

# HAMPTON HIGH SCHOOL



## PROGRAM OF STUDIES

2025-2026

Dear Students:

The Hampton High School faculty and administrators are excited to offer you a Program of Studies that will help you build a strong educational foundation to prepare you for your future endeavors. The Program of Studies includes information on graduation requirements, procedures for scheduling, and descriptions of the course offerings. Therefore, it is important that you and your parents carefully review the Program of Studies, and then ask members of the professional staff for help and guidance.

Students and parents should select courses based on appropriate academic progression, higher-educational goals, and career aspirations. When planning an educational pathway, students and parents should review course prerequisites to prepare for advanced-level courses.

***You should select your courses with great care and with the awareness that all requests for schedule changes must adhere to a strict set of guidelines outlined in the Program of Studies.***

Best wishes to you in planning your future path and on the exciting journey ahead of you.

Sincerely,

Marguerite Imbarlina, Ed.D.  
Principal

Josh Cable, Ed.D.  
Assistant Principal

Joseph Sebestyen, Ed.D.  
Assistant Principal

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## Telephone Directory

### High School

|   |                       |
|---|-----------------------|
| Dr. Marguerite Imbarlina, High School Principal                                   | 412-492-6378          |
| Mrs. DeeDee Dorenkott, Administrative Assistant to the High School Principal      | 412-492-6376          |
| Dr. Joe Sebestyen, High School Assistant Principal                                | 412-492-6383          |
| Mr. Josh Cable, High School Assistant Principal                                   | 412-492-6377          |
| Mrs. Lisa Graff, Administrative Assistant to the High School Assistant Principals | 412-492-6375          |
| Mrs. Janice Wolff, Student Attendance Administrative Assistant                    | 412-492-6399          |
| Mrs. Kimberly Cavitt, School Counselor (A-D student last names)                   | 412-492-6380          |
| Mr. Matthew Combi, School Counselor (E-K student last names)                      | 412-492-6381          |
| Mrs. Marisa Panzer, School Counselor (L-P student last names)                     | 412-492-6334          |
| Mrs. Terri Koprivnikar, School Counselor (R-Z student last names)                 | 412-492-6382          |
| Mrs. Dolores Breslawski, Administrative Assistant to the High School Counselors   | 412-492-6379          |
| Mr. Michael Gavlik, Athletics Director  | 412-492-6389          |
| Mrs. Stacy Martin, Administrative Assistant to the Athletics Director             | 412-486-6000 Ext 1514 |

### Middle School

|  |              |
|--|--------------|
| Dr. Marlynn Lux, Principal   | 412-492-6357 |
| Ms. Renee Michalowski, Administrative Assistant to the Middle School Principal       | 412-492-6356 |
| Dr. Zachary Rice, Assistant Principal  | 412-492-6358 |
| Ms. Melissa Sosso, Administrative Assistant to the Middle School Assistant Principal | 412-492-6355 |
| Mrs. Jill Kampmeyer, School Counselor  | 412-492-6359 |
| Ms. Danielle Wike, School Counselor  | 412-492-6360 |
| Ms. Beth Huffman, Administrative Assistant to the Middle School Counselors           | 412-492-6372 |

## Foreword

Now is the time for you to consider all of your academic possibilities, whether you will advance to a college-level program, career-oriented technical school, military program, or conclude your formal education at the end of twelfth grade by entering directly into the workforce. Planning your high school program of studies carefully is an important part of reaching academic goals and identifying opportunities.

This **PROGRAM OF STUDIES** booklet is designed to help you make choices! As you choose courses for next year, keep in mind **YOUR** career and educational plans.

Be certain that your course selections help you reach **YOUR** goals.

This booklet offers the following information:

1. Graduation requirements
2. Policies related to High School scheduling
3. Descriptions of specific departmental courses
4. Descriptions of elective courses

The inclusion of a course description in this booklet does not guarantee the course will be available next year. Courses will be scheduled based on student interest and the most effective utilization of teachers. Therefore, you should have alternative course selections in mind in case one of your choices is cancelled because of low enrollment. **It is important that you choose alternative courses when scheduling to ensure you choose classes that align with your plans.** Please note that in some cases scheduling conflicts may occur, and course substitutions will need to be made.

Your decisions about course selections are important because of their long-range effect on your future.

Your decisions are also important to the overall picture of the High School program for next year and its cost implications regarding textbooks, supplies, and staffing.

**Because of these important factors, course changes will be prohibited after June 6, 2025, unless warranted by exceptional circumstances.**

**Decisions reached by you and your parents or guardians regarding your course selections will be considered a firm commitment to the school.**

**Scheduling Timeline  
2025-2026**

**Students Grades 10-12**

| Dates  | Activity  |
|--|---|
| Week of January 27   | The Program of Studies is available to all students and parents. Teachers begin discussing course offerings with students during class time.  |
| Grade 9: Tuesday, February 4<br>Grade 10: Wednesday, February 5<br>Grade 11: Thursday, February 6    | HHS Counselors meet with students in their social studies class to review scheduling and answer questions.  |
| Week of February 10th  | HHS Core teachers recommend students for courses.   |
| February 18-21   | Students finalize their course selections with parents in Infinite Campus and click the “Print Request Summary” report. <b>Parents and students must sign the report.</b>   |
| Grade 11: Tuesday, February 25<br>Grade 10: Wednesday, February 26<br>Grade 9: Thursday, February 27 | Counselors collect signed student “Request Summary” reports and review schedules.   |
| Up until April 15  | Students can submit schedule change requests. <b>After this date, there is no guarantee the student’s schedule change request will be granted.</b>  |
| April 16—June 6  | Students with schedule change requests must submit documentation to the Schedule Change Committee. The committee will review the request and space availability. Students will be notified in late July of the acceptance or denial of their request. |

**Students in Grade 9**

|                                     |   |
|-------------------------------------|---|
| Thursday, February 6<br>6:00-7:30PM | 8 <sup>th</sup> grade parents and students attend evening transition event at the high school to review scheduling.                     |
| Friday, February 7                  | HHS counselors review scheduling procedures with 8 <sup>th</sup> graders at HMS.  |
| Tuesday, February 11<br>6:00-7:00   | Scheduling meeting for parents and students who participate in the special education program.   |
| February 18-21                      | Students finalize their course selections with parents in Infinite Campus and click the “Print Request Summary” report.                 |
| Wednesday, February 26              | Parents and students must sign the report. <b>HMS Counselors collect signed student “Request Summary” reports and review schedules.</b> |

**COURSE PLANNING SHEET**

| <b>Department</b> | <b>Credits Required</b> | <b>Grade</b> | <b>Course Title</b> | <b>Credit</b> |
|-------------------|-------------------------|--------------|---------------------|---------------|
| English           | 4                       | 9            |                     |               |
|                   |                         | 10           |                     |               |
|                   |                         | 11           |                     |               |
|                   |                         | 12           |                     |               |
| Social Studies    | 4                       | 9            |                     |               |
|                   |                         | 10           |                     |               |
|                   |                         | 11           |                     |               |
|                   |                         | 12           |                     |               |
| Math              | 4                       | 9            |                     |               |
|                   |                         | 10           |                     |               |
|                   |                         | 11           |                     |               |
|                   |                         | 12           |                     |               |
| Science           | 3                       | 9            |                     |               |
|                   |                         | 10           |                     |               |
|                   |                         | 11           |                     |               |
|                   |                         | 12           |                     |               |
| Academic Seminar  | 0.5                     | 10           |                     |               |
| Arts & Humanities | 2                       |              |                     |               |
|                   |                         |              |                     |               |
|                   |                         |              |                     |               |
|                   |                         |              |                     |               |
| PE                | 2                       | 9            | Wellness I          | 1             |
|                   |                         | 10           |                     | 0.5           |
|                   |                         | 11           | Wellness II         | 0.5           |
| Personal Finance  | 0.5                     |              |                     | 0.5           |
| Electives         | 5                       |              |                     |               |
|                   |                         |              |                     |               |
|                   |                         |              |                     |               |
|                   |                         |              |                     |               |
|                   |                         |              |                     |               |
|                   |                         |              |                     |               |

## Minimum Requirements for High School Graduation

| <i>Courses</i>     | <i>Class of 2027 &amp; Beyond<br/>Credits</i> | <i>Class of 2026<br/>Credits</i> |
|--------------------|---|----------------------------------|
| English            | 4.0   | 4.0                              |
| Social Studies     | 4.0   | 4.0                              |
| Math               | 4.0   | 4.0                              |
| Science            | 3.0   | 3.0                              |
| Arts & Humanities  | 2.0   | 2.0                              |
| Academic Seminar   | 0.5   | 0.5                              |
| Wellness I         | 1.0   | 1.0                              |
| Wellness II        | 0.5   | 0.5                              |
| Physical Education | 0.5   | 0.5                              |
| Personal Finance   | 0.5   | N/A                              |
| Electives          | 5.0   | 5.5                              |
| <b>TOTAL</b>       | <b>25.0</b>                                   | <b>25.0</b>                      |

**Along with course credits, the following items are graduation requirements:**

- Completion of Act 158 Requirements
- 20 Hours of Community Services for All Students (due at the end of 11<sup>th</sup> grade)
- 9 Hours of Job Shadowing (3 Hour Job Shadow in 9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> Grade)

The following middle school courses will receive a transfer credit onto the high school transcript: Algebra I-Essentials, Honors Algebra I, Honors Geometry, and all world language level 1 courses. However, these grades will not be calculated into the student's Q.P.A.

On a case-by-case basis, students attending A.W. Beattie may utilize credits earned through their A.W. Beattie program to satisfy graduation requirements that cannot be met based on scheduling constraints. Students may apply for this consideration through their school counselor. All decisions regarding the assignment of credit will be determined by the building principal.

**English:** All students must complete **one credit** in each of the following categories:

| <b>English 9</b>                | <b>English 10</b>   | <b>English 11</b>                    | <b>English 12</b>   |
|---------------------------------|---------------------|--------------------------------------|---|
| English 9<br>Academic English 9 | Academic English 10 | Academic English 11                  | Academic English 12: British Literature (.5)<br>Academic English 12: Science Fiction & Fantasy (.5)<br>Academic English 12: Humor & Satire (.5)<br>Academic English 12: Crime & Literature (.5) |
| Honors English 9                | Honors English 10   | English 11 - Honors<br>AP English 11 | English 12 - Honors<br>AP English 12  |

**Social Studies:** All students must complete a **minimum of one course** in each of the following categories:

| <b>Geography</b>  | <b>World History</b>                                      | <b>American History</b>                                       | <b>Economics</b>  | <b>American Government</b>  |
|---|---|---|---|---|
| World Geography<br>Honors World Geography<br>AP Human Geography | World History<br>Honors World History<br>AP World History | United States History<br>CHS US 1865-Present<br>AP US History | Economics (.5)<br>Economics Online (.5)<br>AP Economics | American Government (.5)<br>American Government Online (.5)<br>AP American Government |



**Science:** All students must complete a **minimum of three science credits**. Credits must include a course in biology, chemistry, and physics or engineering.

| <b>Biology</b>                                      | <b>Chemistry</b>   | <b>Physics or Engineering</b>  | <b>Science Electives</b>  |
|---|--|--|---|
| Biology I<br>Academic Biology I<br>Honors Biology I | Applied Chemistry (.5)<br>Chemistry I<br>CHS General Chemistry I (1.5) | Conceptual Physics (.5)<br>Physics I<br>AP Physics I (1.5)<br>Robotics I (.5)<br>Robotics II (.5)<br>Engineering Design I (.5)<br>CHS Intro to Engineering<br>AWBCTC Carpentry<br>AWBCTC HVAC<br>AWBCTC Auto Collision<br>AWBCTC Robotics<br>AWBCTC Auto Technology<br>Electrical Training Level 1 | AP Environmental Science<br>Honors Environmental Science<br>Humans and the Environment (.5)<br>Honors Biology II<br>AP Biology<br>Honors Chemistry II<br>AP Chemistry<br>AP Physics II (1.5)<br>Physical Anthropology<br>Honors Human Anatomy<br>Horticulture<br>Engineering Design I (.5)<br>Engineering Design II (.5)<br>Honors Biotechnology Research<br>Select A.W. Beattie Programs |

**Mathematics:** All students must complete a **minimum of four credits with one credit** in each of the following categories:

| <b>Algebra I</b>              | <b>Geometry</b>             | <b>Algebra II</b>  | <b>Electives</b>   |
|-------------------------------|-----------------------------|--|--|
| Honors Algebra I<br>Algebra I | Honors Geometry<br>Geometry | Honors Algebra II<br>Algebra II<br>Intermediate Algebra II | Algebra Essentials<br>AP Statistics<br>College Preparatory Mathematics<br>Pre-Calculus<br>Honors Pre-Calculus<br>CHS Business Calculus<br>AP Calculus AB<br>AP Calculus BC<br>CHS Introduction to Matrices and Linear Algebra<br>CHS Discrete Mathematics<br>CHS Basic Applied Statistics<br>Personal Finance (.5 Credit)*<br>Select A.W. Beattie Programs |

**\*Personal Finance:** Personal Finance is a graduation requirement for students in the Class of 2027 and beyond. It will serve as a math elective for the Class of 2026 only.

**Academic Seminar:**

All students must complete Academic Seminar **or** AP Seminar. Students attending an A.W. Beattie program who are unable to satisfy this requirement because of scheduling limitations should work with their counselor to develop an alternative plan to meet this requirement.

**Arts and Humanities:**

The arts and humanities focus on how people process and document the human experience through literature, art, music, history, and language. The following courses fall into the Arts and Humanities category: all world language courses, all art courses, all music courses, all English electives, Graphic Design courses, Design Studio, social studies electives, Video Production, Advanced Video Production, all Architectural Design courses, all family consumer science courses, Dance Foundations, and Academic Transition. Additionally, the following A.W. Beattie courses count as a humanities course: Advertising Design and Early Childhood Education.

**Community Service Graduation Requirement:**

All students must complete 20 hours of community service. Forms for documenting the community service project are available on the district website under the “Students” tab. The required community service may be completed either during the school year or during summer vacation. The community service requirement is the responsibility of the student. **Except for donating blood or providing pre-approved service in a special education program, community service cannot be fulfilled during school hours.** Community Service documentation is to be turned into the student’s social studies teacher by the end of the third quarter of the student’s 11<sup>th</sup> grade year.

**Examples and Nonexamples of Community Service**

| <b>ACCEPTED</b>  | <b>NOT ACCEPTED</b>                                      |
|--|--|
| Helping at a food bank                                     | Work done for family members                             |
| Service trips established by your church                   | Work done with “for-profit” organizations without pay    |
| Service performed for elderly or incapacitated individuals | Work done at student’s place of employment “without pay” |
| Volunteering at the PTO Concession Stand                   |  |

**Job Shadow Graduation Requirement:**

Job shadowing is a career exploration activity. Students gain exposure to careers that they are interested in pursuing by working with business volunteers. For a short period of time, up to several days, students spend the workday as a shadow to a competent worker. By visiting a workplace, investigating a career field and industry, and experiencing a typical day on the job, students can determine if the career and industry fits their interests and career aspirations.

- Each year, up to 10 hours of a job shadow is an excused absence from school pending parent permission and proper documentation from the career contact.
- Prior to completing a job shadow, students must secure parent permission for the placement and person the student will shadow utilizing the District Career Exploration Permission Form.
- After the job shadow experience, students must complete a reflection to help them navigate post-secondary education and career goals.
- Students must submit their Career Exploration Permission Form, Career Exploration Verification Form, and Career Exploration Reflection Form by the end of each school year.

**Keystone Exams:** The PA Department of Education requires students to demonstrate proficiency in end-of-course exams in Algebra I, Biology, and Literature (English 10). After a student attempts the Keystone exams twice, but does not score proficient, the student’s counselor and administration will work to create an individualized graduation plan based on the implementation of Act 158.

**Scheduling Policies**

**Minimum Schedule**

Hampton High School offers eight periods of instruction each semester. Mondays, Tuesdays, and Fridays operate on an eight-period day (42 minutes classes) and Wednesdays and Thursdays operate on a four-period day (80-minute classes). All students, except seniors, must register for at least seven full-credit courses or the equivalent thereof (two semester courses equal one full-credit course). Seniors must schedule at least 6.5 credits. Students will have a 75-minute “lunch and learn” period on Wednesdays and Thursdays to eat lunch, meet with teachers, study, make-up work, meet with clubs, or participate in other activities. This opportunity should be considered when determining whether to schedule a study hall.

Scheduled activities, such as Yearbook, do not circumvent the minimum schedule requirements listed above.

**Course Selection/Course Waiver**

At Hampton High School, we work diligently to create opportunities for our students, and we encourage students to challenge themselves in order to be prepared for the future. In making course selections, students should refer to the list of suggested criteria for course recommendation, and they should seriously consider the teacher-provided course recommendations. All core subject teachers will provide the students with a course recommendation. It is the prerogative of the student and parent to choose a course that is more rigorous than the teacher-recommended course. We realize that students’ current grades and/or performance may underestimate their true abilities. Consequently, if a student was not recommended for a higher-level course, and the parents believe that their child is capable of being successful in such a course, then parents may request

that their child be admitted to the higher-level course by completing a Course Waiver form. Parents and students should understand that if they select a more rigorous course, scheduling and staffing limitations may prohibit a later change to a different course. It is also important to understand that course selection data are used by the school district to determine class resource purchasing and to make specific staffing decisions. Course selection changes are strictly limited, and the information in the "Dropping/Changing Courses" section of this book should be reviewed prior to any request to do so. The Course Waiver Form may not be used to circumvent prerequisite courses or specific graduation requirements.

### ***Schedule Change Priority***

There are various reasons for schedule changes at the beginning of each semester. Some are more critical than others; therefore, the following priority list has been developed concerning permissible changes. The counselors will address changes in this order:

- A. Students with **NO** schedule will be hand-scheduled
- B. Computer errors
- C. Failures/repeated courses
- D. Balancing for uneven course distribution
- E. Adding a class to meet post-secondary requirements
- F. Adding classes not requiring schedule revision
- G. Counselor prerogative with regard to Academic misplacement

### ***Record of Schedule Change***

All course/schedule changes **must** be processed by the School Counselors. Teachers **MAY NOT** admit or withdraw students from classes without receipt of the Record of Schedule Change Form. Teachers must sign the form. Students must return the forms to the counselors.

### ***Dropping/Changing Courses***

Students should select their courses with great care and with the awareness that all schedule changes must adhere to the following guidelines:

- After April 15, 2025, all schedule change requests for the upcoming school year must be submitted to the Schedule Change Committee by the last instructional day of the school year. They will be reviewed on a space available basis. In late July, students will receive a written acceptance or denial of their request.
- New courses may only be added in the first two (2) weeks of the semester in which they begin (10 school days).
- During the school year, the Schedule Change Committee can be asked to review schedule change requests based on medically related circumstances. The Committee may recommend to the high school principal a schedule change that best supports the individual needs of the student.
- Students carrying 7 credits may not drop a course at any time unless they enroll in another course, limiting this option to the first two weeks of the semester. Students carrying 7.5 + credits may apply to the Schedule Change Committee to withdraw from one course. Withdrawal is not guaranteed.
- Withdrawal during the first thirty (30) school days of a year-long course results in a "W" grade on the transcript. Withdrawal after the first thirty (30) school days of a year-long course results in a failing grade of "WF" on the transcript (this includes transferring from a Hampton High School course to an online course).
- Withdrawal during the first ten (10) school days of a semester course results in a "W" grade on the transcript. Withdrawal after ten (10) school days in a semester course results in a "WF" on the transcript.
- If a student transfers from a course as a result of "academic misplacement" and enrolls in a different level of a **similar** course, this is considered an "academic adjustment" rather than a withdrawal (i.e., moving from Honors Biology I to Academic Biology I).
  - Students cannot academically adjust to a course in which they previously earned credit.
  - Student's earned grade at the time of an academic adjustment will transfer to the new course.
  - Academic adjustments may be requested by a student, parent, or teacher, and must be arranged through the counselor and approved by the principal, teacher, and the Schedule Change Committee.
  - Academic adjustments after the first thirty (30) school days will only be considered if an open seat in a section is available and the student is willing to make up the missed work for the new course.
- If a student is adding an AP or Honors class that has summer work, the student is responsible for the summer work with a due date determined by the teacher.

### ***Dropping Courses for Schedule Balance***

Computer scheduling may occasionally produce a student schedule with eight classes in one semester (no study halls) and two or more study halls in the other semester. If a student feels this class distribution is unmanageable, he or she should see his or her counselor for schedule adjustments. The counselor will attempt, where feasible, to move classes from one semester to another to achieve a more equitable balance. If movement is not possible, the student will be permitted to drop an elective subject to allow room for a study hall. These adjustments must be requested by the student at the beginning of the school year to better ensure retaining the original course selections.

### ***Withdrawing from A.W. Beattie Career Center***

If it should be necessary to withdraw from Beattie Career Center, the procedures below must be followed:

- A. Arrange a conference with your Beattie instructor and the Beattie counselor. Beattie will then notify Hampton of the pending withdrawal.
- B. Student must next see his or her assigned counselor at Hampton.
- C. A drop form will be issued to the withdrawing student by his or her Hampton counselor. Parents **MUST** sign this drop form.
- D. This drop form will be returned to Beattie Career Center, confirming home/school acknowledgement.
- E. Withdrawing student must return to Beattie Career Center to return any textbooks and to pick up personal property.

Withdrawal from Beattie Career Center may occur at the following times:

- A. During the first ten days of the school year.
- B. At the end of the first semester.

Those withdrawing from Beattie Career Center during the first ten days of school may encounter difficulty rescheduling courses at Hampton High School. Students will be responsible for all required make-up work when entering these classes. Students receiving an “F” (failure) for the first year at Beattie Career Center will not be accepted for a second year.

### ***Schedule Changes for Preferred Teacher***

When registering for a course not taken previously, it will NOT be possible to change a schedule because a student has a specific teacher preference.

### ***Repeating a Course***

For reason of failure, grade improvement, and/or review of fundamentals, a student may desire to repeat a course taken previously. Repeat courses will be scheduled with a different teacher when possible. Credits in a repeated course will not be used in the accumulation of credits for graduation.

### **Advanced Coursework**

#### ***Summer Work***

Many Honors and AP courses require the completion of summer assignments. Summer assignments are accessible online via <https://sites.google.com/ht-sd.org/hhs-summer-work/home> or through the course teachers. Failure to complete assigned summer work may result in a student beginning a course with a failing grade. Additionally, failure to complete the work does not entitle the student to drop the course without following the procedures in this handbook.

#### ***Honors Course Offerings***

Honors-level courses have extended content and additional workload, which set them apart from regular high school courses in the same subject. These courses have established prerequisites for admission and require teacher recommendation or approval from the building principal. Hampton High School offers the following Honors courses in the grade levels noted in parentheses:

|                        |                                  |                                 |
|------------------------|----------------------------------|---------------------------------|
| H-English (9,10,11,12) | H-Biology I (9-10)               | H-Wind Ensemble (10-12)         |
| H-World Geography (9)  | H-Biology II (10-12)             | H-Symphony Orchestra (9-12)     |
| H-World History (10)   | H-Anatomy & Physiology (12)      | H-Concert Choir (9-12)          |
| H-Geometry (9-12)      | H-Biotechnology Research (10-12) | H-Environmental Science (10-12) |
| H-Algebra II (9-12)    | H-Drawing & Painting III (10-12) | H-Studio Intensive (10-12)      |
| H-Pre-Calculus (9-10)  |                                  |                                 |

### ***Advanced Placement Program***

The Advanced Placement (AP) program gives strong academic students the opportunity to pursue college-level studies while still in high school. Students may receive Advanced Placement and/or college credit for successful completion of course work based upon their score on an Advanced Placement exam administered in May. Registration and payment for AP exams will be due to the College Board as early as October with no refund. Hampton High School offers the following AP courses in grade levels noted in parentheses:

|                               |  |  |
|-------------------------------|--|--|
| AP Biology (11-12)            | AP Calculus AB (10-12)                     | AP Computer Science Principles (10-12) |
| AP Chemistry (12)             | AP Calculus BC (11-12)                     | AP Economics (12)                      |
| AP Computer Science A (10-12) | AP English Language and Composition (11)   | AP Environmental Science (11-12)       |
| AP Psychology (10-12)         | AP English Literature and Composition (12) | AP Physics 1 (11-12)                   |
| AP Seminar (10-12)            | AP Government & Politics (12)              | AP Physics 2 (12)                      |
| AP World History: Modern (10) | AP Statistics (9-12)                       | AP United States History (11)          |
| AP Art History (11-12)        | AP Research (11-12)                        | AP Art & Design (11-12)                |
| AP Human Geography (9)        |  |  |

Advanced Placement courses are, by design, very demanding college-level courses. For those wishing to accept the challenge, they will be better prepared for the rigor of college courses.

The culmination of the course is the opportunity to take an AP exam where the score is used by many colleges to determine whether college credit for this course may be granted (each college determines its own criteria for granting credit). Studies have shown that students who diligently apply themselves, with the expectation of taking a comprehensive exam at the end of the course, tend to do better in the course and later in college.

The AP classes will be taught in a manner designed to prepare a student to take the AP exam. It is strongly recommended that students taking AP classes do so with the expectation of taking the annual course exam in May.

### ***AP Capstone Program***

AP Capstone is a program designed by the College Board to equip students with the independent research, collaborative teamwork, and communication skills necessary for college. The program is built on the foundation of two AP course offerings: AP Seminar and AP Research. AP Seminar is the first course in the program, and after successful completion of the course and AP exam, students may take AP Research. AP Capstone is designed to complement and enhance the in-depth discipline-specific study provided through AP courses. It cultivates curious, independent, and collaborative scholars, and prepares them to make logical and evidence-based decisions. The curriculum offers three options for students to pursue. *AP Capstone Diploma*: Students who earn scores of 3 or higher in both of the AP Capstone courses and on four additional AP Exams of their choosing will receive the AP Capstone Diploma.

*AP Seminar and Research Certificate*: Students who earn scores of 3 or higher in both of the AP Capstone courses but not on the four additional AP Exams will receive the AP Seminar and Research Certificate.

Additionally, students may take AP Seminar or AP Seminar and AP Research as electives without pursuing the AP Capstone Diploma or AP Seminar and Research Certificate.

### ***College in High School (CHS) Courses***

Students who choose to enroll in CHS courses are making the commitment to take a college-level course within the school day and pay for the credits earned. Students do not have to leave school to take these classes. Additionally, students may elect to take these courses without earning college credit. Those courses that offer the CHS option have this information included in the course descriptions. Students should be aware that if they earn the college credit, their college transcript will list the grade they earned based on the college's grading system. For example, if a student earns a 90% A from Hampton in a course offered through the University of Pittsburgh, their Pitt grade will be an A- (3.75).

| <b>Hampton Course</b>                           | <b>University Association</b>                          | <b>Credits</b> | <b>Requirements to Receive Credit</b>  | <b>Current Student Cost</b> |
|---|--|----------------|--|-----------------------------|
| CHS College Programming and Computer Science    | Carnegie Mellon University                             | 4              | C or Higher on the proctored final exam  | \$200                       |
| CHS Intro to Cybersecurity                      | Robert Morris University                               | 3              | C or Higher Final Grade  | \$250                       |
| CHS Basic Applied Statistics                    | University of Pittsburgh                               | 4              | C or Higher Final Grade and a Final Exam from Pitt   | \$300                       |
| CHS Business Calculus                           | University of Pittsburgh                               | 4              | C or Higher Final Grade, 3 Tests, and a Final Exam from Pitt   | \$300                       |
| CHS Introduction to Matrices and Linear Algebra | University of Pittsburgh                               | 3              | C or Higher Final Grade, Tests, and a Final Exam from Pitt. The final course grade cannot exceed the final exam grade by more than one letter grade. | \$225                       |
| CHS Discrete Mathematics                        | Duquesne University                                    | 3              | C or Higher Final Grade, and Duquesne approved exams   | \$357                       |
| CHS General Chemistry I                         | University of Pittsburgh                               | 4              | C or Higher Final Grade, Tests, Labs, and a Final Exam from Pitt   | \$300                       |
| CHS Intro to Engineering                        | Robert Morris University                               | 3              | C or Higher Final Grade  | \$250                       |
| CHS United States 1865-Present                  | Duquesne University                                    | 3              | C or Higher Final Grade  | \$357                       |
| CHS German 4                                    | University of Pittsburgh                               | 3              | C or Higher Final Grade, 3 Tests, and a Final Exam from Pitt   | \$225                       |
| CHS German 5                                    | University of Pittsburgh                               | 3              | C or Higher Final Grade, 3 Tests, and a Final Exam from Pitt   | \$225                       |
| CHS Spanish 4                                   | University of Pittsburgh                               | 3              | C or Higher Final Grade, Unit Tests, and a Final Exam from Pitt  | \$225                       |
| CHS Spanish 5                                   | University of Pittsburgh                               | 3              | C or Higher Final Grade, Unit Tests, and a Final Exam from Pitt  | \$225                       |
| CHS French 4                                    | Duquesne University                                    | 3              | C or Higher Final Grade  | \$357                       |
| CHS French 5                                    | Duquesne University                                    | 3              | C or Higher Final Grade  | \$357                       |
| CHS Mandarin IV                                 | Washington & Jefferson College                         | 4              | C or Higher Final Grade  | \$350                       |
| CHS Mandarin V                                  | Washington & Jefferson College                         | 4              | C or Higher Final Grade  | \$350                       |
| CHS Intro. to Financial Accounting              | Duquesne University                                    | 3              | C or Higher Final Grade  | \$357                       |
| CHS Intro. to Managerial Accounting             | Duquesne University                                    | 3              | C or Higher Final Grade  | \$357                       |
| CHS Early Childhood Development Birth-5         | Carlow University                                      | 3              | C or Higher Final Grade  | \$225                       |
| CHS Introduction to World Art                   | University of Pittsburgh                               | 3              | C or Higher Final Grade  | \$300                       |
| Programs at A.W. Beattie Technical School       | Contact Beattie for more information<br>(412-847-1912) | 3-23           | Completion of a Program and an advanced score on the National Occupational Competency Testing Institute Exam (NOCTI)                                 | Varies                      |

### ***A.W. Beattie Career Center***

A.W. Beattie Career Center offers students an opportunity to prepare for their chosen career field through advanced career and college preparation during their 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade years. **New students and students who started a program, but did not finish, are required to complete an application to be considered for admission to A.W. Beattie.** After students complete an application, they must be formally accepted by A.W. Beattie to attend a program. Programs may have capacity limits, so enrollment is not guaranteed. Applications to attend A.W. Beattie Career Center should be made during the second semester of 9<sup>th</sup>, 10<sup>th</sup>, or 11<sup>th</sup> grade and will be carefully reviewed. Additional information concerning A. W. Beattie Career Center is available in the School Counseling Office.

Three credits are awarded each year to students successfully completing career coursework. A. W. Beattie Career Center credits and grades are included in the QPA and class rank.

**All A. W. Beattie Career Center Programs offer advanced college credit upon successful completion. Potential college credits range from three to twenty-two credits. Please reference Beattie's website or speak with a Beattie counselor for more information.**

A.W. Beattie Career Center Programs are approved Programs of Study (POS) providing for seamless transition to post-secondary education through rigorous content aligned with challenging academic and relevant career context in a non-duplicative progression of courses aligned to post-secondary education.

A number of A. W. Beattie's programs require uniforms and equipment. The student and parents assume this cost. Therefore, students should obtain accurate cost information before enrolling for a course. Transportation is provided by the School District.

### ***Dual Enrollment***

Dual enrollment, referred to as "concurrent enrollment" in the School Code, is an effort by the Commonwealth to encourage a broader range of students to experience post-secondary coursework and its increased academic rigor, while still in the supportive environment of their local high school. The intent is to increase the number of students who go on to post-secondary education and to decrease the need for remedial coursework at post-secondary institutions. It is a locally administered program that allows a secondary student to concurrently enroll in post-secondary courses. Students who are interested in taking courses at the Community College of Allegheny County (CCAC) or another accredited community college should consult with their school counselor for information on programs and costs.

## **Calculating Course Grades**

### ***Grading System***

The grading system at Hampton High School is listed below. Final percentages earned are **not** rounded; final percentages are truncated, which is illustrated in the chart below.

| Percentage              | Credit Earned | Letter Grade | Weighted Quality Points |               |  |
|-------------------------|---------------|--------------|-------------------------|---------------|--|
|                         |               |              | Regular Course          | Honors Course | Advanced Placement Approved College in High School |
| 90%-100%                | Yes           | A            | 4.0                     | 4.5           | 5.0  |
| 80%-89.999%             | Yes           | B            | 3.0                     | 3.5           | 4.0  |
| 70%-79.999%             | Yes           | C            | 2.0                     | 2.5           | 3.0  |
| 60%-69.999%             | Yes           | D            | 1.0                     | 1.0           | 1.0  |
| 59.999% and below       | No            | F            | 0                       | 0             | 0  |
| Withdrawal Medical      | No            | WM           | N/A                     | N/A           | N/A  |
| Withdrawal              | No            | W            | N/A                     | N/A           | N/A  |
| Withdrawal Failing      | No            | WF           | 0                       | 0             | 0  |
| Pass--60%-100%          | Yes           | P            | N/A                     | N/A           | N/A  |
| Fail--59.999% and below | No            | F            | N/A                     | N/A           | N/A  |

### ***Pass/Fail Grades***

Students in their junior or senior year may take one credit pass/fail using the guidelines listed below:

- Students may take one credit as pass/fail per year
- Courses needed to fulfill graduation requirements cannot be taken pass/fail
- Courses taken pass/fail do count as credit and will be listed on the student's transcript
- Courses taken pass/fail do not factor into a student's QPA
- Students must complete pass/fail documentation with their school counselor
- For year-long courses, documentation must be submitted before the first day of the third quarter; for semester-long courses, documentation must be submitted before the first day of the second quarter
- Once a student declares a course pass/fail, he or she cannot change the course grading
- The same withdrawal rules apply to a pass/fail course as a regular course
- Students taking a CHS course for college credit and pass/fail will still earn a percentage and letter grade for their college transcript according to the university's grading matrix

### ***Incomplete Grades***

**NO** incompletes will be given as grades.

### ***Grades for Repeating Courses (During Regular School Year)***

Receiving a passing or improved grade for a course repeated at Hampton during the regular school year does not replace the previous grade. **Both** course grades, course titles, and respective dates will be shown on the student's transcript. Both courses will be used in Q.P.A. computation and class ranking. Although two credits may be earned for the same course (example: Algebra I = D, Algebra I = B), a different math course must be taken and passed to complete graduation requirements. The same will be done for any other specific departmental graduation requirement.

### ***Transferring Courses and Grades from a Previous School***

When a student transfers from another high school to Hampton High School, the previous school's name, the courses they attempted at their previous high school, and the corresponding grades earned will appear on their Hampton High School transcript. Grades earned at the student's previous school district while attending grades 9-12 will be factored into the student's Hampton High School grade point average (GPA) using Hampton's grading system (table listed above). For example, if a student took an Advanced Placement (AP) course at their previous high school and earned an "A," the student will earn 5.0 weighting for the course. High school credits earned while enrolled in grades 6-8 will not be factored into the student's high school GPA; however, the courses will be listed on the student's transcript. When applying for admission to an institution of higher learning or a scholarship, transfer students **may** need to submit an official transcript from their previous school along with their Hampton High School transcript to provide a complete application.

### ***Transferring Grades Following a Course Replacement***

Following a schedule change, when one course replaces another in the same subject area, grades earned to date in the former course will transfer to the new course and will be displayed on the student's ensuing report card as having been earned in the new course. The present teacher may use his or her discretion in determining the weighting of these grades in the overall final average. If a student changes from an AP or Honors course to a non-weighted course, **NO** weighted quality points will transfer.

### ***Alternative Instruction Methods***

Students enrolled at Hampton High School must attempt 27.5 credits within the high school's program of studies. These courses will be taught by Hampton High School teachers (7 credits, at minimum, in grades 9-11 and 6.5 credits, at minimum, in grade 12). Students competing for Summa Cum Laude honorific graduation notation must attempt 28 credits within the high school's program of studies with Hampton High School teachers (7 credits each year).

### ***High School Acceleration Courses***

Students who wish to accelerate in the areas of math, science, and world language may take a course from an institution that is approved by the high school principal. The acceleration course will not count as one of the required HHS 25 graduation credits or one of the required 28 credits for HHS honorific notation upon graduation (Summa Cum Laude, etc.). **Acceleration courses may not supplant a Keystone tested course (Biology 1, English 10, or Algebra I).** Acceleration courses and grades may be listed on a student's transcript; however, the course will not be factored into the student's GPA. Parents are responsible for the payment of acceleration courses.



### **High School Enrichment Courses**

Students who wish to take a course outside of Hampton High School that is not a graduation requirement may do so. This means that the enrichment course will not count as one of the required HHS 25 graduation credits or one of the required 28 credits for HHS honorific notation upon graduation (Summa Cum Laude, etc.). Enrichment courses and grades may be listed on a student's transcript; however, the course will not be factored into the student's GPA. Parents are responsible for paying for enrichment courses and materials.

### **Replacement Course**

Students may supplant up to 0.5 of a credit for physical education by taking a course from an institution that is approved by the high school principal. The course title, letter grade earned, and credit will appear on the student's transcript, and the grade will factor into the student's GPA as an unweighted grade. Parents are responsible for the cost of a replacement physical education course.

### **Early Graduation Planning**

Students who wish to graduate early may do so by working with the high school principal and school counselor to develop a plan. Courses to satisfy early graduation will need to be completed at an institution that is approved by the high school principal. Additionally, a student wishing to pursue this opportunity will need to have completed an early graduation plan with their counselor. Additionally, all state and high school graduation requirements beyond coursework must be met prior to the student's senior year (community service, job shadows, and Keystone Exams).

### ***Awarding Partial Credit for Full-Credit Courses***

Students may enroll in a full-credit course and receive a half credit based upon time enrolled in the course and approval from the building principal. These circumstances may include:

- A. Students transferring to Hampton for the second semester who may be enrolled in full-year courses and receive half-credit for the second half of the course.
- B. Special circumstances to fulfill graduation requirements.
- C. Withdrawing from Beattie Career Center.

## **Recognition of Student Achievement**

### ***Calculating Quality Point Average (QPA)***

Final grades are used when calculating the year-end quality-point average. Full-year courses receive 1.0 credit; semester courses receive 0.5 credit. The cumulative quality point average is determined by dividing the total cumulative quality points by the total credits attempted.

$$\frac{\text{Total Quality Points Earned}}{\text{Total Credits Attempted}} = \text{Weighted QPA}$$

### ***Class Rank***

Class rank is not published. Cumulative class ranks will be computed at the end of the eleventh and twelfth grades. Only students who have completed the Junior and/or Senior year and have received final grades in all courses will be included in the total class number. Cumulative ranks will be calculated only from final grades. The cumulative quality-point average will be determined by the year-end quality-point average formula described in the section above.

### ***Recognition of Graduate Achievement***

During the commencement ceremony, students in the senior class will be recognized for their academic achievements based on the table below using the QPA calculation listed above. The QPA requirements will be reviewed annually as courses offered at the high school change.

| Minimum QPA Requirement | Recognition     | Additional Criteria  |
|-------------------------|-----------------|--|
| 4.40                    | Summa Cum Laude | <ul style="list-style-type: none"> <li>• A minimum of 28 credits earned through courses offered at Hampton High School with a letter grade</li> <li>• No withdrawals</li> <li>• Transfer students must attend Hampton High School for a minimum of two (2) full years and earn a minimum of fifteen (15) credits in order to qualify for the recognition of Summa Cum Laude. All Hampton earned credits along with all credits earned in grades 9-12 from the student's former school district will be used to determine the student's cumulative quality point average.</li> <li>• Letter grades must be available for at least 28 credits in order for students to be eligible for the recognition of Summa Cum Laude</li> </ul> |
| 4.20                    | Magna Cum Laude | <ul style="list-style-type: none"> <li>• A minimum of 27.5 credits earned</li> </ul>   |
| 4.00                    | Cum Laude       | <ul style="list-style-type: none"> <li>• A minimum of 27.5 credits earned</li> </ul>   |
| Top-ranked 10%          | Senior Scholars | <ul style="list-style-type: none"> <li>• QPA based upon a senior's cumulative QPA from three years and three grading periods of the senior year</li> <li>• Any senior who entered Hampton High School after the beginning of their junior year, whose cumulative Quality Point Average is equal to or better than the lowest quality point average in the top-ranked 10 percent of seniors, will be added to the list of Senior Scholars</li> </ul>  |

### ***National Honor Society***

National Honor Society membership is available to juniors and seniors who meet the standards for qualification. The initial criterion for selection into the Hampton High School Delta Chapter of the National Honor Society is **SCHOLARSHIP**. Students are invited to apply for NHS membership based on a qualifying quality-point average after the completion of their sophomore year. Students must attain a cumulative quality-point average of 3.75 or greater to be invited to apply for membership. Juniors who are being considered are judged on Grades 9 and 10, while seniors are judged on Grades 9, 10, and 11. Beyond **SCHOLARSHIP**, students being considered for membership must also demonstrate outstanding **LEADERSHIP** and **SERVICE** in their school and community, as well as outstanding **CHARACTER**. Prospective members will have the opportunity to submit documentation attesting to their **SCHOLARSHIP, LEADERSHIP, SERVICE, AND CHARACTER** to an anonymous five-member faculty council who will review this documentation in cooperation with the National Honor Society advisor. Students who are selected for membership are expected to maintain the high standards of **SCHOLARSHIP, LEADERSHIP, SERVICE, AND CHARACTER** throughout the remainder of their high school career or risk dismissal from the National Honor Society. Membership in the Hampton High School Delta Chapter of the National Honor Society is not a right, but a privilege bestowed upon students who meet the high standards for membership as determined by the faculty council. The advisor will provide written information and details regarding membership to students who meet the **SCHOLARSHIP** criteria in late September.

### ***Diploma Seal of Biliteracy***

Students in levels 4 and 5 of a language taught at Hampton High School are eligible to obtain a Seal of Biliteracy on their diploma, which is an award given by the state in recognition of students who have studied and attained proficiency in English and a second language by high school graduation. This award encourages students to pursue biliteracy, recognizes the skills that students attain, and serves as evidence of linguistic skills sought by college admission boards and by future employers.

Requirements to earn a Biliteracy Seal on a Hampton High School diploma:

Students must earn:

- At least a proficient on the Literature Keystone AND
- Intermediate High score on ACTFL Assessment of Performance Toward Proficiency in Language (AAPPL) Oral and Writing Test in a language other than English

Students who are eligible to take the ACTFL AAPPL exam will be notified by their language teacher.

## Support Programs

The high school provides various support programs in order to meet the academic, social, and emotional needs of students.

**Academic Support Program:** An academic support program is available for students in math, English, and biology. Students receive this support during study halls, non-academic classes, or through a web-based tutorial. The high school also provides after-school tutoring labs in English, math, and science for students.

**Student Assistance Program:** The Student Assistance (SAP) and Child Study programs are available at the high school to address the academic, social, and emotional needs of students. A team of trained counselors and administrators, along with a liaison from an outside agency, meet weekly (SAP) and monthly (Child Study) to discuss those students who may require additional services.

**Special Education Services:** The Hampton Township School District provides a free appropriate public education (FAPE) to students with disabilities in accordance with federal (IDEA) and state (Chapter 14 of the Pennsylvania School Code) regulations. In order for a student to be eligible for special education services, he/she must meet the eligibility criteria of having a disability as defined by the Pennsylvania Department of Education and be in need of specially designed instruction. Students with disabilities who qualify for special education are serviced through the learning support, emotional support or life skills program based on their individual needs. The student's program is established via an Individualized Education Plan (IEP) that is determined by members of the IEP team, including the parents and child, if appropriate. An evaluation by a certified school psychologist is required to determine if the child qualifies for special education services. Students with disabilities who qualify under the Americans with Disabilities Act (ADA) and Chapter 15 of the Pennsylvania School Code will receive related services and accommodations that are needed to allow for equal opportunity to participate in the school program. The goal of Chapter 15/504 is to provide these services to protected handicapped students, without discrimination. Students must meet the requirements that include being school age with a physical or mental disability that substantially limits or prohibits participation in or access to an aspect of the school program.

**Enrichment Opportunities:** Hampton Township School District promotes enrichment or acceleration for those high-end learners identified as gifted, as well as those students who have demonstrated interest, motivation, and strength in a particular area. Hampton students do not have to be identified as Gifted to take advantage of opportunities such as differentiation, enrichment or acceleration. However, they must demonstrate a need for such services. In Pennsylvania, the provision of services to identified gifted students is governed by Chapter 16 of the Pennsylvania School Code: Gifted Education.

Parents should contact their child's school counselor to get more information on how to access any of the aforementioned services for their children.

## College and Career Resources

Students have access to a variety of resources in the library and counseling office, including college catalogs, scholarship information when available, and reference books regarding career and college opportunities.

### **Naviance**

Students are also given individualized access to Naviance, an extensive web-based college research and planning tool for students, parents, and school counselors. The website helps to guide individual students through the entire college planning, application, and decision process. Students can search for scholarships, explore careers, take interest inventories, and investigate their learning style. Students will also be able to review academic and admission data for colleges across the United States. Through the Family Connection section of Naviance, the counseling department will be able to share information with parents and their students about upcoming meetings and events, local scholarship opportunities, summer classes and events, and other Web resources for college and career information. Early in the school year, students without Naviance login information will be guided through the counseling office in establishing an account on the computer. Because the program is web-based, it can be accessed from school or home by students and/or parents.

## Career and Course Planning – Career Clusters

Self-assessment is critical to the scheduling and post-secondary process. You will be able to make appropriate scheduling choices by using this knowledge. The following tips will assist you in completing your self-assessment with post-secondary goals in mind:

1. Recognize your academic strengths and weaknesses.
2. Analyze your interests and values. Keep in mind talents, skills, interests, and hobbies.
3. Understand your academic pathway – know your past courses and identify where you'll be going.
4. Establish a goal. Well-established and articulated objectives will allow you to design a plan that will assist you in reaching your post-secondary goals.

In summary, knowing about yourself, your interests and abilities, and formulating goals is important to conduct an effective exploration of post-secondary options. Thus, you are more likely to find a good match between yourself and the post-secondary option that you choose. Utilize the career clusters on the following pages as a post-secondary planning resource.

### National Collegiate Athletic Association (NCAA)

Prospective student-athletes are able to access information needed to understand the Division I and Division II eligibility requirements via the NCAA Eligibility Center. You should access the NCAA Eligibility Center home page at <http://www.ncaa.org/> for all information regarding student-athletes.

General information on the website includes:

1. How to register as a student-athlete, timelines during high school
2. Core course listings for the high school
3. NCAA Guide for the College-Bound Student Athlete
4. Division I and Division II Eligibility Requirements
5. Frequently asked questions

All prospective student-athletes MUST register on-line at the Eligibility Center website for Division I or II. You will be instructed from there as to the process to have your transcripts sent from the high school. You should register during your sophomore (10<sup>th</sup> grade) year.

The NCAA has adopted new policies that all prospective student-athletes who are planning to attend either a Division I or Division II school must supply SAT and ACT scores to the eligibility center directly from the testing agencies. You must use the code "9999" when making the request with the agencies. You can do so when you take the test (typically in your junior year), or request the scores be sent later (for a fee to the testing agency). If you direct the ACT or SAT to send the NCAA your scores every time you take a test, the NCAA will choose the best scores from each test subject to create your sum score. The NCAA can only accept official test scores from ACT or SAT, they cannot use scores that you provide.

### What are the Academic Eligibility Requirements?

The following requirements must be met in order for a student to be able to practice, play, and receive a scholarship at an NCAA Division I or II college or university.

#### Division I:

You must graduate from high school and meet ALL the following requirements:

1. Complete 16 NCAA core courses:
  - 4 years of English
  - 3 years of math (Algebra I or higher)
  - 2 years of natural/physical science (**including one year of lab science**)
  - 2 years of social science
  - 1 additional year of English, math, or natural/physical science
  - 4 additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy

2. Complete 10 (ten) core courses, including 7 (seven) in English, math or natural/physical science, before the start of your seventh semester (i.e. before the start of senior year). Once you begin your seventh semester, you may not repeat or replace any of those 10 (ten) courses for GPA improvement.
3. Earn at least a 2.3 GPA in your core courses.
4. Earn an SAT combined score or ACT sum score that matches your core-course GPA on the Division I sliding scale for students. (See the Division I Full Qualifier Sliding Scale on the website.)

**Division II:**

1. Complete 16 core courses.
2. Earn at a least a 2.200 GPA in your high school core courses.
3. Earn the SAT or ACT score that matches your core-course GPA (minimum of 2.200 on the Division II competition sliding scale (see the website).

Core Courses for Division II: To play sports at a Division II school, you must complete these NCAA core courses:

3 years of English

2 years of math (Algebra I or higher)

2 years of natural or physical science (**including one year of lab science**)

3 additional years of English, math or natural or physical science

2 years of social science

4 additional years of English, math, natural or physical science, social science, foreign language, comparative religion or philosophy

The simple formula to meet the 16 core-course requirement is to take 4 English classes, 4 math classes, 4 science classes, and 4 social studies classes, or one of each core class per year.

**It is the responsibility of the parent and student to ensure they are scheduling appropriate courses in high school that meet NCAA eligibility requirements. Not all high school courses count as NCAA Core Courses. Visit [eligibilitycenter.org](http://eligibilitycenter.org) for a full list of the high school’s core courses.**

As new courses are added to the Program of Studies, the course names and scope & sequence are submitted to the NCAA Eligibility Center to be evaluated for approval. As of December 2024, the following courses have been denied as “NCAA-approved core courses” based on certain NCAA guidelines. These courses DO NOT qualify as NCAA core courses and, therefore, CANNOT BE USED for NCAA initial-eligibility certification:

- |            |                     |
|------------|---------------------|
| English 9  | Horticulture        |
| English 10 | Algebra Essentials  |
| English 11 | Applied Mathematics |

# ARTS AND ENTERTAINMENT

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Careers in this path are related to the fine arts including performance art, visual art, and literary art. These include graphic, interior, and fashion design as well as writing and film.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Visual artist, photographer's assistant, theater production, model, electronic equipment operator, audio-visual systems technician, stage hand, actor, voice over artist, stunt person, dolly grip, focus puller   |
| <b>Technical Level Careers</b>    | Stage manager, recording studio assistant, special effects coordinator, prop maker, photographer, graphic designer/artist, filmmaker, camera operator, music minister, negative cutter, key production grip, make-up artist  |
| <b>Professional Level Careers</b> | Choreographer, publisher, music teacher, technical writer, sound engineer, media and design arts instructor, music director/conductor, producer, sound design editor, visual effects coordinator, playwright, dancer, screenwriter, costume/fashion design, musician, animator |

## CORE AND ELECTIVE COURSE OFFERINGS

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|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Drawing and Painting I, II, III</li> <li>• Mixed Media</li> <li>• AP Art History</li> <li>• Ceramics/Sculpture I &amp; II</li> <li>• Metals and Jewelry I &amp; II</li> <li>• Interior Design</li> <li>• Music Theory</li> <li>• Orchestra</li> </ul> | <ul style="list-style-type: none"> <li>• Band</li> <li>• Sewing Design</li> <li>• Advanced Sewing Design</li> <li>• AP Studio Art</li> <li>• Studio Intensive</li> <li>• Video Production</li> <li>• Advanced Video Production</li> <li>• Film Studies</li> <li>• Advertising Design (A.W. Beattie CTC)</li> </ul> |
|--|--|

# COMMUNICATION AND MEDIA

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Careers in this path are related to the broadcast, print, and mass media arts. These include journalism, languages, and various forms of mass and digital media.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Photographer’s assistant, lighting technician, electronic equipment operator, camera technician, broadcast technician, sound technician, disc or video jockey, announcer, voice over artist  |
| <b>Technical Level Careers</b>    | Recording studio assistant, web designer, photographer, graphic designer/artist, camera operator, photojournalist, radio/television broadcaster, gaffer, key production grip, broadcast technician, network technician, audio-visual technician                            |
| <b>Professional Level Careers</b> | Foreign language interpreter, publisher, technical writer, columnist, sound engineer, media and design arts instructor, producer, sound design editor, news analyst, reporter, telecommunications specialist, station manager, public relations, mass media communications |

## CORE AND ELECTIVE COURSE OFFERINGS

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|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Video Production</li> <li>• Advanced Video Production</li> <li>• Mass Media Journalism</li> <li>• Graphic Design I and II</li> <li>• Design Studio</li> </ul> | <ul style="list-style-type: none"> <li>• French I-V</li> <li>• German I-V</li> <li>• Mandarin I-V</li> <li>• Spanish I-V</li> <li>• AP Seminar</li> <li>• AP Research</li> <li>• Advertising Design (A.W. Beattie CTC)</li> </ul> |
|--|---|

## HEALTH SCIENCES AND MEDICAL TECHNOLOGY

Careers in this path are related to the promotion of health and treatment of disease. These include research, prevention, treatment, and related health technologies.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Physical therapy assistant, respiratory care practitioner, optometric medical assistant, medical office secretary, home health aide, laboratory assistant, pharmacy aide, dental assistant, medical equipment preparer, personal and home care aide, psychiatric aide, veterinary assistant, laboratory animal caretaker, biotechnological assistant, central supply aide, geriatric assistant   |
| <b>Technical Level Careers</b>    | Certified nursing assistant, pharmacy technician, registered nurse, paramedic, operating room technician, medical records technician, emergency medical technician, licensed vocational nurse, radiology technician, dental lab technician, respiratory therapist, cardiovascular technologist, dental hygienist, diagnostic medical sonographer, biomedical technician, environmental services technician, gerontologist, medical science illustrator |
| <b>Professional Level Careers</b> | Surgeon, registered nurse, pharmacist, physician, orthodontist, nurse practitioner, anesthesiologist, athletic trainer, dietitian and nutritionist, clinical trial researcher, biomedical chemist, geneticist, health service administrator, industrial hygienist, materials management supervisor   |

### CORE AND ELECTIVE COURSE OFFERINGS

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Biology</li> <li>• H-Biology II</li> <li>• AP Biology</li> <li>• Chemistry</li> <li>• AP Chemistry</li> <li>• AP Physics/Physics</li> <li>• AP Psychology/Psychology</li> <li>• H-Human Anatomy &amp; Physiology</li> <li>• H-Biotechnology Research Lab</li> </ul> | <ul style="list-style-type: none"> <li>• Physical Anthropology</li> <li>• Dental Careers (A.W. Beattie CTC)</li> <li>• Emergency Response Technology (A.W. Beattie CTC)</li> <li>• Health and Nursing Sciences (A.W. Beattie CTC)</li> <li>• Pharmacy Operations (A.W. Beattie CTC)</li> <li>• Sports Medicine (A.W. Beattie CTC)</li> <li>• Vet Sciences Tech (A.W. Beattie CTC)</li> <li>• Surgical Sciences (A.W. Beattie CTC)</li> </ul> |
|--|--|



# HUMAN AND SOCIAL SERVICES

Careers in this path are related to the helping professions and social systems. These include education, government, religion, childcare, social services, and personal services.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Social and human service assistant, animal control worker, foster care worker, lifeguard, nail technician, census clerk, nurse's aide, childcare assistant   |
| <b>Technical Level Careers</b>    | U.S. customs officer, eligibility worker, vocational counselor, employment and training technician, residential counselor, substance abuse counselor, licensed psychiatric technician, mental health worker, cosmetologist, massage therapist, animal control officer, emergency medical technician  |
| <b>Professional Level Careers</b> | Marriage and family therapist, licensed clinical social worker, foreign language interpreter, funeral director, medical/public health social workers, mental health social worker, mental health counselor, anthropologist, astronomer, educator, school counselor, school administrator, clinical psychologist, curator, archivist, education researcher, dietician, librarian, clergy, speech language pathologist, curriculum developer |

## CORE AND ELECTIVE COURSE OFFERINGS

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• AP Psychology</li> <li>• AP Statistics</li> <li>• CHS-Basic Applied Statistics</li> <li>• AP Seminar</li> <li>• AP Research</li> <li>• Psychology</li> <li>• Sociology</li> <li>• CHS Early Childhood Development</li> </ul> | <ul style="list-style-type: none"> <li>• Physical Anthropology</li> <li>• World Languages</li> <li>• Early Childhood Education (A.W. Beattie CTC)</li> <li>• Emergency Response Technology (A.W. Beattie CTC)</li> </ul> |
|---|--|

# LAW, LEGAL, AND PUBLIC SERVICES

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Careers in this path are related to planning managing and providing legal, public safety, protective services and homeland security.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Forest firefighter, uniform security officer, parking enforcement officer, legal clerk, correctional officer, security officer, fire/police/ambulance dispatch, stenographer, postal worker, bail bondsman, private investigator   |
| <b>Technical Level Careers</b>    | Police officer, police patrol officer, sheriff and deputy sheriff, firefighter, fire apparatus engineer, paralegal, legal assistant, game warden, military intelligence, combat operations officer, bomb technician, aviation safety officer, industrial espionage security officer, criminal investigator, police detective |
| <b>Professional Level Careers</b> | Federal marshal, FBI, ATF, DEA agent, probation mediator, attorney, judge, magistrate judge, probation officer, immigration officer, cryptographer, public information office, politician, internal revenue investigator, information systems security specialist, computer forensics specialist                             |

## CORE AND ELECTIVE COURSE OFFERINGS

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|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• AP Government and Politics</li> <li>• AP Psychology</li> <li>• AP Seminar</li> <li>• AP Research</li> <li>• AP Statistics</li> <li>• AP Language/Composition</li> <li>• AP Literature/Composition</li> <li>• CHS Cybersecurity</li> </ul> | <ul style="list-style-type: none"> <li>• Psychology</li> <li>• Sociology</li> <li>• Law and Justice</li> <li>• Physical Anthropology</li> <li>• Emergency Response Technology (A.W. Beattie CTC)</li> <li>• Computer Systems, Networks, &amp; Cyber Security (A.W. Beattie CTC)</li> </ul> |
|--|--|

# FINANCE AND BUSINESS INDUSTRY

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Careers in this path are related to the business environment. These include entrepreneur, sales, marketing, computer/information systems, finance, accounting, personnel, economics, and management.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Account clerk, audit clerk, bookkeeper, payroll clerk, bank teller, new account clerk, account collector, credit clerk, claims clerk, insurance appraiser, records processor, client services clerk, brokerage clerk, resort equipment manager, tour guide, concierge                                    |
| <b>Technical Level Careers</b>    | Account specialist, cost estimator, tax preparer, associate accountant, administrative assistant, office manager, loan specialist, credit analyst, claims examiner, tax examiner, treasurer, underwriting assistant, insurance claims agent, food and beverage manager, travel agent, real estate broker |
| <b>Professional Level Careers</b> | Bank officer, stockbroker, consultant, business teacher, accountant, auditor, budget analyst, controller, appraiser, bank manager, escrow officer, economist, financial planner, securities manager, operations manager, merchandiser, training and development specialist, insurance agent, actuary     |

## CORE AND ELECTIVE COURSE OFFERINGS

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|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Business Management</li> <li>• CHS Intro to Financial Accounting</li> <li>• CHS Intro to Managerial Accounting</li> <li>• Introduction to Advertising</li> <li>• Personal Finance</li> <li>• Entrepreneurship</li> </ul> | <ul style="list-style-type: none"> <li>• World Languages</li> <li>• AP Economics</li> <li>• AP Psychology</li> <li>• AP Statistics</li> <li>• CHS Basic Applied Statistics</li> <li>• CHS Business Calculus</li> </ul> |
|---|--|

# AGRICULTURE AND NATURAL RESOURCES

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Careers in this path are related to agriculture, the environment, and natural resources. These include agricultural sciences, earth sciences, environmental sciences, fisheries, forestry, horticulture, and wildlife.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Nursery worker, forestry aide, crop inspector, irrigator, park aide, gardener/groundskeeper, feeder, AG supplies warehouse laborer, AG service technician trainee, AG equipment operator, AG business clerk, farmworker and laborer  |
| <b>Technical Level Careers</b>    | Land use planning technician, field representative technician, animal health technician, greenhouse grower/manager, soil conservation technician, landscape designer, forestry technician, artificial inseminator, AG sales and service technician, AG import/export technician, AG equipment service, AG equipment set-up foreperson, farm equipment mechanic |
| <b>Professional Level Careers</b> | Soil/water manager, agronomist, country planner/landscape, animal nutritionist, international AG pest control advisor, veterinarian, plant/animal geneticist, forester/ranger, architect, AG teacher/farm/home advisor, AG research/developer, AG engineer, AG business owner/operator, ecologist, golf course superintendent                                  |

## CORE AND ELECTIVE COURSE OFFERINGS

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|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Biology</li> <li>• AP Environmental Science</li> <li>• Humans and the Environment</li> <li>• Horticulture</li> <li>• H-Environmental Science</li> </ul> | <ul style="list-style-type: none"> <li>• Introduction to Materials Processing</li> <li>• Metal Fabrication</li> <li>• Wood Fabrication</li> <li>• Chemistry</li> <li>• Physical Anthropology</li> </ul> |
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# ENGINEERING AND DESIGN INDUSTRY

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Careers in this path are related to technologies necessary to design, develop, install, and maintain physical systems. These include engineering, manufacturing, construction, service, and related technologies.

|                                   |  |
|-----------------------------------|--|
| <b>Entry Level Careers</b>        | Junior drafter, CAD technician, construction apprentice, engineering aide, drafting apprentice, apprentice electrician, computer equipment installer, security equipment installer   |
| <b>Technical Level Careers</b>    | Drafter/designer, plan checker, surveyor, estimator, electrical engineering technician, mechanical engineering technician, laboratory technician, civil engineering technician, chemical engineering technician, aerospace engineering technician, architectural drafter, telecommunications technician, journeyman electrician, computer systems administrator, database administrator, computer support specialist |
| <b>Professional Level Careers</b> | Mechanical engineer, aerospace engineer, agricultural engineer, electrical engineer, computer hardware engineer, telecommunications engineer, landscape architect, materials engineer, nuclear engineer, architect, industrial designer, civil engineer, structural engineer, software engineer, systems analyst, network security specialist, software developer, web developer, IT manager, computer programmer    |

## CORE AND ELECTIVE COURSE OFFERINGS

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|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Physics</li> <li>• Chemistry</li> <li>• CHS-Discrete Mathematics</li> <li>• AP Calculus (AB, BC)</li> <li>• Architectural Design I, II</li> <li>• Engineering Design I, II</li> <li>• Computer Programming I &amp; II</li> <li>• CHS Intro to Engineering</li> </ul> | <ul style="list-style-type: none"> <li>• Robotics I &amp; II</li> <li>• AP Computer Science A</li> <li>• AP Computer Science Principles</li> <li>• CHS Academy College Programming and Computer Science</li> <li>• CHS Cybersecurity</li> <li>• CHS Intro to Matrices and Linear Algebra</li> <li>• Robotics Engineering (A.W. Beattie CTC)</li> <li>• Computer System, Network, &amp; Cyber Security (A.W. Beattie CTC)</li> </ul> |
|---|---|

## English Department Courses

| Course # | Course Title                                   | Credit | Grade Level | Prerequisites  |
|----------|--|--------|-------------|--|
| 0179     | English 9 <sup>^</sup>                         | 1.0    | 9           | Teacher Recommendation   |
| 0109     | Academic English 9                             | 1.0    | 9           | English 8 Course   |
| 0149     | Honors English 9                               | 1.0    | 9           | Academic English 8 or Honors English 8   |
| 0110     | Academic English 10                            | 1.0    | 10          | English 9 course   |
| 0140     | Honors English 10                              | 1.0    | 10          | Academic English 9 or Honors English 9   |
| 0111     | Academic English 11                            | 1.0    | 11          | English 10 course  |
| 0141     | Honors English 11                              | 1.0    | 11          | Academic English 10 or Honors English 10                                       |
| 0151     | AP English Language and Composition (11)       | 1.0    | 11          | Academic English 10 or English 10 – Honors                                     |
| 0112     | Academic English 12: British Literature        | 0.5    | 12          |  |
| 0113     | Academic English 12: Science Fiction & Fantasy | 0.5    | 12          |  |
| 0114     | Academic English 12: Humor & Satire            | 0.5    | 12          |  |
| 0115     | Academic English 12: Crime & Literature        | 0.5    | 12          |  |
| 0142     | Honors English 12                              | 1.0    | 12          | AP English Language and Composition, Honors English 11, or Academic English 11 |
| 0152     | AP English Literature and Composition (12)     | 1.0    | 12          | AP English Language and Composition, Honors English 11, or Academic English 11 |
| 0120     | Academic Seminar                               | 0.5    | 10-12       |  |
| 0160     | AP Seminar                                     | 1.0    | 10-12       |  |
| 0161     | AP Research                                    | 1.0    | 11-12       | Completion of AP Seminar   |
| 0122     | Mass Media Journalism                          | 0.5    | 9-12        |  |
| 0182     | Creative Writing                               | 0.5    | 9-12        |  |
| 0183     | Film Studies                                   | 0.5    | 11-12       |  |

<sup>^</sup> Not NCAA Approved

No student may enroll in two (2) year-long English classes concurrently without the approval from the high school principal based on an extenuating circumstance. Students are required to complete one grade level specific English course per year. These year-long courses are identified with the grade level descriptor in the course titles. Any student who fails to complete the requirements of English 9, 10, 11 or 12 on any level must enroll in an accredited program to complete the work required for credit in this class and to schedule the next level of English.

**ENGLISH 9 No. 0179**

Full Year

Credit 1.0

Grade 9

Prerequisites: Teacher Recommendation

This course is designed to support students who need explicit reading instruction. English 9 is a full-year reading supported English course that focuses on the continued development of reading, comprehension, writing, vocabulary, listening, and speaking skills using a variety of approaches. Through units devoted to the active reading of short stories, novels, poetry, nonfiction, and drama, the students participate in activities and discussions in order to comprehend and analyze both fiction and non-fiction literature. The students also learn to communicate through written expression by composing multi-paragraph compositions and an MLA-based research project.

**ACADEMIC ENGLISH 9 No. 0109**

Full Year

Credit 1.0

Grade 9

Prerequisite: English 8 course

Academic English 9 is a full-year course that challenges the student to expand, refine, and explore the areas of literature, grammar, writing, speaking, and listening. Through units devoted to the active reading of poetry, short stories, novels, nonfiction, and drama, the student thinks and participates in discussions about himself/herself and the society in which he/she lives. Students will learn the basic components of research and begin a sequential vocabulary program that emphasizes the development and refinement of traditional English skills. All 9<sup>th</sup> grade academic students are required to complete an acceptable MLA-based research project.

**HONORS ENGLISH 9 No. 0149**

Full Year

Credit 1.0

Grade 9

Prerequisite: Academic English 8 or Honors English 8

Honors English 9 is an accelerated survey of literature, grammar, composition, and vocabulary study. Emphasis is placed on word choice (authors' styles and students' styles), and mature writing and thinking. This course is for excellent readers who are independent, self-reliant, and highly motivated. An inquiry-based research project is the culminating activity. Summer reading and writing are required of all who enroll in this honors course.

**ACADEMIC ENGLISH 10 No. 0110**

Full Year

Credit 1.0

Grade 10

Prerequisite: English 9 Course

Academic English 10 is a year-long course that is designed to challenge and expand students' reading, writing, and researching skills through a variety of composition, grammar, oral communication, literature, and research units. Students study a variety of literature including non-fiction, short fiction, the novel, drama, Shakespeare, and poetry. Students will write several descriptive and expository compositions. In addition, all 10<sup>th</sup> grade academic students complete an acceptable MLA-based research project. Students will build effective vocabulary through the analysis of literature. Through this course, academic tenth graders will gain the necessary skills to improve literary analysis, written and oral communication skills, and technology skills. This is a Pennsylvania State Keystone test course.

**HONORS ENGLISH 10 No. 0140**

Full Year

Credit 1.0

Grade 10

Prerequisite: Academic English 9 or Honors English 9

Honors English 10 is the second in the sequence of accelerated courses in English. The course is designed to offer students an understanding of literary genres. Students learn to read critically and closely as they apply elements of analysis to novels, short stories, drama, poetry, and nonfiction. Study in vocabulary and grammar is promoted, and precision in writing and speaking is stressed. Students develop and polish composition skills by writing in various modes. Students will also complete a fully documented research paper using an MLA format. Technology will be incorporated throughout this course to further assist with meeting these goals. Students enrolled in Honors English 10 must possess exceptional motivation to meet the rigor and challenge of the course. Summer reading and writing is a requirement of all who take this class. This is a Pennsylvania State Keystone test course.

**ACADEMIC ENGLISH 11 No. 0111**

Full Year

Credit 1.0

Grade 11

Prerequisite: English 10 Course

Academic English 11 is a full-year course that critically examines and analyzes poetry, short stories, novels, and non-fiction essays from different periods of American literature. This course also requires students to utilize their refined writing skills in order to compose a series of analytical compositions as well as an MLA-based research project. This course also develops vocabulary, grammar, and technology skills. Students are expected to participate actively in the class and are evaluated through compositions, quizzes, exams and projects.

**HONORS ENGLISH 11 No. 0141**

Full Year

Credit 1.0

Grade 11

Prerequisite: Academic English 10 or Honors English 10

Honors English 11 is an accelerated study of American literature with an emphasis on the analysis of literature through critical reading and writing. The course exposes the student to each American literary period through various works of literature. In addition, the intensive writing program that accompanies this course will require students to complete many compositions, both created outside of class and during timed in-class sessions, along with an acceptable MLA-based research project. Students will also utilize a collegiate vocabulary program throughout the course. This course will prepare students for AP or Honors English in their senior year. This course is for excellent readers who are independent, self-reliant, and highly motivated. Summer reading and writing assignments are required for this course.

**AP ENGLISH LANGUAGE AND COMPOSITION No. 0151**

Full Year

Credit 1.0

Grade 11

Prerequisite: Academic English 10 or Honors English 10

AP English Language and Composition is a year-long course for motivated juniors interested in earning college credit while in high school. The course requires nonfiction readings that are selected to give students opportunities to identify and explain an author's use of rhetorical strategies and techniques. Students will learn to evaluate primary and secondary sources in order to incorporate them into original compositions utilizing Modern Language Association guidelines. Students will write expository, analytical, and argumentative papers in response to a variety of fiction, non-fiction, poetry, and images-as-text. Students will utilize American literature and other texts to analyze the techniques of writing. A summer assignment is also required of this course. Students who take this course are expected to take the AP exam in May.



**ACADEMIC ENGLISH 12: BRITISH LITERATURE No. 0112**

Semester  
Credit 0.5  
Grade 12

Prerequisites: Students must take Academic English 12 concurrently with Science Fiction & Fantasy, Humor & Satire, or Crime & Literature

British Literature 12 is a required half-year course that fulfills .5 of the senior year English course requirement. This course is designed to introduce students to the chronological study of British Literature, from the epic poem, *Beowulf*, to the science-fiction novel, *Brave New World*. These materials will be supplemented with a sampling of world literature. In addition to literary studies, students will refine composition skills. All 12th grade academic students are required to complete an acceptable MLA-based research project. The students will also continue to build a strong vocabulary.

**ACADEMIC ENGLISH 12: SCIENCE FICTION & FANTASY No. 0113**

Semester  
Credit .5  
Grade 12

Science Fiction and Fantasy is a half-year elective course that fulfills .5 of the senior year English course requirement. This course is designed to introduce students to the craft of fantasy and science fiction and to explore the way both genres have developed. Students will explore how authors develop common themes and tropes in science fiction and fantasy genres through short fiction, podcasts, television, and film. In addition to a variety of short fiction, students will analyze *Lord of the Rings* by J.R.R. Tolkien and select a novel for group study. Students will engage in an inquiry-based research assignment that allows them to consider the impact of fantasy or science fiction.

**ACADEMIC ENGLISH 12: HUMOR & SATIRE No. 0114**

Semester  
Credit 0.5  
Grade 12

Humor and Satire is a half-year elective course that fulfills .5 of the senior year English course requirement. This course is designed to introduce students to the craft of various types of written and performed humor and satire including situational comedy, slapstick comedy, satire, parody, surreal humor, dramedy, wit, and mockumentary. In addition to a variety of short fiction, students will have the opportunity to select a novel for group study. Students will engage in an inquiry-based research assignment that allows them to consider the impact of humor.

**ACADEMIC ENGLISH 12: CRIME & LITERATURE No. 0115**

Semester  
Credit 0.5  
Grade 12

Crime and Literature 12 is a half-year elective course that fulfills .5 of the senior year English course requirement. This course is designed to introduce students to the craft of various types of media focusing on both true crime and fictionalized crime. In addition to a variety of short fiction, students will have the opportunity to select a novel for group study. Students will engage in an inquiry-based research assignment that allows them to consider the impact of the genre.

**HONORS ENGLISH 12 No. 0142**

Full Year  
Credit 1.0  
Grade 12

Prerequisite: AP English Language and Composition, Honors English 11, or Academic English 11

Honors English 12 is an accelerated course of study of British and World Literature, its various time periods, and related criticism. Students enrolling in this course should be highly motivated and committed to reading and analyzing literature. Through class discussion and written work, students will explore the themes and elements of literature. Additionally, the course includes college-level vocabulary study and incorporation of technology, where appropriate. All 12<sup>th</sup> grade Honors

students are required to complete an acceptable MLA-based research project. Any student enrolled in Honors 12 will be expected to complete the summer reading and writing assignments.

### **AP ENGLISH LITERATURE & COMPOSITION No. 0152**

Full Year

Credit 1.0

Grade 12

Prerequisite: AP English Language and Composition, Honors English 11, or Academic English 11

AP English Literature and Composition is a year-long course appropriate for students who have the motivation and capability to earn college credit while in high school. The course includes the intensive study of literature from various genres and time periods. The College Board guidelines suggest that students become involved in the experience, the interpretation and the evaluation of literature. Writing assignments focus on the critical analysis of literature and include expository, analytical, and argumentative essays. In addition, students are required to write a research paper as well as other out-of-class papers that analyze how meaning is embodied in literary form. Students who take this course are expected to take the AP Exam in May.

### **ACADEMIC SEMINAR No. 0120**

Semester

Credit .5

Grades 10, 11, 12

Academic Seminar is a required course for all students; however, AP Seminar can fulfill this requirement. The course is designed to build students' competencies in the following areas: public speaking, collaboration, conceptual thinking, research, and critical thinking, all of which are soft skills. Students will engage in a variety of individual and collaborative projects resulting in team presentations that may aim to inform, persuade, or question their audiences. Projects will ask students to address a variety of occasions and audiences and will be assessed on preparation, teamwork, critical thinking, content, and delivery. Through the course, students work to become more critical, articulate, open-minded and curious. Additionally, the course provides students with career readiness skills.

### **AP SEMINAR No. 0160**

Full Year

Credit 1.0

Grades 10, 11, 12

AP Seminar is a research, writing, and speaking course that engages students in cross-curricular exploration of academic and real-world topics. **Students interested in this course should have strong foundational skills in critical reading, writing, and research and be confident self-advocates.** Using an inquiry framework, students analyze articles, research studies, literary and philosophical texts, and a variety of multimedia. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with skills in analyzing and evaluating information with accuracy and precision in order to craft and communicate evidence-based arguments. Students will be expected to conduct research and collaborate with peers outside of the school day. This course also provides students with career readiness skills. Students should be aware that individual and group papers, filmed presentations, and an AP exam will all factor into the final AP score assigned by the College Board. Students who take this course are expected to participate in the AP Exam.

### **AP RESEARCH No. 0161**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: Successful completion of AP Seminar

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and

reflection portfolio. The course culminates in an academic paper of approximately 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. Students who take this course are expected to submit the paper and presentation for AP credit.

**MASS MEDIA JOURNALISM No. 0122**

Semester

Credit .5

Grades 9, 10, 11, 12

In this semester-length course, students will learn the essentials of journalism including lead generation and writing, newsworthiness, fact-finding, interviewing, copywriting, copyediting, layout, and photojournalism. Emphasis will be placed on journalistic style including accuracy, brevity, clarity, and objectivity. Students will be taught the ethics of journalism including topics such as press freedom, libel, sensationalism, and copyright laws, including provisions governing fair use. Students will be expected to work individually and in groups to produce articles covering a variety of genres including hard news, investigative news, human interest, arts and entertainment, and sports. Students will have the opportunity to share their work with the high school community by contributing to our student newspaper, *The Hamptonian*. The course will also teach students about the 21<sup>st</sup> century's multi-media landscape, which includes print, digital, video, and social media. Students enrolled in the course are expected to be inquisitive and to adhere to the highest standards of media ethics and professionalism.

**CREATIVE WRITING No. 0182**

Semester

Credit 0.5

Grades 9, 10, 11, 12

Creative Writing is a one-semester intensive writing course for the student who enjoys writing on a daily basis, and wants to explore various genres and modes of writing. Students experiment with forms of poetry, song lyrics, narratives, short stories, screenplays, and one-act plays. Published works, in most of these forms, will also be read and discussed throughout the semester. Emphasis is placed on developing a writing community where students explore personal style and voice and interact with peers for feedback and ideas. Students are evaluated on class participation in response groups, in-class exercises, and sharing circles as well as drafts and polished pieces of writing.

**FILM STUDIES No. 0183**

Semester

Credit .5

Grades 11, 12

This elective course offers students a study of films, film-making techniques, and film analysis. Students will develop skills in analyzing film techniques such as cinematography, art and visual effects, sound and music, and screenwriting, while viewing both classic and contemporary films. In addition, students will explore how these techniques illuminate, enhance, or dilute the meaning of the film. The course will introduce students to the following film topics: foundations of horror, suspense and narration, anime, documentary, German Expressionism/Film Noir, and Hitchcock. Students will be evaluated on class discussion, projects, and written work.

## Social Studies Department Courses

| Course #      | Course Title  | Credit | Grade Level | Prerequisites                   |
|---------------|---|--------|-------------|---------------------------------|
| 0209          | Academic World Geography  | 1.0    | 9           |                                 |
| 0249          | Honors World Geography  | 1.0    | 9           |                                 |
| 0256          | AP Human Geography  | 1.0    | 9           |                                 |
| 0210          | World History   | 1.0    | 10          |                                 |
| 0240          | Honors World History  | 1.0    | 10          |                                 |
| 0255          | AP World History: Modern  | 1.0    | 10          |                                 |
| 0211          | United States History   | 1.0    | 11          |                                 |
| 0251          | AP United States History  | 1.0    | 11          |                                 |
| 0215          | CHS United States 1865-Present                                  | 1.0    | 11          |                                 |
| 0212<br>0212C | American Government--Traditional<br>American Government--Online | 0.5    | 11-12       |                                 |
| 0253          | AP US Government and Politics                                   | 1.0    | 11-12       |                                 |
| 0232<br>0232C | Economics—Traditional<br>Economics—Online                       | 0.5    | 11-12       |                                 |
| 0252          | AP Economics  | 1.0    | 11-12       | Honors Algebra II or Algebra II |
| 0281          | Psychology  | 0.5    | 10-12       |                                 |
| 0282          | Sports Psychology   | 0.5    | 10-12       |                                 |
| 0283          | Sociology   | 0.5    | 11-12       |                                 |
| 0285          | Civil War History   | 0.5    | 9-12        |                                 |
| 0286          | World War II History  | 0.5    | 11,12       |                                 |
| 0287          | Contemporary World Issues                                       | 0.5    | 11, 12      |                                 |
| 0254          | AP Psychology   | 1.0    | 10-12       |                                 |

### ACADEMIC WORLD GEOGRAPHY No. 0209

Full Year  
Credit 1.0  
Grade 9

World Geography promotes both cultural and global awareness in an increasingly interdependent world. The course is the “connecting link” between social and physical sciences. It balances traditional physical geography with equally important cultural geography, emphasizing human-environment interaction. Frequent current event activities ensure that students remain informed of world and national news.

### HONORS WORLD GEOGRAPHY No. 0249

Full Year  
Credit 1.0  
Grade 9

Criteria for Recommendation: A final grade of B or higher in an 8<sup>th</sup> Grade History Course.

Honors Human Geography is an advanced course that examines the relationship between human societies and their environments, focusing on how cultural and physical landscapes evolve over time. Students will explore themes such as migration, urban growth, cultural interactions, and resource management with an emphasis on local, regional, and global perspectives. The course encourages analytical thinking and problem-solving through project-based learning, real-world applications, and collaborative research. It provides a comprehensive introduction to geographic concepts and equips students with skills for advanced studies in the social sciences.

**AP HUMAN GEOGRAPHY No. 0256**

Full Year  
Credit 1.0  
Grade 9

Criteria for Recommendation: A final grade of A in an 8th grade history course and the ability to read and interpret college-level text.

AP Human Geography is a rigorous, fast-paced college-level course that explores the patterns and processes shaping human understanding, use, and alteration of the Earth's surface. Students will examine topics such as population dynamics, cultural landscapes, political organization, urban development, and economic systems. Through geographic analysis, students will develop critical thinking skills to understand global issues and their spatial implications. This course prepares students for the AP exam, offering the potential for college credit, and provides a strong foundation for further studies in social sciences and geography.

**WORLD HISTORY No. 0210**

Full Year  
Credit 1.0  
Grade 10

This course is a continuation of the academic study of World History. The focus of the course is on social, political, economic, cultural, and technological developments throughout the world from 1200 to the present. Emphasis will also be placed on the development of historical thinking skills, such as comparison, causation, and continuity and change over time.

**HONORS WORLD HISTORY No. 0240**

Full Year  
Credit 1.0  
Grade 10

Criteria for Recommendation:

1. A final grade of C or higher in Honors World Geography
2. A final grade of B or higher in World Geography

Students in World History – Honors will study the development of major issues in our world. The course will begin with introductory units on exploration, religious and philosophical developments, and scientific discoveries. The study of the 18<sup>th</sup> and 19<sup>th</sup> centuries will focus on revolution and world economic changes, while the study of the 20<sup>th</sup> century will trace the developments of political and diplomatic power around the world. The ongoing tension between tradition and modernity as shaped by wars, revolutions, and economic transformations will be the central theme of the course, as students will be asked to make connections between topics and time periods to understand and appreciate how these events and ideologies have impacted our current world.

**AP WORLD HISTORY: MODERN No. 0255**

Full Year  
Credit 1.0  
Grade 10

Criteria for Recommendation: Final grade of B or higher in Honors World Geography or Final grade of A in World Geography

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 in order 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.

**UNITED STATES HISTORY No. 0211**

Full Year  
Credit 1.0  
Grade 11

This is a survey course of American history with an emphasis placed on the 19<sup>th</sup> and 20<sup>th</sup> centuries. Students will explore the major economic, social, political, diplomatic, and cultural events that have shaped modern America through topics such as Reconstruction, the Gilded Age, WWI, the Great Depression and New Deal, WWII, the Cold War, the Civil Rights Movement, the Vietnam War, etc. Students will utilize critical thinking skills through the use of both primary and secondary historical records and relate historical events to modern ones.

**AP UNITED STATES HISTORY No. 0251**

Full Year  
Credit 1.0  
Grade 11

Criteria for Recommendation: A final grade of B or better in Honors World History or final grade of A in World History

AP United States History focuses on developing students' abilities to think conceptually about U.S. history from approximately 1492 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. Students who take this course are expected to take the AP exam in May.

**CHS UNITED STATES 1865-PRESENT No. 0215**

Full Year  
Credit 1.0  
Grade 11

Criteria for Recommendation: A final grade of B or better in Honors World History or final grade of A in World History

This course traces and analyzes the central developments in U.S. History from Reconstruction to the present. Students will probe themes such as the definition of citizenship and the expanding role of government in citizens' lives, development of an industrial economy, global interventions such as the U.S. role as a Cold War superpower, response to economic collapse and war, migration and immigration, ethnic identity, race relations, gender roles, and labor rights. They will also examine how various groups of Americans have challenged the status quo in a determined expectation that the United States should live up to the promise of its founding ideals of equality and freedom. Finally, this course will familiarize students with how to interpret primary and secondary sources, learn to read and construct historiographical arguments, and hone analytical and evidenced based writing skills.

Students may elect, for a fee, to enroll in Duquesne University College in High School Program to earn three college credits.

**AMERICAN GOVERNMENT No. 0212**

Semester  
Credit.5  
Grade 11, 12

**No. 0212C (Asynchronous Online Course)**

American Government is a one semester required course designed to give students an understanding of the United States Constitution and American government in action. The students begin the course with an examination of the history and philosophies that played parts in developing our form of government at the Constitutional Convention. The theories of popular sovereignty, limited government, separation of powers, checks and balances, and federalism are examined. The functions of the branches of government, the role of political parties, elections, interest groups, and the media will also be studied. Finally, civil liberties and civil rights will be reviewed through an extensive analysis of the Bill of Rights. There is a special emphasis on making government relevant and applicable to students' lives through group projects in which students must present solutions to real world political problems. Students may choose to take the traditional classroom course or an online version. Similar to a college course, the instructor will have autonomy in planning when students are required to be in class as compared to when they will be required to be online based on progress in the online course.

**AP UNITED STATES GOVERNMENT AND POLITICS No. 0253**

Full Year  
Credit 1.0  
Grade 11, 12

AP United States Government and Politics is a senior course designed for students with strong reading and writing skills interested in political philosophy, law, politics, and the background of our government system. The first part of the course covers the Constitution: the philosophy and underpinnings behind it, the ratification debates, its implementation, and then the actual content and meaning of the Constitution and Bill of Rights. The second half of the course covers the required Advanced Placement curriculum outside of the Constitution. There is an in-depth study of the three branches of the government, their powers, and how they function. Students will also study the political process—campaigns, elections, special interest groups, political parties, public opinion, and the media’s influence on politics. Overlaying the entire course is an attention to current political issues and how they reconcile with the political theory taught in the course. An emphasis is placed on being able to take positions on controversial issues and being able to support those positions with factual information. Students who take this course are expected to take the AP exam in May. Students electing to take this course during their junior year will be concurrently enrolled in an American history course.

**ECONOMICS No. 0232  
No. 0232C (Asynchronous Online Course)**

Semester  
Credit .5  
Grade 11, 12

Economics is an upper grade level course that studies how scarce resources are allocated to satisfy the wants of the people. The course compares different economic systems, examines the influence of supply and demand on prices and the quantity of goods produced. It also addresses how firms compete in our market economy, how the supply and demand of resources determine their price and quantity, and the role of government in our economy, including the actions of the Federal Reserve and the provision of public goods. Students will analyze how global economics has developed as they study international trade and global economic challenges. Additionally, students will learn how economics impact personal finance, and ways to navigate financial decisions. Students may choose to take the traditional classroom course or an online version. Similar to a college course, the instructor will have autonomy in planning when students are required to be in class as compared to when they will be required to be online based on progress in the online course.

**AP ECONOMICS No. 0252**

Full Year  
Credit 1.0  
Grade 11, 12  
Prerequisite: Algebra II-Honors or Algebra II

AP Economics is a college-level course designed to give the students a greater understanding of economics vis-à-vis a traditional high school course. The course is modeled after introductory college courses and covers the fundamentals of both Micro- and Macro-Economics. Students who take this course are expected to sit for the AP exams in both Micro- and Macro-Economics in May. AP Economics is unlike other history/social studies courses that students may have taken. There is a considerable amount of Algebra I mathematics and graphing. Completion of daily assignments is critical to success. Students who take this course are expected to take the AP exam in May. Students electing to take this course during their junior year will concurrently be enrolled in an American history course.

**PSYCHOLOGY No. 0281**

Semester  
Credit .5  
Grades 10, 11, 12

In this introductory psychology course, students will focus on the origins of man’s thoughts and behaviors by studying the development of the individual. Throughout the semester, students will study the various approaches to psychology, as well as sensation and perception, learning and memory, theories of development, social cognition and interaction, and

psychological disorders. By the end of this course students will have a better understanding of their own thoughts and behaviors, and how they affect interactions with others.

**SPORTS PSYCHOLOGY            No. 0282**

Semester  
Credit .5  
Grades 10, 11, 12

The Sports Psychology course will explore the fascinating intersection of psychology and sports performance. Designed for athletes and anyone interested in the mental aspects of sports, this course will study the intricacies of the athlete's mind, providing valuable insights and techniques to enhance athletic performance, mental resilience, and overall well-being. Through a combination of theory, practical exercises, case studies, and real-world applications, students will gain a comprehensive understanding of sports psychology and its impact on sports excellence.

**SOCIOLOGY    No. 0283**

Semester  
Credit .5  
Grade 11, 12

Sociology remains relevant as a topic because it explains how societies change. The course takes a scientific look at people as social beings and explores their behavior in groups and their relationships to social institutions. Topics studied include: culture, values and norms, roles and relationships, family, education, poverty, crime, and discrimination. The course allows students to research topics and express opinions about things that affect them.

**CIVIL WAR HISTORY            No. 0285**

Semester  
Credit .5  
Grade 9, 10, 11, 12

The United States Civil War was a test upon our Constitution and the unification of our nation. Americans were divided over the issues of slavery, states' rights, culture, and economic structures. This course is intended to analyze the issues pertaining to this era of history and to respect the sacrifices of millions who preserved this union.

**WORLD WAR II HISTORY    No. 0286**

Semester  
Credit .5  
Grade 11, 12

The World War II course will teach students about the political, military, and social issues surrounding WWII from an American perspective. Students will examine the battles in both theaters, as well as the impact of the war on America's Home Front. Students will learn of the contributions and sacrifices made by the "greatest generation" during the turbulent war years.

**CONTEMPORARY WORLD ISSUES    No. 0287**

Semester  
Credit .5  
Grade 11, 12

This course will explore political, economic, and social events/issues that impact our daily lives on both the state and local, as well as national and international level. Students will conduct research, engage in discussions, and explore projects based on independent and collaborative learning in order to cultivate their reading, writing, research, critical evaluation and communication skills. Additionally, they gain a greater knowledge of the world around them by considering issues from multiple perspectives to develop well-informed and evidence-based opinions/arguments. Ultimately, students will acquire the habits of informed and engaged citizens in order to actively and responsibly participate in a democratic society.



**AP PSYCHOLOGY No. 0254**

Full Year

Credit 1.0

Grade 10, 11, 12

Criteria for recommendation: A final grade of B or higher in Academic Biology or Biology I- Honors

AP Psychology is intended for students who wish to explore the study of psychology through a college-level course. This is a year-long course designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, theories, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists apply to their science and practice. Students who take this course are expected to take the AP exam in May.

## Math Department Courses

| Course # | Course Title                                    | Credit | Grade Level | Prerequisites  |
|----------|---|--------|-------------|--|
| 0301     | Algebra Essentials^                             | 1.0    | 9-12        | Teacher Recommendation   |
| 0308     | Algebra I                                       | 1.0    | 9-12        |  |
| 0305     | Intermediate Algebra II                         | 1.0    | 9-12        | Algebra I course   |
| 0306     | Algebra II                                      | 1.0    | 9-12        | Algebra I course   |
| 0321     | Geometry  | 1.0    | 9-12        | Algebra I course or Concurrent Enrollment in an Algebra I course |
| 0322     | Honors Geometry                                 | 1.0    | 9-12        | Honors Algebra I or Algebra I                                    |
| 0309     | Honors Algebra II                               | 1.0    | 9-12        | Honors Algebra I or Teacher Recommendation                       |
| 0311     | College Prep Mathematics                        | 1.0    | 11-12       | Algebra II and Geometry  |
| 0312     | Pre-Calculus                                    | 1.0    | 9-12        | Algebra II and Geometry  |
| 0310     | Honors Pre-Calculus                             | 1.0    | 9-12        | Honors Algebra II  |
| 0355     | CHS Discrete Mathematics                        | 1.0    | 10-12       | Pre-Calculus course  |
| 0341     | CHS Basic Applied Statistics                    | 1.0    | 9-12        | Algebra II or Honors Algebra II                                  |
| 0354     | AP Statistics                                   | 1.0    | 9-12        | Algebra II or Honors Algebra II                                  |
| 0342     | CHS Business Calculus                           | 1.0    | 10-12       | Honors Pre-Calculus or Pre-Calculus                              |
| 0352     | AP Calculus AB                                  | 1.0    | 10-12       | Honors Pre-Calculus  |
| 0353     | AP Calculus BC                                  | 1.5    | 11-12       | Honors Pre-Calculus  |
| 0356     | CHS Introduction to Matrices and Linear Algebra | 1.0    | 11-12       | AP Calculus AB or BC and a score of 4 or 5 on the AB exam        |

^ Not NCAA Approved

| Math Pathways          |  |                |  | Requirement: 4 Courses           |  |   |  |
|------------------------|--|----------------|--|----------------------------------|--|---|--|
| Grade 9                |  | Grade 10       |  | Grade 11                         |  | Grade 12  |  |
| Honors Algebra II      |  | H-Pre-Calculus |  | AP Calculus BC<br>AP Calculus AB |  | CHS Linear Algebra<br>CHS Discrete Math   |  |
| H-Geometry<br>Geometry |  | H-Algebra II   |  | H-Pre-Calculus                   |  | AP Calculus BC<br>AP Calculus AB<br>CHS Business Calculus<br>CHS Discrete Math<br>AP Statistics |  |
|                        |  | Algebra II     |  | Pre-Calculus                     |  | CHS Discrete Math<br>CHS Basic Applied Statistics   |  |
|                        |  |                |  | College Prep Mathematics         |  | Pre-Calculus  |  |
| Algebra I              |  | H-Geometry     |  | Algebra II                       |  | Pre-Calculus  |  |
|                        |  | Geometry       |  | Intermediate Algebra II          |  | College Prep Mathematics  |  |
| Algebra Essentials     |  | Algebra        |  | Geometry                         |  | Intermediate Algebra II   |  |

**ALGEBRA ESSENTIALS No. 0301**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Teacher recommendation

Students who take the Algebra Essentials Course will be provided with review, practice, application and extensions of the mathematical skills necessary for success in Algebra I. The content of the course will focus on: proportional reasoning, geometry, linear equations, the number system and statistical analysis. Students will move quickly from the basic skills to the application and extension to ensure better preparation for a full year of Algebra I. A scientific calculator is required for this course.

**ALGEBRA I No. 0308**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

The Algebra I student will be able to graph and solve linear equations, simplify and factor polynomials, including polynomial fractions, as well as set up and solve real world application problems. Also, students will acquire a working understanding of functions, inequalities, and systems of linear equations. They will be introduced to probability, statistics, and data analysis. A scientific calculator is required for this course. This is a Pennsylvania State Keystone test course.

**GEOMETRY No. 0321**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Algebra I course or concurrent enrollment in an Algebra I course

Geometry provides an introduction to the fundamentals of Euclidean Geometry by helping students develop basic geometric skills and by teaching the many applications of geometric principles. Content will include the following topics: perimeter, area, volume, surface area, angles, triangles, parallel and perpendicular lines, similarity, congruence, quadrilaterals, circles, and right triangle trigonometry. This course will also help to strengthen the students' algebra skills. Instructional activities will include lecture, discussion, problem solving, logical reasoning through proofs and construction. A scientific calculator is required for this course.

**HONORS GEOMETRY No. 0322**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: H-Algebra I

Criteria for Recommendation: H-Algebra I final grade of 80% or higher or Algebra I final grade of 90% or higher

The content of Geometry – Honors will help the student to perceive the role of inductive and deductive reasoning in both mathematical and non-mathematical situations. Furthermore, the student will learn to appreciate the need for clarity and precision of language. The course includes discussion on the subject of deductive proofs, angles, perpendicular lines, parallel lines, congruent triangles, circles, areas and volumes of solid and plane figures, and an introduction into coordinate geometry. A scientific calculator is required for this course.

**INTERMEDIATE ALGEBRA II No. 0305**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Algebra I course

In this course, students will study Algebra II concepts that they will see on the PSAT and SAT, including: linear equations, solving linear equations, systems of equations, linear programming, basic factoring, quadratic equations, exponential

equations with compound interest/loans, and polynomial functions. They will also be introduced to rational and radical expressions and functions. At the end of the course, the student will understand basic concepts needed for going into the workforce and completing trade apprenticeship placement exams.

**ALGEBRA II No. 0306**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Algebra I course

Criteria for Recommendation: H-Algebra I final grade of 70% or higher or Algebra I final grade of 80% or higher

Algebra II students will study the real number system, linear and piecewise functions, systems of linear equations and inequalities, and polynomial functions. They will also be introduced to rational and radical expressions and functions. At the end of the course, the student will understand basic concepts needed for the PSAT and SAT exams and the various introductory college mathematics courses. Students will be exposed to many applications to the real world and accessible technology. A graphing calculator or a scientific calculator is required for this course.

**HONORS ALGEBRA II No. 0309**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: H-Algebra I

Criteria for Recommendation: H-Algebra I final Grade of 80% or higher or Algebra I final grade of 90% or higher

Algebra II – Honors students will study the real and complex number systems; polynomial equations and inequalities and their graphs; rational expressions, functions and equations; radicals, radical functions; rational exponents; and the exponential equations and functions. They will acquire ease in applying algebraic concepts and skills, and appreciate the need for precision of language. This will be obtained through many applications to the real world and accessible technology. A graphing calculator is required for this course.

**COLLEGE PREP MATHEMATICS No. 0311**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: An Algebra II course

College Preparatory Mathematics is a full-year course that prepares students for success in entry-level college or trade apprenticeship courses and placement exams. This course is designed to reinforce mathematics concepts that students are expected to master prior to college. The topics include linear, quadratic, polynomial, rational, exponential, and logarithmic functions and their graphs. Other topics include solving equations and inequalities, systems of equations and inequalities, and a basic introduction to right triangle trigonometry.

**PRE-CALCULUS No. 0312**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Algebra II and Geometry

Criteria for Recommendation: H-Algebra II final grade of 75% or higher or Algebra II final grade of 90% or higher

Pre-calculus is designed to prepare students for college level mathematics and provide them with a basis for trigonometric applications. Students in this course begin with a brief review of Algebra II and progress through Algebra III with a study of functions and their graphs, and solving exponential and logarithmic equations. The course spends a significant amount of time developing the trigonometric identities and laws of trigonometric functions, including circular trigonometry and its applications. A graphing calculator is required.

### **HONORS PRE-CALCULUS No. 0310**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: H-Algebra II

Criteria for Recommendation: H-Algebra II final grade of 80% or higher

Pre-Calculus - Honors is an essential course for college bound students who plan to major in mathematics, science, engineering, medicine or any other field that requires a strong mathematical background. Students in this course will progress through a study of functions and their graphs as well as techniques of equation solving. Students will learn circular trigonometry, with applications then made to the solutions of triangles. Logarithms, complex numbers, and limits are also a part of the course. A graphing calculator is required.

### **CHS DISCRETE MATHEMATICS No. 0355**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: H-Pre-Calculus or Pre-Calculus

Criteria for Recommendation: H-Pre-Calculus final grade of 70% or higher or Pre-Calculus final grade of 90% or higher

CHS Discrete Mathematics is a full-year computational math course for students interested in studying mathematics, computer science, and/or engineering after high school. **At the post-secondary level, most computer science and math majors are required to take this course.** This course will cover mathematical reasoning, combinatorial analysis, discrete structures, algorithmic thinking, applications, and modeling. Topics may include logic, proofs, sets, and functions; algorithms, integers, and matrices; counting techniques, permutations and combinations, probability theory; relations; graphs; trees; Boolean Algebra; and Modeling Computation.

Students may elect, for a fee, to enroll in the Duquesne University College in High School Program to earn three college credits.

### **CHS BASIC APPLIED STATISTICS No. 0341**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Algebra II or Honors Algebra II

Criteria for Recommendation: Algebra II – final grade of 80% or higher

This mathematics course is for students preparing for a college major or career in the social sciences. This course teaches methods of descriptive and inferential statistics. Topics include data collection and description, hypothesis testing, correlation and regression, the analysis of variance, and contingency tables (chi square). Students will learn how to use a statistical computer package, MINITAB. Students may elect, for a fee, to enroll in the University of Pittsburgh College in High School Program to earn four (4) college credits.

### **AP STATISTICS No. 0354**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Algebra II or H-Algebra II

Criteria for Recommendation: Algebra II final grade of 80% or higher

An understanding of basic probability and statistics is vital for nearly all careers, as well as for most standardized testing. This rigorous, college-level course will focus on calculating, interpreting, and applying descriptive and inferential statistics; probabilities; experimental design, bias, simulation, implementation and evaluation of samples and surveys; regression analysis; construction and interpretation of confidence intervals; and tests of hypotheses with an overall emphasis on their applications in our world. A graphing calculator is required. Students who take this course are expected to take the AP Statistics exam in May.

**CHS BUSINESS CALCULUS (No. 0342)**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: H-Pre-Calculus or Pre-Calculus

Criteria for Recommendation: H-Pre-Calculus final grade of 70% or higher or Pre-Calculus final grade of 90% or higher

CHS Business Calculus includes the content presented in a college-level calculus course. The course includes discussion on limits and continuity, differentiation, integration, applications of differentiation and integration, and an introduction to multivariable calculus with a focus on business applications. This course is designed for students who plan to major in business or a non-science field in college, and for those who desire to build a foundation in preparation for Scientific Calculus I in college. This course is NOT designed for students who desire deep preparation for university majors in mathematics, engineering, or science, or those who plan to take the AP Calculus exam. A graphing calculator is required. The students may elect, for a fee, to enroll in The University of Pittsburgh's Business Calculus I (Math 120) course and earn 4 college credits. Students must take the ALEKS assessment at their own expense during the summer prior to the start of the school year. Based on the test results, students may be required to take on-line tutorials through ALEKS to qualify for CHS credit.

**AP CALCULUS AB No. 0352**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: H-Pre-Calculus

Criteria for Recommendation: H-Pre-Calculus final grade of 80% or higher

AP Calculus AB is a full year college-level course. It is designed for advanced high school students planning to major in mathematics, engineering, physical or biological sciences, economics, medicine, or law. The course includes the study of both differential and integral calculus concepts. Assessment is primarily based on test and quiz scores as well as a cumulative final exam. A graphing calculator is required. Students who take this course are expected to take the AP Calculus AB exam in May.

**AP CALCULUS BC No. 0353**

Full Year and Two Lab Periods

Credit 1.5

Grades 11, 12

Prerequisite: H-Pre-Calculus

Criteria for Recommendation: H-Pre-Calculus final grade of 90% or higher

AP Calculus BC is equivalent to both a first and second semester college calculus course. This course is recommended for advanced high school students looking to combine the traditional courses of AP Calculus AB and AP Calculus BC into one year of study. In addition, it is designed for students planning to enter any type of engineering, medical, math or science-related field. The course covers limits and continuity, squeeze theorem, intermediate value theorem, differential calculus, contextual and analytical applications of differentiation, L'Hospital's rule, related rates, optimization, integral calculus, advanced integration techniques, differential equations, separation of variables, Euler's method, logistic models, applications of integration, area, volume, arc length, parametric equations, polar coordinates, vector-valued functions, infinite sequences and series, convergence/divergence tests, Taylor and Maclaurin series and polynomials, Lagrange error bound, error estimation, and representing functions as power series. While no prior knowledge in calculus is required, it is expected that students will have a strong recall of concepts from algebra, geometry, and precalculus to be successful in the course. Two additional class periods per week and a graphing calculator are required. Students are expected to take the AP Calculus BC exam in May.

**CHS INTRODUCTION TO MATRICES AND LINEAR ALGEBRA    No. 0356**

Full Year

Credit 1.0

Grade 11, 12

Prerequisite: AP Calculus AB or BC with an AP exam score of 4 or 5

The principal topics of the course include vectors, matrices, determinants, linear transformation, eigenvalues, and eigenvectors, and selected applications. This course is a rigorous math course that prepares students for engineering and mathematics majors. It satisfies a requirement for most Engineering majors and the Physics major at Pitt. Students may elect, for a fee, to enroll in the University of Pittsburgh College in High School Program to earn three college credits.

### Science Department Courses

| Course # | Course Title                      | Credit | Grade Level | Prerequisites  |
|----------|-----------------------------------|--------|-------------|--|
| 0400     | Biology I                         | 1.0    | 9-12        |  |
| 0410     | Academic Biology I                | 1.0    | 9-12        |  |
| 0440     | Honors Biology I                  | 1.0    | 9-12        |  |
| 0441     | Honors Biology II                 | 1.0    | 10-12       | Academic Biology or Honors Biology and Completion or concurrent enrollment in Chemistry I or CHS Chemistry I       |
| 0479     | Humans and the Environment*       | 0.5    | 10-12       |  |
| 0451     | AP Biology                        | 1.0    | 11-12       | Honors Biology II  |
| 0446     | Honors Biotechnology Research     | 1.0    | 10-12       | Academic or Honors Biology I   |
| 0415     | Applied Chemistry*                | 0.5    | 9-12        |  |
| 0411     | Chemistry I                       | 1.0    | 10-12       | Completion of a Biology course   |
| 0444     | CHS General Chemistry I           | 1.5    | 10-12       | Academic or Honors Biology I and Honors Algebra I  |
| 0452     | AP Chemistry                      | 1.0    | 11-12       | Honors Chemistry II  |
| 0452L    |                                   | 1.5    |             | CHS Chemistry I  |
| 0416     | Conceptual Physics*               | 0.5    | 9-12        |  |
| 0412     | Physics I                         | 1.0    | 11-12       | Algebra II   |
| 0443     | AP Physics I                      | 1.5    | 11-12       | Algebra II or Honors Algebra II<br>Pre-Calculus or concurrent enrollment in Honors Pre-Calculus or Pre-Calculus    |
| 0453     | AP Physics II                     | 1.5    | 12          | AP Physics I<br>Honors Pre-Calculus or Precalculus   |
| 0447     | CHS Introduction to Engineering   | 1.0    | 10-12       |  |
| 0445     | Honors Human Anatomy & Physiology | 1.0    | 12          | Academic Biology or Honors Biology I and Chemistry I or Honors Chemistry I   |
| 0481     | Horticulture^*                    | 1.0    | 11-12       |  |
| 0482     | Physical Anthropology             | 1.0    | 10-12       | Any Biology Course   |
| 0450     | Honors Environmental Science      | 1.0    | 10-12       | Academic Biology I or H-Biology I <u>and</u> completion or concurrent enrollment in Chemistry I or CHS Chemistry I |
| 0454     | AP Environmental Science          | 1.0    | 10-12       | Academic Biology I or Honors Biology I and Chemistry I or CHS Chemistry I  |

^Not NCAA approved

\*Not approved as an NCAA Lab Science



| <b>Traditional Science Pathways--3 Science Credits Required for Graduation (Biology, Chemistry, and Physics/Engineering)</b>   |   |  |
|--|---|--|
| <b>Grade 9</b>   | <b>Grade 10</b>   | <b>Grade 11</b>  |
| Honors Biology I (1.0)<br><b>Or</b><br>Academic Biology I (1.)   | CHS General Chemistry I (1.0)<br><b>or</b><br>Chemistry I (1.0)   | AP Physics (1.0)<br><b>or</b><br>Physics I (1.0)   |
| Academic Biology I (1.0)<br><b>Or</b><br>Biology I   | Applied Chemistry (.5)<br><b>and</b><br>Conceptual Physics (.5)<br><b>or</b><br>Robotics I (.5)<br><b>or</b><br>Engineering Design I (.5) | <b>Choose at least 1 Credit:</b><br>Horticulture (1.0)<br>Physical Anthropology (1.0)<br>Humans and the Environment (.5)<br>Honors Environmental Science (1)<br>Honors Biotechnology Research (1)<br>A.W. Beattie Program* (1.0) |
| <b>Satisfactory completion of 1 year at A.W. Beattie in one of the following programs may serve as 1 Science Credit:</b><br>Dental Careers                      Sports Medicine-Rehab Therapy                      Veterinary Sciences Technology<br>Introduction to Pharmacy                      Surgical Sciences                      Robotics Engineering*<br>Cosmetology                      Automotive Collision*                      Automotive Technology*<br>Carpentry/Building*                      Emergency Response                      Health and Nursing Sciences<br>HVAC* |   |  |
| *Can count for a physics requirement   |   |  |

| <b>Science Electives for Students Preparing for College Majors or Careers in a Science Field</b> |                 |   |                                   |
|--|-----------------|---|-----------------------------------|
| <b>Area of Interest</b>  | <b>Grade 10</b> | <b>Grade 11</b>   | <b>Grade 12</b>                   |
| <b>Biology/Health Science</b>  |                 |   | Honors Human Anatomy & Physiology |
|  |                 | AP Biology  |                                   |
|  |                 | Honors Biology II<br>Physical Anthropology<br>Honors Biotechnology Research                         |                                   |
| <b>Chemistry/Chemical Engineering</b>  |                 | AP Chemistry  |                                   |
| <b>Physics/Engineering</b>   |                 | AP Physics I  | AP Physics II                     |
| <b>Environmental Science</b>   |                 | Humans and the Environment<br>Honors Environmental Science AP Environmental Science<br>Horticulture |                                   |

**BIOLOGY I No. 0400**

Full Year  
Credit 1.0  
Grades 9, 10, 11, 12

Students enrolled in this course will continue to build upon the fundamental chemistry and life science concepts studied in previous science courses. This course will explore cells and cell processes that include basic biological principles, the chemical basis of life, bioenergetics, homeostasis, and transport. The course will also examine the continuity and unity of life, which includes cell growth, cell reproduction, genetics, evolution, and ecology. This course is a Pennsylvania State Keystone test course.

**ACADEMIC BIOLOGY I No. 0410**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Criteria for Recommendation: Final grade of B or higher in 8<sup>th</sup> grade science and English class

This rigorous course will build upon fundamental physical chemistry and life science concepts in previous science courses. This course includes units on biochemistry, cells and cell processes, genetics, evolution and ecology. Students are expected to integrate information from multiple sources and apply it to new situations. Lab experiences include model manipulation, computer simulations, chemical reactions, and microscope use. This is a Pennsylvania State Keystone test course.

**HONORS BIOLOGY I No. 0440**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Criteria for Recommendation: Final grade of B or higher in 8<sup>th</sup> grade science and English class

Biology I Honors is designed for the student who is intrigued by the sciences and is considering going on to college as a science major. The core topics of the course will be similar to Biology I, yet the activities used to supplement the content will vary. This course will build upon the fundamental chemistry and life science concepts that should have been mastered in previous science courses. The course topics include: evolution, classification, biochemistry, cellular structure/function, cellular transport, photosynthesis, cellular respiration, DNA replication/protein synthesis, and cell reproduction, and genetics. Ecology and Plants will be integrated into other topic areas. Lab options will include model manipulation, computer simulations, microscope use, and more. The level of rigor in this course will aid in preparing students for future honors and AP level science courses. This is a Pennsylvania State Keystone test course.

**HONORS BIOLOGY II No. 0441**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisites: Academic Biology I or H-Biology I and completion or concurrent enrollment in Chemistry I or CHS Chemistry I

Criteria for Recommendation: Final grade of B or higher in Academic Biology I or H-Biology I

Biology II - Honors is designed for students who plan to major in the biological sciences. The course aims to build on the concepts taught in Biology I and Biology I – Honors. The overall focus will be experimental design, ecology, evolution/phylogeny with plants and animals integrated in where appropriate. This course is taught from a college-level textbook and will be supplemented with in-class activities, lecture, and lab work. The H-Biology II course covers a portion of the AP curriculum and is considered a prerequisite to the Advanced Placement Biology course. Summer work is assigned for this course.

**HUMANS AND THE ENVIRONMENT No. 0479**

Semester

Credit .5

Grades 10, 11, 12

Humans and the Environment is designed to highlight the positive and negative role of human actions and their effect on our world. This course is a great elective for students who want to understand our place in the changing life on our planet. Units covered include population growth and resource management, food production and distribution, species endangerment and extinction, air and water pollution, climate systems and climate change, and nonrenewable vs. renewable energy sources. Students who have excelled in the academic as well as social sciences will get an opportunity to integrate concepts from those disciplines and appreciate how they apply to the real world. Class activities will include note-taking/discussions, indoor activities and simulations, and projects. This course provides many opportunities to appreciate the natural world and to understand how the decisions humans make shape the life on our planet.

**HONORS ENVIRONMENTAL SCIENCE No. 0450**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Academic Biology I or H-Biology I and completion or concurrent enrollment in Chemistry I or CHS Chemistry I

Criteria for Recommendation: Academic Biology I or H-Biology I final grade of 80% or higher

Honors Environmental Science is a college prep course that is an introduction to the field of Environmental Science. This course expands upon several biology and chemistry concepts through various lab investigations. The focus of Honors Environmental Science will be on ecology and evolution, geology and energy, resource use and issues and climate change and sustainability. The class involves a combination of discussions/Socratic seminars, outdoor fieldwork, indoor labs/simulations, projects, and quizzes. This course integrates information from the four science disciplines along with the social sciences. The class will emphasize the actions of humans and their impact on earth's resources and services. We will explore current problems and possible solutions that can preserve the environment while still allowing for development. The activities and focus of the course is different from AP Environmental Science and works well to provide background for students interested in further pursuing this branch of the sciences. It is geared towards students who want to major and/or minor in environmental science, pre-med, geology, biology, chemistry, political science, sociology, economics or pre-law.

**AP ENVIRONMENTAL SCIENCE No. 0454**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Academic Biology I or Honors Biology I and completion or concurrent enrollment in Chemistry I, H-Chemistry I, or CHS Chemistry I

Criteria for Recommendation: Academic Biology I or Honors Biology I final grade of 80% or higher

AP Environmental Science is designed to be the equivalent of an introductory environmental science course taken during the first year of college. The units covered are Ecosystems, Biodiversity, Population Dynamics, Earth Systems and Resources, Land and Water Use, Energy Resources and Consumption, Air Pollution, Aquatic and Terrestrial Pollution and Climate Change. This course requires students to spend time completing notes outside of school so that class time can focus on labs and inquiry-based activities. Also, a summer work assignment will be assigned to assess prior knowledge and serve as a resource for a final project. The class will involve a combination of discussions/Socratic seminars, outdoor fieldwork, and indoor labs/simulations using a project-based learning approach. One thematic project along with three unit tests will be completed each quarter. More of an emphasis will be put on problem solving and long-term data collection and analysis compared to the first-year science classes. This course is taught from a college level text and lab manual and is geared towards students who want to major and/or minor in environmental science, ecology, geology, biology, political science, sociology, or pre-law. For students who took Academic Biology I and Chemistry I, it is very helpful to take Honors Environmental Science before this course.

**AP BIOLOGY No. 0451**

Full Year

Credit 1.0

Grades 11, 12

Prerequisites: Honors Biology II

Criteria for Recommendation: H-Biology II– final grade of B or higher; Chemistry I, H-Chemistry I, or CHS Chemistry I final grade of B or higher

AP Biology is an introductory college level biology course that is designed to be the equivalent of the general biology course taken during the first college year. Students will further build upon scientific skills learned in Biology II Honors; therefore, students are expected to know that information. The overall focus will be biochemistry, cellular processes, and molecular genetics. This course will be taught from a college-level textbook and will be supplemented with in-class activities, lecture, and lab work. Students who take this course are expected to take the AP exam in May. Summer work is required for this course.

**HONORS BIOTECHNOLOGY RESEARCH No. 0446**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Academic or Honors Biology I

Criteria for Recommendation: Final grade of B or higher in Academic or H-Biology I

This course is designed in partnership with the University of Pittsburgh's Biology Outreach Program. Students will be exposed to cutting-edge research concepts and techniques while gaining laboratory skills such as sterile technique, gram staining bacteria, micro-pipetting, gel-electrophoresis, PCR, transformation, RE Digest and CRISPR. Students will be conducting research and sharing their data with University of Pittsburgh laboratories. Students will be asked to design their own research investigation and present their findings. Students will get to work with multiple model organisms including, but not limited to, bacteria, yeast, *Drosophila*, *C. elegans*, sea urchins, and duckweed. The year will end with a final presentation on an independent literature review of their choice focusing on current research being done using one of these model organisms and the biotechnology techniques they were exposed to during the course. This class will be lab-driven and the content will interconnect multiple life science and physical science concepts. Each lab will transition into the next so that content and skills will continually be reinforced as we build toward the final research investigation.

**APPLIED CHEMISTRY No. 0415**

Semester

Credit .5

Grades 10, 11, 12

Applied Chemistry is an introductory course in Chemistry with emphasis placed on concept development and scientific inquiry. Concepts are developed and reinforced through discussions, demonstrations, and laboratory exercises. The laboratory experiments enable the student to gain direct hands-on experience to reinforce the principles obtained in the classroom. Content includes matter, chemical reactions, energy, atomic theory, and chemical bonding.

**CHEMISTRY I No. 0411**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Completion of a biology course

Criteria for Recommendation: Final grade of B or higher in Honors or Academic Biology or Final grade of A in Biology

Chemistry I is an introductory course in inorganic chemistry designed to acquaint the student with fundamental physical and chemical properties of elements, compounds, and mixtures. This course places emphasis on student laboratory experiments where chemical reactions and chemical processes are observed and explained at the atomic and molecular level using the scientific method. Laboratory experiments and instructor demonstrations reinforce the theory and principles of chemical reactions and chemical processes learned in the classroom.

**CHS GENERAL CHEMISTRY I No. 0444**

Full Year and Two Lab Periods

Credit 1.5

Grades 10, 11, 12

Prerequisites: Academic Biology I or Honors Biology I and Honors Algebra I

Criteria for Recommendation: Final grade of A in Honors Algebra I and a final grade of B or higher in Honors Biology I or final grade of A in Academic Biology I

College in High School General Chemistry I is a rigorous introductory college chemistry course designed for students who are particularly interested in the sciences and who have a strong background in mathematics. Students planning to enter college in a science or mathematics-related field, such as medicine, pharmacy, or engineering, are encouraged to take this course. Topics include atomic theory, molarity, gases and kinetic theory, thermochemistry, electronic structure and the periodic table, relationships between phases, ionic solutions and acid/base theories, redox reactions, carbon chemistry, rates of reactions, chemical equilibria, and thermodynamics. This course requires laboratory sessions and exams on the University of Pittsburgh campus. The laboratory experiments provide the student with direct experience to reinforce concepts learned in

the classroom. This course requires two additional periods per week for laboratory experiences. The students may elect, for a fee, to enroll in The University of Pittsburgh's General Chemistry I 0110 course and earn 4 college credits.

**AP CHEMISTRY**                      **No. 0452 (Student moving from Chemistry II, no additional lab periods needed)**  
Full Year and Two Labs              **No. 0452L (Student moving from CHS Chemistry to AP)**

Credit 1

Grade 11, 12

Prerequisites: CHS Chemistry I or Honors Chemistry I

Criteria for Recommendation: Final grade of B or higher in Honors Chemistry-II or CHS-Chemistry I

AP Chemistry is designed to be the equivalent of the general chemistry course usually taken during the first year of college. The focus will be on reaction kinetics, acids-bases, equilibrium chemistry, thermochemistry, and electrochemistry. This course is instructed out of a college-level textbook and will be supplemented with in-class activities, group projects, demonstrations, lecture, and lab work. It is understood that a portion of the AP Chemistry curriculum will have been covered in the CHS I Chemistry course; therefore, the students are expected to know the material. The AP Chemistry course is geared for students who are planning to apply to college in a science-related major (chemistry, physics, biology, biochemistry, chemical engineering, pre-medicine, etc.). Students who take this course are expected to take the AP Exam in May.

**CONCEPTUAL PHYSICS**    **No. 0416**

Semester

Credit .5

Grades 10, 11, 12

Conceptual Physics is an introduction to basic physics concepts where students will gain practical insight into how and why things work. The course will involve conceptual and basic mathematical applications of physics concepts with each unit culminating in a project that utilizes the material learned. Content includes motion, force and Newton's laws, momentum and impulse, work and energy, waves and sound, and electronics.

**PHYSICS I**    **No. 0412**

Full Year

Credit 1.0

Grades 11, 12

Prerequisites: Completion of Algebra II

Criteria for Recommendation: Final grade of C or higher in Honors Algebra II or Final grade of B or higher in Algebra II

Physics I is an introductory course in Physics with emphasis placed on concept development and problem solving. Concepts are developed and reinforced through laboratory exercises, experiments, and demonstrations. Problem solving involves application of skills from prior algebra and geometry courses to concepts learned in Physics. Content includes one-dimensional and two-dimensional motion, forces and Newton's Laws, work and energy, momentum, waves and sound, light and optics, and electronics.

**AP PHYSICS I**    **No. 0443**

Full Year and Two Lab Periods

Credit 1.5

Grades 11, 12

Prerequisite: Successful completion of or concurrent enrollment in Honors Pre-Calculus or Pre-Calculus

Criteria for Recommendation: Final grade of A in Algebra II or final grade of B or higher in Honors Algebra II

AP Physics I is equivalent to a first-semester college course in algebra-based physics. This course is recommended for students planning to enter any type of engineering, medical, math or science-related field. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. This course utilizes a college-level textbook and is supplemented with in-class activities, projects, demonstrations, lectures, and laboratory investigations. No prior course work in physics is necessary for students to enroll in AP Physics I. Students should have completed Geometry and Algebra II or an equivalent course. Although the AP Physics I course includes basic use of trigonometric functions, this understanding can be gained either in the

concurrent math course or in the AP Physics I course itself. Two additional scheduled periods are required per week. Students who take this course are expected to take the AP exam in May.

### **AP PHYSICS II No. 0453**

Full Year and Two Lab Periods

Credit 1.5

Grade 12

Prerequisites: AP Physics I

Criteria for Recommendation: Final grade of B or higher in AP Physics I

AP Physics II is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. This course utilizes a college-level textbook and is supplemented with in-class activities, projects, demonstrations, lectures, and laboratory investigations. Students should have had AP Physics I or a comparable introductory course in physics. Students should have taken or be concurrently taking Pre-Calculus or an equivalent course. This course requires two additional scheduled periods per week. Students who take this course are expected to take the AP exam in May.

### **CHS INTRODUCTION TO ENGINEERING No. 0447**

Full Year

Credit 1.0

Grade 10, 11, 12

This course provides the student with an overview of the role and function of practicing engineers. Students will be introduced to the various disciplines of engineering and the tools and technologies used. The following skills will be discussed and honed throughout the course: Critical Thinking, Problem Solving, Engineering Design Process, Communication, Collaboration and Engineering Ethics to name a few. As a culminating experience, students will learn about the Industrial Baxter Robot from different perspectives. Mechanically, they will learn how the robot operates - looking at the joints, motors, sensors and cameras. Electrically, they will learn how the robot gets its power, control and data signals. Programming, they will learn how to program the robot to perform certain tasks. Physically, they will design and fabricate an end-of-arm tool (EOAT) to grab a specific object without breaking it.

### **HONORS HUMAN ANATOMY & PHYSIOLOGY No. 0445**

Full Year

Credit 1.0

Grade 12

Prerequisites: Academic Biology or Honors Biology I and Chemistry I or Honors Chemistry I

Criteria for Recommendation:

1. Final grade of B or higher in Biology I or Honors Biology I
2. Final grade of B or higher in Chemistry I or Honors Chemistry I

This course is designed to reflect a college level anatomy and physiology course. The material presented will be very helpful for students considering a career in medicine or any of the healthcare profession. It is assumed that students entering this course have a foundation in Biology, but a limited amount of prior knowledge of anatomy and physiology. The processes of ossification, nerve impulse & conduction, homeostasis and feedback will be a portion of what is studied. Understanding the organization of the human body, and the origin and application of medical terminology are accentuated throughout the year. The anatomy & physiology of the skeletal, muscular, and cardiovascular systems will be explored in great detail. The topic of Cancer and mechanisms behind its formation, growth, and metastasis will also be highlighted. Pathophysiology will be related to each of the subject areas throughout the year. Lab periods will involve the incorporation of the software A.D.A.M. – (Anatomical Dissection of Anatomy for Medicine), the use of iPad applications, and the manipulation of anatomical models as well as natural bones.

**HORTICULTURE No. 0481**

Full Year

Credit 1.0

Grades 11, 12

Horticulture is designed for juniors and seniors who are interested in exploring the science, technology, and art of working with plants. No prior plant knowledge is required. The course is primarily a project-based class, and activities include, but are not limited to, vermicomposting, starting and maintaining gardens, identifying trees, and using trees as natural resources. Plant processes, soil health, and landscape design are also studied. Many of the activities involve working with and in soil. When weather is nice, students go outside to apply concepts learned in class.

**PHYSICAL ANTHROPOLOGY No. 0482**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Successful completion of a biology course

Anthropology, study of humans, is for students in grades 10-12. This class is designed to provide students with a greater understanding of primates, evolution, anatomy, human origins and what it truly means to be human. Physical Anthropology has a strong focus on the biological principles of becoming and being human. Students will understand the genetic and molecular basis for being human as well as the application of this understanding to the tracking of human lineages. Comparative anatomy and dentition will be examined as well as skeletal reconstruction. Students will learn several aspects of forensic anthropology and osteology (what we can learn from/about bones). This class includes various required supplemental readings. Activities include the following topics: fossil/skeletal profiling, skeletal reconstruction, rope and atlatl making, print ID, and dentition.

## Computer Science Department Courses

| Course # | Course Title                                 | Credit | Grade Level | Prerequisites   |
|----------|--|--------|-------------|---|
| 0501     | Computer Programming I                       | 0.5    | 9-12        | Algebra I or Honors Algebra I   |
| 0502     | Computer Programming II                      | 0.5    | 9-12        | Computer Programming I  |
| 0504     | Robotics I                                   | 0.5    | 9-12        | Algebra I or Honors Algebra I   |
| 0505     | Robotics II                                  | 0.5    | 9-12        | Robotics I  |
| 0553     | AP Computer Science A                        | 1.0    | 10-12       | 1. Computer Programming I and Computer Programming II<br>2. Honors Algebra II |
| 0554     | CHS College Programming and Computer Science | 1.0    | 11-12       | Successful completion of AP Computer Science A                                |
| 0555     | AP Computer Science Principles               | 1.0    | 10-12       | Honors Algebra I or Algebra I   |
| 0556     | CHS Cybersecurity                            | 1.0    | 10-12       |   |

### COMPUTER PROGRAMMING I No. 0501

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Successful completion of Algebra I or Algebra I-Honors

This one semester course is an introduction to programming with an emphasis on critical thinking, problem solving, and creativity. Specific topics include functions, variables, expressions, conditionals, loops, strings, lists, graphics, and animations, as well as top-down design, testing and debugging. The course's main goal is for students to learn the fundamentals of programming, to enjoy coding, and to be able to use programming creatively to help solve problems in a variety of domains.

### COMPUTER PROGRAMMING II No. 0502

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Computer Programming I

This course is a continuation of Computer Programming I. Problem-solving and algorithm development skills will be used as students design, write code, debug, and document programs using proven programming techniques. Specific topics include math functions, sounds, files, loops, strings, lists, graphics, and animations, as well as top-down design, testing and debugging. At the end of the course, students will have engaged in a substantial learning experience and should be able to computationally solve a wide range of problems. Computer Programming II serves as the prerequisite for Advanced Placement Computer Science A.

### ROBOTICS I No. 0504

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Successful completion of Algebra I or Algebra I-Honors

This course is designed to focus on the Computational Thinking Practices that are critical for all students to learn. In this computing course, students will explore controlling basic robot movements, sensors and how they work, intermediate concepts of programming, troubleshooting strategies, and the engineering practices with the VEX Cortex programming curriculum and ROBOTC language. Robots will be tested in a Virtual World environment as well as in a classroom setting. The practices emphasized in this course – precise logical thinking, using data to make decisions, analyzing problems, and



building solutions in teams – are critical in all forms of problem solving, not just robotic ones. The robotics activities are concrete, contextualized, and provide immediate feedback.

### **ROBOTICS II No. 0505**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Robotics I

In Robotics II, students will engineer and program robots using the VEX Cortex programming curriculum and ROBOTC language to demonstrate their understanding of design principles to solve a problem. This course will focus on the physics and math principles needed to develop a more dynamic robot to meet different challenges and problems. This course will allow more student autonomy with researching and designing a robot using the VEX platform.

### **AP COMPUTER SCIENCE A No. 0553**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisites: 1. Computer Programming I and II  
2. Algebra II-Honors

Criteria for Recommendation: Final grade of B or higher in Algebra II-Honors

AP Computer Science A is intended to be comparable to a first-year course offered in colleges and universities. The course will cover topics that would normally comprise six or more semester hours of college-level computer science coursework. It is not expected that all students in the course will major in computer science. The course is intended to serve both as an introductory course for computer science majors and as a substantial service course for people who will major in other disciplines that require significant involvement with computing. Upon completion of the course, the student should be prepared to take the AP exam in Computer Science A. The prospective student should have a strong interest in computing, a good mathematics background, and well-developed skills in written communication. This course will require a significant amount of time outside of class. A summer assignment is also required of this course. Students who take this course are expected to take the AP exam in May.

### **CHS COLLEGE PROGRAMMING AND COMPUTER SCIENCE No. 0554**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: Successful completion of AP Computer Science A

This college in high school course provides a technical introduction to the fundamentals of programming with an emphasis on producing clear, robust, and reasonably efficient code using top-down design, informal analysis, and effective testing and debugging. Starting from first principles, we will cover a large subset of the Python programming language, including its standard libraries, and programming paradigms. This is a rigorous, fast-paced course that requires at least one year of prior programming experience at the high school level. This course was designed by Carnegie Mellon University as an online, asynchronous program. **Students who enroll in this course have the opportunity to earn college credits by registering for the college in high school program through Carnegie Mellon University.**

### **AP COMPUTER SCIENCE PRINCIPLES No. 0555**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Algebra I-Honors or Algebra I and Algebra II

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for **success across all disciplines**, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply

creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

**CHS CYBERSECURITY No. 0556**

Full Year

Credit 1.0

Grades 10, 11, 12

Computers, the Internet, and mobile information technologies have become routine elements of our daily lives. The percentage of our social, professional, and political discourse mediated by information systems increases each year. Critical infrastructure likewise follows suit, with financial, healthcare, energy and other utilities leveraging the Internet to increase both capability and efficiency. In the physical world, we publish rules (laws) to govern our interactions with one another. These rules tell us what behaviors are permissible and what responsibilities we have to one another. In cyberspace, where these rules exist – and what they require – are less clear. This course explores questions surrounding how we "govern" cyberspace in the context of cybersecurity and privacy issues. We will examine a series of examples, both real-world and hypothetical, to investigate what policy "tools" are in-place, available, and should be available to address Internet security and privacy issues. **Students who enroll in this course have the opportunity to earn three college credits by registering for the college in high school program through Robert Morris University.**

## World Language Department Courses

| Course # | Course Title    | Credit | Grade Level | Prerequisites |
|----------|-----------------|--------|-------------|---------------|
| 0601     | French I        | 1.0    | 9-12        |               |
| 0602     | French II       | 1.0    | 9-12        | French I      |
| 0603     | French III      | 1.0    | 10-12       | French II     |
| 0604     | CHS French IV   | 1.0    | 11-12       | French III    |
| 0605     | CHS French V    | 1.0    | 11-12       | French IV     |
| 0611     | German I        | 1.0    | 9-12        |               |
| 0612     | German II       | 1.0    | 9-12        | German I      |
| 0613     | German III      | 1.0    | 10-12       | German II     |
| 0614     | CHS German IV   | 1.0    | 11-12       | German III    |
| 0615     | CHS German V    | 1.0    | 11-12       | German IV     |
| 0631     | Spanish I       | 1.0    | 9-12        |               |
| 0632     | Spanish II      | 1.0    | 9-12        | Spanish I     |
| 0633     | Spanish III     | 1.0    | 10-12       | Spanish II    |
| 0634     | CHS Spanish IV  | 1.0    | 11-12       | Spanish III   |
| 0635     | CHS Spanish V   | 1.0    | 11-12       | Spanish IV    |
| 0641     | Mandarin I      | 1.0    | 9-12        |               |
| 0642     | Mandarin II     | 1.0    | 9-12        | Mandarin I    |
| 0643     | Mandarin III    | 1.0    | 10-12       | Mandarin II   |
| 0644     | CHS Mandarin IV | 1.0    | 11-12       | Mandarin III  |
| 0645     | CHS Mandarin V  | 1.0    | 11-12       | Mandarin IV   |

### **FRENCH I No. 0601**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

French I begins a five-year sequence toward proficiency in French. Level I French students have the opportunity to learn the language and culture of France and other French speaking countries. Students develop the ability to communicate about themselves and daily life using simple sentences containing basic language structures with accurate pronunciation. French culture is explored through readings and related projects. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the end of the year.

### **FRENCH II No. 0602**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: French I

French II students will expand their knowledge of general and specific categories through listening, speaking, reading, and writing. Students participate in simple conversations by combining new and previously learned elements of the language. They are able to satisfy basic survival needs and interact on issues of everyday life in the past, present, and future tenses both inside and outside of the classroom setting. Students continue to develop cultural awareness through the study of specific French cultures. The French culture is further explored through recordings, readings, and related research about the various regions of France and other countries where French is an important language. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic

communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

### **FRENCH III No. 0603**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: French II

French III provides the student with the opportunity to strengthen previously acquired language skills. Level III French students continue to develop and refine their proficiency in French with an emphasis on the ability to interact orally and express themselves in writing. French III students are introduced to works of literature in French. Students continue to develop cultural awareness through the study of specific French cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

### **CHS FRENCH IV No. 0604**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: French III

CHS French IV students continue their development of French through the use of advanced grammar and literature. Students will communicate using more complex language structures on a variety of topics. Authentic structures, which require higher level thinking and speaking skills, are presented in this course. Students continue to develop cultural awareness through the study of specific French cultures. Level IV will also begin the study of French history through the 17<sup>th</sup> Century. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, compositions, and projects. All class discussions will be conducted in French. Students will need to have a French-English/English-French dictionary. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year. **Students who enroll in this course have the opportunity to earn three (3) college credits by registering for the college in high school program.**

### **CHS FRENCH V No. 0605**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: CHS French IV

CHS French students will complete and refine advanced grammar structures and conversational abilities. Culture is emphasized through the study of everyday French teenagers and their relationship to the world around them. Daily conversation is emphasized as well as cultural enhancement through speaking and reading activities. Discussion of present and past personal experiences helps the student to “create” with the target language and maintains the goal of authentic conversation. Students will increase proficiency in reading and writing through the completion of French history from the French Revolution through the present. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, compositions, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year. **Students who enroll in this course have the opportunity to earn three (3) college credits by registering for the college in high school program.**

**GERMAN I No. 0611**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

German I begins a five-year sequence toward proficiency in German. Level I German students have the opportunity to learn the language and culture of Germany and the other German speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the end of the year.

**GERMAN II No. 0612**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: German I

German II students will expand their knowledge of general and specific categories through listening, speaking, reading, and writing. Students participate in simple conversations by combining new and previously learned elements of the language. They are able to satisfy basic survival needs and interact on issues of everyday life in the present and the past time both inside and outside of the classroom setting. Students continue to develop cultural awareness through the study of specific German cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, and daily class participation. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

**GERMAN III No. 0613**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: German II

German III provides the student with the opportunity to strengthen previously acquired language skills. Level III German students continue to develop and refine their proficiency in German with an emphasis on the ability to interact orally and express themselves in writing. German III students are introduced to works of literature in German. Students continue to develop cultural awareness through the study of specific German cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and compositions. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

**CHS GERMAN IV No. 0614**

Full Year

Credit 1.0

Grade 11, 12

Prerequisite: German III

CHS German IV students continue their development of German through the study of major cities in Germany. Students will communicate using more complex language structures on a variety of topics. Authentic structures, which require higher-level thinking and speaking skills, are presented in this course. Students continue to develop cultural awareness through the study of specific German cultures and through current readings. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and compositions. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

**Students who enroll in this course have the opportunity to earn three (3) college credits by registering for the college in high school program.**

**CHS GERMAN V No. 0615**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: CHS German IV

CHS German V students continue their development of German through the study of major cities in Germany and other German speaking countries. Culture is emphasized through the study of everyday German teenagers and their relationship to the world around them. Students will increase proficiency in reading and writing through current works of literature. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and compositions. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

**Students who enroll in this course have the opportunity to earn three (3) college credits by registering for the college in high school program.**

**SPANISH I No. 0631**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Spanish I begins a five-year sequence toward proficiency in Spanish. Level I Spanish students have the opportunity to learn the language and culture of Spain and other Spanish-speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. Oral proficiency will be evaluated through multiple opportunities to demonstrate facility in oral language skills indicative of a Level I student.

**SPANISH II No. 0632**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Spanish I

Level II Spanish students will expand their knowledge of general and specific vocabulary categories through listening, speaking, reading, and writing. Students participate in simple conversational situations by combining and recombining learned elements of the language. They are able to satisfy basic survival needs and interact on issues of everyday life in the present time and past time inside and outside of the classroom setting. Students continue to develop cultural awareness through the study of specific Hispanic cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. Oral proficiency will be evaluated through multiple opportunities to demonstrate facility in oral language skills indicative of a Level II student.

**SPANISH III No. 0633**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Spanish II

Spanish III provides the student with an opportunity to strengthen previously acquired language skills. Level III Spanish students continue to develop and refine their proficiency in all four language skills – listening, speaking, reading and writing with an emphasis on the ability to interact orally and in writing. Students continue to develop cultural awareness through study of specific Hispanic cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. Oral proficiency will be evaluated through multiple opportunities to demonstrate facility in oral language skills indicative of a Level III student.

**CHS SPANISH IV No. 0634**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: Spanish III

CHS Spanish IV provides students the opportunity to further develop, improve and refine their listening, speaking and writing skills. This course is designed to develop communicative proficiency. It combines content-based language instruction with an interactive task-based approach and focuses in all relevant language skills: listening, speaking, reading, and writing. Culture is integrated in all aspects of the program. Each chapter will focus around a topic, and vocabulary, grammar, and culture presentation and practice will be linked to the theme chapter. In this course, classroom time is devoted to developing competence in speaking and hearing Spanish. Therefore, the instructor will speak only in Spanish during the class, and students will be expected to do the same with the instructor and classmates. Strategies for listening comprehension and developing speaking skills will be taught in class. **Students who enroll in this course have the opportunity to earn three (3) college credits by registering for the college in high school program.**

**CHS SPANISH V No. 0635**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: CHS Spanish IV

CHS Spanish V provides students the opportunity to refine their development of speaking, listening, reading, and writing. It is designed to develop communicative proficiency. This course builds and expands the language skills acquired in the previous courses of Spanish. It combines content-based language instruction with an interactive task-based approach, and focuses in all relevant language skills: listening, speaking, reading, and writing. Culture is integrated in all aspects of the program. Each chapter will focus around a topic, and vocabulary, grammar, and culture presentation and practice will be linked to the theme chapter. In this course, classroom time is devoted to developing competence in speaking and hearing Spanish. Therefore, the instructor will speak only in Spanish during the class, and students will be expected to do the same with the instructor and classmates. Strategies for listening comprehension and developing speaking skills will be taught in class. **Students who enroll in this course have the opportunity to earn three (3) college credits by registering for the college in high school program.**

**MANDARIN I No. 0641**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

In Mandarin I students begin a five-year sequence toward proficiency in Mandarin. Level I Mandarin students will be introduced to the language and culture of China and other Mandarin speaking countries. Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures with accurate pronunciation. In addition, students will investigate the meaning of the Mandarin characters and practice calligraphy when creating representations of the characters. Students are assessed through written, oral and aural exercise, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing, with the strongest emphasis being placed on speaking. An oral proficiency exam will be given at the end of the year.

**MANDARIN II No. 0642**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: Mandarin I

Level II Mandarin students will expand their knowledge of general and specific vocabulary categories through listening, speaking, reading, and writing. Students participate in simple conversational situations by combining and recombining learned elements of the language. They are able to satisfy basic survival needs and interact on issues of everyday life in the

present time and past time inside and outside of the classroom setting. Students continue to develop cultural awareness through the study of specific Chinese cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

**MANDARIN III No. 0643**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Mandarin II

Mandarin III provides the student with the opportunity to strengthen previously acquired language skills. Level III Mandarin students continue to develop and refine their proficiency in Mandarin with an emphasis on the ability to interact orally and express themselves in writing. Mandarin III students are introduced to works of literature in Mandarin. Students continue to develop culture awareness through the study of specific Chinese cultures. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, compositions and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An oral proficiency exam will be given at the mid-term and at the end of the year.

**CHS MANDARIN IV No. 644**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: Mandarin III

CHS Mandarin IV students continue their development of Mandarin through the use of advanced grammar and literature. Students will communicate using more complex language structures on a variety of topics. Authentic structures, which require higher-level thinking and speaking skills, are presented in this course. Students continue to develop cultural awareness through the study of specific Chinese cultures and through current works of literature. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, compositions and projects. Assessments are based on the four basic communication skills of speaking, listening, reading, and writing. An Oral proficiency exam will be given at the mid-term and at the end of the year. **Students who enroll in this course have the opportunity to earn four (4) college credits by registering for the college in high school program.**

**CHS MANDARIN V No. 645**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: CHS Mandarin IV

CHS Mandarin V is designed for students who have successfully completed level IV to further develop the proficiencies across the three communicative modes: interpersonal (speaking, listening, reading, and writing skills), interpretive (listening and reading skills), and presentational (speaking and writing skills). It is a theme-based course that focuses on structured and student-centered instructions and activities. The course provides students with maximum exposure to authentic culture and language. Students apply their growing cultural knowledge to communicative tasks in real life contexts and develop the ability to write and speak in a variety of discourse styles. Students are assessed through written, oral and aural exercises, tests and quizzes, daily class participation, compositions and projects. Additionally, an oral proficiency exam will be given at the mid-term and at the end of the year. **Students who enroll in this course have the opportunity to earn four (4) college credits by registering for the college in high school program.**



## Business Department Courses

| Course #      | Course Title  | Credit | Grade Level | Prerequisites                            |
|---------------|---|--------|-------------|--|
| 0733          | CHS Introduction to Financial Accounting                | 1.0    | 9-12        |  |
| 0734          | CHS Introduction to Managerial Accounting               | 1.0    | 10-12       | CHS Introduction to Financial Accounting |
| 0716          | Law and Justice   | 0.5    | 10-12       |  |
| 0719          | Entrepreneurship  | 0.5    | 10-12       | Business Management                      |
| 0722          | Business Management                                     | 0.5    | 9-12        |  |
| 0721<br>0721C | Personal Finance—Traditional<br>Personal Finance—Online | 0.5    | 10-12       |  |
| 0720          | Introduction to Advertising                             | 0.5    | 9-12        |  |

### CHS INTRODUCTION TO FINANCIAL ACCOUNTING No. 0733

Full Year

Credit 1.0

Grades 9, 10, 11, 12

This course is an introduction to the basic concepts and standards underlying external financial accounting systems and reporting. Several important concepts will be studied in detail including recognizing avenues of revenue, identifying and distinguishing between different inventory methods, calculating cost and value of long-lived assets, and the use of long-term liabilities and their effect on a business. The course emphasizes the construction of the basic financial accounting statements - the income statement, balance sheet, and cash flow statement - as well as their interpretation for business decision-making. Students will develop a basic understanding of how to use the financial statements to assess and evaluate the profitability, liquidity, and solvency of business entities. **Students who enroll in this course have the opportunity to earn college credits by registering for the college in high school program through Duquesne University.**

### CHS INTRODUCTION TO MANAGERIAL ACCOUNTING No. 0734

Full Year

Credit 1.0

Grade 10, 11, 12

Prerequisites: Introduction to Financial Accounting

Honors Managerial accounting is a company's internal language and is used for decision-making, production management, product design, and pricing, as well as for motivating and evaluating employees. The purpose of this course is to provide an introduction to cost concepts, product costing systems, budgeting systems, and the development of accounting data for internal managerial decisions. The first part of the course presents alternative methods of preparing managerial accounting information, while the remainder of the course examines how companies use these methods. This course will help students understand the operations of future employers as they will be able to interpret and use accounting data for decision-making. **Students who enroll in this course have the opportunity to earn college credits by registering for the college in high school program through Duquesne University.**

### LAW AND JUSTICE No. 0716

Semester

Credit .5

Grades 10, 11, 12

The Law and Justice course is designed to provide students with a basic understanding of the American justice system. The course focuses on laws and legal issues that regulate the economy, business, and consumers. This course will demonstrate the American legal system by looking at the three major categories of a legal system: criminal law, civil law, and contract

law. The personal legal aspect of this course will overview the students' rights, privileges, and duties as defined by federal laws, state statutes, and local ordinances. Course highlights include class discussions on current legal issues, mock trial scenarios, and visits by various guest speakers.

### **ENTREPRENEURSHIP No. 0719**

Semester

Credit .5

Grades 10, 11, 12

Prerequisite: Business Management

In this semester course, students select an idea for a new business and create a plan for its success. Students will develop a business plan focusing on the organization, marketing strategies, financial requirements, and human resources of the new business. Furthermore, this course provides students with an understanding of accounting practices and procedures utilized in different forms of business ownership. Additional course features include creating an advertising campaign, planning a grand opening, keeping financial records, preparing and analyzing financial statements, and developing employee job descriptions and qualifications. The course culminates with the student developing a hypothetical business plan to implement his/her unique venture that conforms to all applicable governmental laws and regulations.

### **BUSINESS MANAGEMENT No. 0722**

Semester

Credit .5

Grades 9, 10, 11, 12

In this Business Management course, students will be provided with an understanding of the business management functions, various management theories, and the basic organization of a business. Students will understand that Business Management is the process of using the resources of a business to efficiently and effectively achieve its goals through planning, organizing, staffing, leading, and controlling. Furthermore, students will be analyzing different forms of business ownership and examining a product through direct or indirect channels of distribution. Students will build a strong knowledge base while developing effective management skills and understanding that successful managers are individuals who recognize the benefits of teamwork and consensus building, and are able to maximize human resources. As leaders, students will recognize the importance of technology and information management in the decision-making process, and the value of ethics and social responsibility in building and maintaining business relationships. In addition, managers realize that the ability to recognize and respond to new business opportunities and changing economic conditions is critical to the overall success of a business both locally as well as in the global marketplace.

### **INTRODUCTION TO ADVERTISING No. 0720**

Semester

Credit .5

Grades 9, 10, 11, 12

This course is an introduction to the principles and practices of contemporary advertising, marketing, and public relations. Students will explore these roles in the marketplace, the elements of a successful advertisement, advertising production, and tasks accomplished by media professionals, while promoting products and service businesses. Special emphasis is given to social, legal, planning, and the creative aspects of advertising as students will create their own advertising plan for a product.

### **PERSONAL FINANCE No. 0721**

Semester

**No. 0721C (Asynchronous Online Course)**

Credit .5

Grades 10, 11, 12

Personal Finance is intended to start each student on his/her path to financial success! Understanding and managing personal finances are important to one's future financial success. Personal Finance focuses on using financial procedures to plan, organize, and allocate resources. Students explore and understand financial opportunities affecting their daily lives, such as setting financial goals, using money management strategies, selecting bank services, protecting credit, filing tax returns, managing investments, renting property, purchasing a home, evaluating risk management, and planning for retirement. Students will engage in career exploration to determine how choices influence occupational options and future earning

potential. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success. Personal Finance is a blended course presented through a classroom setting mixed with online activities. Many colleges and universities are offering full, online courses making this experience particularly beneficial. First, students are learning important personal finance concepts, and secondly, they are experiencing taking a class in an online environment. Students may choose to take the traditional classroom course or an online version. Similar to a college course, the instructor will have autonomy in planning when students are required to be in class as compared to when they will be required to be online based on progress in the online course.

## Special Education Department

| Course #                                    | Course Title                              | Credit  | Grade Level | Prerequisites     |
|---|---|---------|-------------|-------------------|
| 2117  | English Applications <sup>^</sup>         | 1.0     | 9-12        | IEP Team Decision |
| 1710  | English <sup>^</sup>                      | 1.0     | 9-12        | IEP Team Decision |
| 2119  | Math Applications <sup>^</sup>            | 1.0     | 9-12        | IEP Team Decision |
| 1730  | Math <sup>^</sup>                         | 1.0     | 9-12        | IEP Team Decision |
| 1701—First Semester<br>1702—Second Semester | Academic and<br>Transition Support        | 0.5-1.0 | 9-12        | IEP Team Decision |
| 2101  | Life Skills Transition<br>Support         | 1.0     | 9-12        | IEP Team Decision |
| 2114  | School-Based<br>Vocational<br>Experiences | 0.5-1.0 | 9-10        | IEP Team Decision |
| 2115  | Community Based<br>Vocational Education   | 3.0     | 11-12       | IEP Team Decision |

<sup>^</sup>Not NCAA Approved

### **ENGLISH APPLICATIONS No. 2117**

Full Year

Credit 1.0

Grades 9, 10, 11, and 12

Prerequisite: IEP Team Decision

This full-year English course teaches students reading and writing skills that will support them in independently functioning in their community after high school. Aligned with the PA Alternate Academic Standards for Reading and Writing, instruction is differentiated based on student needs. The essential literacy skills that students are likely to encounter in and out of the school are covered in this course.

### **ENGLISH No. 1710**

Full Year

Credit 1.0

Grades 9, 10, 11, and 12

Prerequisite: IEP Team Decision

This full-year English course focuses on the continued development of word recognition skills, vocabulary development, reading comprehension and interpretation skills, written language skills and reading fluency. This course is aligned to PA Academic Standards for Reading and Writing. Instruction is differentiated based on student needs.

### **MATH APPLICATIONS No. 2119**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: IEP Team Decision

This is a full-year comprehensive developmental mathematics program designed to teach students to compute, solve problems, and think mathematically in real world situations. Aligned with the PA Alternate Academic Standards for Mathematics, instruction is differentiated based on student needs. Basic math skills and concepts that are used in and out of the school environment are covered, such as telling time, making change, measuring, sorting, and using a calculator.

**MATH No. 1730**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: IEP Team Decision

This is a full-year comprehensive mathematics program for students to develop their understanding of integers, order of operations, algebraic expression, one and two-step equations, proportions, percents, probability, geometry, and linear equations. The concepts in this course are designed to prepare students to take Algebra Essentials.

**ACADEMIC & TRANSITION SUPPORT No. 1701 (First Semester)  
 No. 1702 (Second Semester)**

Full Year

Credit 1.0 (scheduled at least 3 days per week to earn credit)

Grades 9-12

Prerequisite: IEP Team Decision

In this course, students work toward mastering their Individualized Education Program (IEP) goal(s) and focus on secondary transition planning in the areas of post-secondary education, employment, and independent living in order to prepare for adult living after high school. Activities are designed to monitor progress and support a student's Individualized Education Program. This credit-bearing course is awarded a Pass/Fail grade and is not factored into a student's GPA.

**LIFE SKILLS TRANSITION SUPPORT No. 2101**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisite: IEP Team Decision

In this course, students work toward mastering functional and/or behavioral Individualized Education Program (IEP) goal(s) and focus on secondary transition planning in the areas of post-secondary education, employment, and independent living to prepare for adult living after high school. Activities are designed to monitor progress and support a student's Individualized Education Program. This credit-bearing course is awarded a Pass/Fail grade and is not factored into a student's GPA.

**SCHOOL-BASED VOCATIONAL EXPERIENCES No. 2114**

Semester or Full Year

Credit 0.5-1.0

Grades 9, 10, 11, 12

Prerequisite: IEP Team Decision

This course focuses on the development of career readiness and employment skills. Students will be assigned to a variety of jobs around the school, including clerical, custodial, food service, and production tasks. Students will also develop skills related to employment, such as soft skills (work ethic, positive communication, time management, and problem solving), in addition to career development (developing a resume, cover letter, and interviewing).

**COMMUNITY BASED VOCATIONAL EDUCATION No. 2115**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: IEP Team Decision

In this blocked (3 period) course, students learn and perform vocational skills in a classroom and community setting. In the classroom, students are given instruction on skills needed to obtain and maintain employment one day per week. They are required to develop and maintain a portfolio. In the community, students perform job-related activities at various worksites under the supervision of a job coach (up to) four days per week. Data is collected by the job coach, and timely feedback is shared with the student and parent(s)/guardian(s). Transportation to and from worksites is provided by the Hampton Township School District.

## Fine Arts Department Courses

| Course # | Course Title                    | Credit | Grade Level | Prerequisites   |
|----------|---------------------------------|--------|-------------|---|
| 0810     | Mixed Media                     | 0.5    | 9-12        |   |
| 0812     | Drawing and Painting I          | 0.5    | 9-12        |   |
| 0830     | Drawing and Painting II         | 0.5    | 9-12        | Drawing and Painting I  |
| 0831     | Honors Drawing and Painting III | 1.0    | 10-12       | Drawing and Painting I and II   |
| 0813     | Ceramic Sculpture I             | 0.5    | 9-12        |   |
| 0814     | Ceramic Sculpture II            | 0.5    | 9-12        | Ceramic Sculpture I   |
| 0816     | Metals and Jewelry I            | 0.5    | 9-12        |   |
| 0817     | Metals and Jewelry II           | 0.5    | 9-12        | Metals and Jewelry I  |
| 0840     | AP Art and Design               | 1.0    | 11-12       | Completion of at least one level II art course or Instructor Approved Portfolio             |
| 0842     | CHS Introduction to World Art   | 1.0    | 10-12       |   |
| 0841     | AP Art History                  | 1.0    | 11-12       |   |
| 0832     | Honors Studio Intensive         | 1.0    | 11-12       | Completion of two courses in one medium (ceramics, metals/jewelry, or drawing and painting) |

### **MIXED MEDIA No. 0810**

Semester

Credit .5

Grades 9, 10, 11, 12

Materials Fee: \$10-\$20

This course is designed for students who like to work in a variety of art media. It is designed to challenge the student to use traditional materials in non-conventional ways. Most of the work produced in this class is intended to be used as functional objects, as well as creating works of art. Some of the projects will include mosaic tiling, mixed media, fiber arts, ceramics, and *papier mâché*.

### **DRAWING AND PAINTING I No. 0812**

Semester

Credit .5

Grades 9, 10, 11, 12

This basic course introduces the student to a wide variety of media and techniques to develop an artistic interest in two-dimensional art. Students will acquire basic skills in drawing, acrylic painting, design principles, color theory, and mixed media. Use and care of art materials and tools will be taught. Completed projects and use of class time are important to success in this course.

### **DRAWING AND PAINTING II No. 0830**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Drawing & Painting I

This semester course is designed to build upon techniques and media introduced in the Drawing & Painting I course. There will be a concentration in areas of more advanced drawing, watercolor, acrylic painting, and design work. Students are

expected to complete weekly sketchbook assignments. Students learn how to prepare and present their work for group critiques.

### **HONORS DRAWING AND PAINTING III No. 0831**

Full Year

Credit 1.0

Grades 10, 11, 12

Prerequisite: Drawing & Painting I, Drawing & Painting II

Honors Drawing & Painting III is a yearlong course designed for the motivated art student. Students will be required to keep an art sketchbook for personal and assigned work. Projects will build upon techniques previously learned to further develop their own style through a guided structure of creative problem - solving. All members of the class will work and think as artists on individual and group work. Students continue to develop their art critiquing skills through the group critique process and the study of works of art on view in art museums and galleries.

### **CERAMIC SCULPTURE I No. 0813**

Semester

Credit .5

Grades 9, 10, 11, 12

This is an introductory course designed to serve as a foundation for the development of artistic interest in clay. Ceramic Sculpture is taught as a fine art. Construction is developed in functional and non-functional work. Hand-building techniques using slab, coil, pinch, and relief construction are emphasized. Students learn clay preparation, design, texture, structure, and form. Classroom management, storage habits, and glazing are taught. Finished work and required class time are important to success in this course.

### **CERAMIC SCULPTURE II No. 0814**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Ceramic Sculpture I

This course is designed as a sequential study of art from Ceramic Sculpture I. Under guided practice and instruction, the students will build on techniques and skills acquired from Ceramic Sculpture I. Wheel-thrown pottery is a part of this course. Glazing techniques are explored and developed as the student becomes accustomed to the process of ceramics. Thematic exploration and personal expression are important to success in this course.

### **METALS AND JEWELRY I No. 0816**

Semester

Credit .5

Grades 9, 10, 11, 12

Materials Fee: \$10-\$20

Students are introduced to the creative world of contemporary metalworking. They will learn design elements in relation to metals, wood, fabrics, and found objects. Skills and techniques in cutting, piercing, soldering, enameling, and joining materials will be emphasized.

### **METALS AND JEWELRY II No. 0817**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Metals and Jewelry I

This course is designed as a sequential study of art in metals and skills and techniques introduced from Metals and Jewelry I. In addition, jewelry casting is introduced. There is also an emphasis on the joining of multimedia concepts and designs. If

students opt to purchase pieces made in silver, the fee will be determined based on the current market value of silver and project weight.

**AP ART AND DESIGN No. 0840**

Full Year

Credit 1.0

Grade 11, 12

Prerequisite: Completion of at least one level II art course or Instructor Approved Portfolio

AP Art and Design is an in-depth, advanced level course focused on the creation of a portfolio for the College Board AP portfolio examination. Students will determine whether they will concentrate on 2-D or 3-D artwork for their portfolio prior to the start of the course. The course is a full year course focusing on the three sections of the portfolio: breadth, concentration, and quality in the student's chosen area of focus. Students will be expected to maintain a sketchbook and produce a minimum of 25 high quality pieces for the portfolio with the expectation of the completion of 4 finished works completed over summer break. Additionally, students will develop the following practices and habits of mind: critical analysis, evidence-based decision making, innovative thinking, articulation of design elements and principles, systematic investigation of formal and conceptual aspects of art making, technical competence with materials, demonstration of artistic intention, and the creation of a body of work unified by a visual or conceptual theme. Students will achieve a deep understanding of both criticism and aesthetics and apply it to their work, as well as the work of others, through group and individual critiques. Students who take this course are expected to submit their portfolio to the College Board.

**AP ART HISTORY No. 0841**

Full Year

Credit 1.0

Grade 11, 12

The AP Art History course is equivalent to a year-long college art survey course exploring the nature of art, art making, and response to art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, students develop in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content. The experience will include research, discussion, reading, and writing. Students who take this course are expected to take the AP exam in May.

**CHS INTRODUCTION TO WORLD ART No. 0842**

Full Year

Credit 1.0

Grade 10, 11, 12

College in High School Introduction to World Art is part of the University of Pittsburgh's History of Art and Architecture department, and it introduces students to art from around the world. The course is a college-level foundation course in art history. Students explore how art historians interpret art, objects, and architecture through their cultural, political, and historical contexts, both past and present. The course hones visual acumen—the ability to critically analyze images, objects, and spaces—and connects this skill to effective description and interpretation. These tools offer practical benefits beyond the classroom. Additionally, students will learn to ask meaningful questions about art and its creators. Students may elect, for a fee, to enroll in the University of Pittsburgh College in High School Program to earn three college credits for this course.

**HONORS STUDIO INTENSIVE No. 0832**

Full Year

Credit 1.0

Grades 11, 12

Prerequisite: Completion of two courses in one medium (ceramics, metals/jewelry, or drawing and painting)

Studio Intensive is a year-long course for students endeavoring to pursue a post high school career in the visual arts. Centered on the individual student's strengths in a specific and chosen medium, each quarter will have individually tailored goals and objectives that have been predesigned through collaboration between the student and teacher in May of the previous school year. These goals will focus on further development of technique and processes, aesthetic decision making, and risk taking during the artistic processes that are more advanced than what is covered in entry level courses that focus on the same medium. The fourth quarter will center on research, field study, and career preparation. The course will culminate in an exhibition of the student's work, accompanied by a senior thesis identifying their role in the art world.



## Communications Technology Department Courses

| Course # | Course Title      | Credit | Grade Level | Prerequisites    |
|----------|-------------------|--------|-------------|------------------|
| 0901     | Graphic Design I  | 0.5    | 9-12        |                  |
| 0902     | Graphic Design II | 0.5    | 9-12        | Graphic Design I |
| 0903     | Video Production  | 0.5    | 9-12        |                  |
| 0905     | Advanced Video    | 0.5    | 9-12        | Video Production |

**GRAPHIC DESIGN I No. 0901**

Semester

Credit .5

Grades 9, 10, 11, 12

This class focuses on the four major areas of visual communication – photography, graphics, video, and multimedia. Students will learn how to create and communicate messages effectively by manipulation and/or creation of graphics using the latest technologies. Students will gain real-world experiences in the planning and execution of their projects. Students will learn digital photographic principles and techniques. They will have the opportunity to work with Adobe Suite to create, enhance and manipulate graphics and photos. They will also investigate graphic production, design systems, and multimedia production. Students will have the opportunity to bring their designs to life using equipment such as a photo printer, laser engraver, and vinyl cutting machine. This is a hands-on course, and grades will be based on projects and class participation. There may be a nominal materials fee for this course depending on the projects chosen by the student.

**GRAPHIC DESIGN II No. 0902**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Graphic Design I

This course allows students to further their study in the field of visual communication. Included are advanced operations in digital photographic principles and techniques. Students also can develop advanced techniques in graphics design. Students will have the opportunity to be introduced to studio and portraiture and product photography, while special emphasis will be placed on advanced editing techniques using Adobe Suite. Students will have the opportunity to bring their designs to life using a large format printer, laser engraver, and sublimation printer. This is a hands-on course, and grades are based on projects and class participation. There may be a nominal fee for materials for this course.

**VIDEO PRODUCTION No. 0903**

Semester

Credit .5

Grades 9, 10, 11, 12

In this course students will enhance or acquire skills in all facets of video production (including creating storyboards, capturing raw footage, assessing music and audio production, and video editing). Additionally, students will learn how to edit audio and video using the latest professional editing software such as Final Cut, Motion, Adobe Premiere, and Garage Band. Through their varied efforts working with video production, students will further develop important life and career skills, such as responsibility, organization, problem solving, and teamwork. This is a hands-on course and grades are based on the projects and class participation.

**ADVANCED VIDEO PRODUCTION No. 0905**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Video Production

Advanced Video Production is a semester-long course. Students will learn to face real-life situations that they may encounter in the studio or out in the field. Students will have the opportunity to bring to life the reality of video production. Students will learn the latest techniques and discuss the newest equipment in the field of video communications. Students may also write and produce several projects for real clients. Video production assignments may include public service announcements, how-to videos, and/or feature videos. Some group work is required for the video assignments.

## Engineering and Construction Department Courses

| Course # | Course Title                             | Credit | Grade Level | Prerequisites   |
|----------|--|--------|-------------|---|
| 0904     | Design Studio                            | 0.5    | 9-12        |   |
| 0910     | Introduction to Materials Processing     | 0.5    | 9-12        |   |
| 0914     | Metal Fabrication                        | 0.5    | 9-12        | Introduction to Materials Processing  |
| 0922     | Wood Fabrication                         | 0.5    | 9-12        | Introduction to Materials Processing  |
| 0931     | Architectural Design I                   | 0.5    | 9-12        |   |
| 0932     | Architectural Design II                  | 0.5    | 9-12        | Architectural Design I  |
| 0951     | Transportation and Engineering           | 0.5    | 9-12        |   |
| 0906     | Engineering Design I                     | 0.5    | 9-12        |   |
| 0907     | Engineering Design II                    | 0.5    | 9-12        | Engineering Design I  |
| 0908     | Engineering with Friends                 | 0.5    | 10-12       |   |
| 0909     | Core: Intro to Basic Construction Skills | 0.5    | 10-12       |   |
| 0711     | Electrical Training Level 1 Externship   | 3.0    | 12          | CORE: Intro to Basic Construction Skills<br>Student must be at least 16 years old |

### DESIGN STUDIO No. 0904

Semester

Credit .5

Grades 9, 10, 11, 12

This course blends art, design, and innovation. It is for the student who has an eye for design and passion for creative problem solving. This course introduces students to tools and techniques outside of the realm of the traditional art studio, including the Adobe Creative Suite, the laser engraver, 3D printers, and woodworking tools. Students will create innovative art both individually and in collaboration with fellow designers. Design Studio is a place where students design to develop their own creative potential.

### INTRODUCTION TO MATERIALS PROCESSING No. 0910

Semester

Credit .5

Grades 9, 10, 11, 12

Lab Fee: Approximately \$25

**This course provides the prerequisite foundation for advanced work with metals and wood.**

The emphasis of this course is to learn the safe operation of tools as well as the opportunities and limitations of working with various materials. In this course, the student will become familiar with equipment and manufacturing techniques associated with wood, metal, and plastic fabrication. Students will be introduced to the safe operation of a variety of machining and manufacturing tools, such as metal working tools (drill press, pedestal grinder, scroll bender, and MIG welder) and wood working tools (table saw, miter saw, sanders, and CNC router). Topics include how various materials are processed, cut, formed, and joined together. Students are required to measure and read design plans, and then design, construct and analyze products using various materials.

**METAL FABRICATION No. 0914**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Introduction to Materials Processing

Lab Fee: Approximately \$25

Metal Fabrication is designed for students who want to expand their knowledge from Introduction to Materials Processing with an emphasis on metal working. Students will use the engineering design process to develop products. They will operate tools such as a plasma cutter, an oxy-propane torch, metal forming tools, various metal cutting tools, and a metal inert gas welder (MIG). This course is recommended for all students interested in metal fabrication and engineering.

**WOOD FABRICATION No. 0922**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Introduction to Materials Processing

Lab Fee: Approximately \$30

Wood Fabrication is designed for students who want to expand their knowledge from Introduction to Materials Processing with an emphasis on woodworking. Students will use the engineering design process to develop products. They will operate tools such as a lathe, various saws, planer, joiner, and a variety of tabletop and hand tools. They will be required to read design plans, use measuring instruments such as micrometers, and complete the fabrication process. This course is recommended for all students interested in wood fabrication and engineering.

**ARCHITECTURAL DESIGN I No. 0931**

Semester

Credit .5

Grades 9, 10, 11, 12

This course begins with a brief history of architecture from around the world and the influences that are evident in American architecture. Students will create a technical sketch of a space and re-design it to be more functional. Additionally, students will use technology applications to design a residence based on a client's specifications. This course will also include the opportunity for students to design a complete home using a tutorial on Autodesk Revit (from creating a wall to publishing professional blueprints). The course will conclude with architectural design challenge using Revit.

**ARCHITECTURAL DESIGN II No. 0932**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Architectural Design I

This course builds on the skills from Architectural Design I. Students will participate in a design challenge to renovate an existing structure following a set criteria and constraints. The challenge will require students to develop draft blueprints using the research and design process. Students will build a scale model of the finished product and publish the final set of prints.

**TRANSPORTATION AND ENGINEERING No. 0951**

Semester

Credit .5

Grades 9, 10, 11, 12

Lab Fees: Approximately \$25

This introductory course is designed to provide students with problem-solving activities related to scientific and engineering principles. Students will construct projects dealing with transportation systems such as planes, rockets, wheeled vehicles, and boat-hull design. They will be presented with a variety of experiments enabling them to test their designs against their

classmates. Students will also launch rockets calculating height and speed. This fast-paced, fun course provides opportunity to put math and science skills to practical use.

**ENGINEERING DESIGN I No. 0906**

Semester

Credit 0.5

Grades 9, 10, 11, 12

This is a project-based, hands-on course, which prepares students for a world of emerging technologies. This course will focus on the three dimensions of technological literacy: knowledge, ways of thinking and acting, and capabilities. This is a STEM (Science, Technology, Engineering and Mathematics) course, which is intended for any student who is thinking about engineering or a technology field. Students will develop ideas, and then create innovative, practical solutions. Assessment will be based on participation and the implementation of the design process to solve engineering problems. Students will end the semester with reviewing mechanical components and their interrelationships involved in reverse engineering.

**ENGINEERING DESIGN II No. 0907**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Engineering Design I

Engineering Design II further explores engineering topics and themes originally presented in Engineering Design I. The semester will involve hands-on, project-based activities that will further develop the design process; from brainstorming to prototyping to modeling to production. Students will collaborate on designs and present their prototypes to a panel of educators and professionals.

**ENGINEERING WITH FRIENDS No. 0908**

Semester

Credit 0.5

Grades 10, 11, 12

This one semester course is designed as a collaborative introduction to engineering with an emphasis on cooperative educational experiences in the materials processing workshops. Students of all abilities will work together to learn how to make basic home repairs, use table tools, and design individual home projects. An emphasis is placed on safety with equipment, measuring, and independence with home maintenance.

**CORE: INTRO TO BASIC CONSTRUCTION SKILLS No. 0909**

Semester

Credit 0.5

Grades 10, 11, 12

CORE is based on curriculum from the National Center for Construction Education and Research. The course is a competency-based program that is industry-recognized as a prerequisite for the educational component of apprenticeships in construction trades that are completed with private companies (ie. electrical, HVAC, sprinkler fitters, laborer, roofing). Individuals interested in attending a technical school, entering the work force as a skilled worker, or attending college for a degree in construction, architecture, or engineering would benefit from this course as a basic introduction to construction: safety, construction math, hand tools, power tools, construction drawings, rigging, communication, and basic employability skills. Students who complete this course will not need to complete entrance exams for the Associated Builders and Contractors Association's apprenticeship programs; however, they will need to complete an application.

**ELECTRICAL TRAINING LEVEL 1 EXTERNSHIP No. 0711**

Full Year

Credit 3.0

Grades 10, 11, 12

Prerequisite: CORE: Intro to Basic Construction Skills course with a grade of B or higher AND Student must be 16 years old at the start of the program

This course is taught in conjunction with the Associated Builders and Contractors group of Western Pennsylvania. Using the National Center for Construction and Education Research curriculum, students will complete level 1 of prerequisite training for the Electrical Apprenticeship program. Its modules cover topics such as electrical theory, introduction to national electrical code, device boxes, conduit bending, wireways, raceways, conductors, cables, residential wiring, electrical test equipment, basic electrical construction documents, and electrical safety. The program blends instruction and hands-on training to prepare students for an apprenticeship in electrical work.

## Family and Consumer Science Department Courses

| Course # | Course Title                                | Credit | Grade Level | Prerequisites  |
|----------|---|--------|-------------|--|
| 1002     | CHS Early Childhood Development Birth-Age 5 | 1.0    | 10-12       |  |
| 1004     | Sewing and Design I                         | 0.5    | 9-12        |  |
| 1005     | Sewing and Design II                        | 0.5    | 9-12        | Sewing and Design I  |
| 1006     | Sewing and Design III                       | 0.5    | 10-12       | Sewing and Design II   |
| 1007     | Food Fundamentals                           | 0.5    | 9           |  |
| 1010     | Gourmet on the Run                          | 0.5    | 10-12       |  |
| 1008     | Creative Cooking                            | 0.5    | 10-12       |  |
| 1011     | Beyond High School                          | 0.5    | 11-12       |  |
| 1012     | Interior Design                             | 0.5    | 9-12        |  |
| 1014     | Food with Friends                           | 0.5    | 10-12       | One prior cooking class at the high school level or teacher recommendation |

### **CHS EARLY CHILDHOOD DEVELOPMENT BIRTH-AGE 5 No. 1002**

Full Year

Credit 1

Grades 10, 11, 12

The primary purpose of this course is to provide an in-depth learning experience in child development theory and to familiarize students with the unique traits and characteristics of children from birth to age five. This psychology-based course provides students with insights about the physical, social-emotional, cognitive, moral and language development in early childhood. During the course, students will learn observation techniques, plan lessons, and organize and supervise preschool sessions. They will present stories and activities that fall into the fine motor and gross motor domains. Those activities may include circle time, arts and crafts, story time, and other age-appropriate activities. The experiences in the course help to prepare students for potential careers involving children. Students will share best practices that align with care and education of children as well as examine issues relating to the development of children. **Students who enroll in this course may elect to earn three college credits by registering for the college in high school program through Carlow University.**

### **SEWING AND DESIGN I No. 1004**

Semester

Credit .5

Grades 9, 10, 11, 12

Sewing and Design I is designed to teach basic sewing skills on the machine as well as by hand. Students will complete up to three clothing items; one project of the teacher's choice and one to two of their choice. They will consider personal design techniques and color choices in both project work and in hand-drawn clothing designs. They will also complete one project using hand skills. The student supplies materials.

### **SEWING AND DESIGN II No. 1005**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Sewing and Design I

Students improve their sewing skills by learning techniques that produce professional-looking garments. Personalized fashion design is encouraged. Garment selection and construction become more difficult with each project. In addition, students will complete research on a fashion era which will include a paper and an oral presentation.

**SEWING AND DESIGN III No. 1006**

Semester

Credit .5

Grades 10, 11, 12

Prerequisites: Sewing and Design II

Advanced garment construction, pattern study, and pattern design are presented in this class. Students work at their own level, moving toward projects that are more difficult and present a unique sense of style. In addition, students will complete research on a designer which will include a paper and an oral presentation.

**FOOD FUNDAMENTALS No. 1007**

Semester

Credit .5

Grade 9

Food Fundamentals is designed for the novice cook. Major emphasis is placed on learning basic cooking techniques and how to operate specific kitchen equipment and appliances. Through teacher demonstrations, and practical, hands-on experiences, students cook and bake a variety of items. The goals are for students to develop skills essential for successful cooking practices and to gain confidence in the kitchen. The major units of study are kitchen safety and sanitation, kitchen basics and nutrition, breakfast, lunch, and dinner.

**GOURMET ON THE RUN No. 1010**

Semester

Credit .5

Grades 10, 11, 12

Gourmet on the Run is designed for the student who is interested in the preparation and serving of foods that can be prepared quickly. Many of the dishes include convenience food products. Shortcut cooking methods and skills are emphasized, as well as time and energy-saving techniques. Throughout the course, the microwave, blender, griddle, food processor, stovetop, as well as other appliances are used to emphasize quick cooking. All students will do a demonstration of a recipe using a small appliance from the course. This course is great for any student who does not have the time to do more-involved cooking.

**CREATIVE COOKING No. 1008**

Semester

Credit .5

Grades 10, 11, 12

In this course, students identify and apply basic principles of cookery in the preparation of self-chosen recipes and group-created recipes. Students have the opportunity for unique expression through lab work and cooking competitions. Ingredient functionality will be emphasized in this course. Major projects include researching foods from a different country/culture and altering/creating recipes.

**BEYOND HIGH SCHOOL No. 1011**

Semester

Credit .5

Grades 11, 12

Beyond High School is a semester course open to juniors and seniors. This course will prepare every student for experiences after high school such as school-to-work or college living. Life management skills, such as budgeting and banking, are taught and practiced. Additional topics of importance may include communication skills, consumerism and preparing for careers. Class activities and experiences make this a hands-on, relevant course. Home survival skills won't be forgotten such as laundry, ironing, and how to tie a tie.



**INTERIOR DESIGN No. 1012**

Semester

Credit .5

Grades 9, 10, 11, 12

Where and how we live has a profound impact on individuals in society. Understanding the principles of housing helps in making good decisions on what kind of living space is appropriate for individuals and families throughout the life cycle. This course will help students identify and demonstrate how to create a space that best reflects needs, taste, and positive aesthetics that incorporate both the elements and principles of design with an architectural foundation. Students will analyze factors (social, psychological, economic, cultural) affecting housing decisions of individuals and families and determine how those decisions impact society.

**FOOD WITH FRIENDS NO. 1014**

Semester

Credit .5

Grades 10, 11, 12

Prerequisites: One prior cooking class at the high school level or teacher recommendation

This one semester course is designed as a collaborative introduction to foods and nutrition information with an emphasis on cooperative educational experiences in the food laboratory. Students of all abilities work together to understand independent living skills to prepare them for life after high school. An emphasis is placed on recipe preparation, kitchen safety and sanitation, meal planning, nutrition, and independence within the kitchen.

## Physical Education and Wellness Department Courses

| Course #      | Course Title                                  | Credit | Grade Level | Prerequisites                               |
|---------------|---|--------|-------------|---|
| 1109          | Wellness I                                    | 1.0    | 9           |   |
| 1111<br>1111C | Wellness II—Traditional<br>Wellness II—Online | 0.5    | 11          |   |
| 1121          | Lifetime Activities                           | 0.5    | 9-12        |   |
| 1120          | Yoga  | 0.5    | 9-12        |   |
| 1125          | Advanced Yoga                                 | 0.5    | 9-12        | Yoga  |
| 1123          | Fitness and Weight Training I                 | 0.5    | 9-12        |   |
| 1133          | Fitness and Weight Training II                | 0.5    | 9-12        | Completion of Fitness and Weight Training I |
| 1124          | Team Sports                                   | 0.5    | 9-12        |   |

### WELLNESS I No. 1109

Full Year  
Credit 1.0  
Grade 9

**Requirement for 9<sup>th</sup> grade.**

The Wellness I curriculum is structured so that students will be introduced to and given the opportunity to explore current health issues that impact members of their age group. The health portion of this class will include the following topics: decision making, social pressure, stress management, suicide awareness and prevention, nutrition and weight management, lifestyle diseases, substance abuse, and sexually transmitted diseases. The physical education portion of this course will focus on cardiovascular endurance, a variety of muscular strength activities, and the five basic swimming strokes aligned to the American Red Cross Learn-to-Swim program.

### WELLNESS II No. 1111 No. 1111C (Asynchronous Online Course)

Semester  
Credit .5  
Grade 11

**Completing CPR training is a state graduation requirement for 11<sup>th</sup> grade. Students who take Wellness II with another institution will need to also take a CPR certification course and share a copy of their certificate with the counseling department.**

The Wellness II curriculum is structured so that students will be introduced to and given the opportunity to explore current health issues that impact members of their age group. The focus of this class will cover body systems, first aid, CPR, the use of an AED and rescue breathing. Students interested in earning a CPR certification will need to pay a fee. This course will also focus on muscular strength and endurance, cardiovascular and flexibility activities. Students may choose to take the traditional classroom course or an online version. Similar to a college course, the instructor will have autonomy in planning when students are required to be in class as compared to when they will be required to be online based on progress in the online course.

### LIFETIME ACTIVITIES No. 1121

Semester  
Credit .5  
Grades 9, 10, 11, 12

This elective is designed to give an introduction to various activities that can be played or performed throughout their lifetime. Activities include racket sports, such as tennis, pickle ball, table tennis, and badminton. Also, mountain-biking, fly fishing, and archery following NASPE guidelines are introduced.

**YOGA No. 1120**

Semester

Credit .5

Grades 9, 10, 11, 12

Yoga is a course intended to encourage lifelong physical activity and fitness. In this course, students will learn yoga postures, breathing techniques, and relaxation methods that can be utilized to improve health. Students will develop body awareness and correct alignment in a variety of yoga poses including standing, balance, hip-opening, inversions, arm balances, twists, back bending, seated, core strengthening, and partner poses. Each class will have a specific focus: pose break-down, yoga flows, strength-building routines, or relaxation.

**ADVANCED YOGA No. 1125**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisite: Yoga

Advanced Yoga builds upon the skills and knowledge acquired in the first yoga course. After reviewing basic sequences, students will have the opportunity to create sequences of their own to add variety. There will be an emphasis on identifying weakness in muscular strength and endurance and then developing strategies to improve. In addition to group practice, students will be personalizing their practice by locating and utilizing resources for skills they personally want to improve. Students will have the opportunity to practice more advanced skills like floating, binding, arm balances, inversions, and Chaturanga variations. Various breath techniques, different asana-based styles of yoga, mindfulness practices, and self-reflection will be incorporated.

**PERSONAL FITNESS AND WEIGHT TRAINING I No. 1123**

Semester

Credit .5

Grades 9, 10, 11, 12

This elective combines classroom, weight training, and cardiovascular fitness activities. Improving students' health-related components of fitness through introduction to fitness concepts and their application are primary goals of the course. Students will participate in activities to enhance cardiovascular fitness, muscular strength and endurance, flexibility and body composition. The benefits of exercise and its effect on the systems of the body will be introduced.

**PERSONAL FITNESS AND WEIGHT TRAINING II No. 1133**

Semester

Credit .5

Grades 9, 10, 11, 12

Prerequisites: Completion of Fitness and Weight Training I

This advanced course expands upon the information and techniques learned in Fitness and Weight Training I. Students with a desire to improve and/or maintain their personal fitness level will have a particular interest in this course. Teaching the necessary skills to attain and maintain fitness throughout life is a primary goal. Students will design and implement a fitness program to meet individual needs by using a format that affords flexibility in choosing activities.

**TEAM SPORTS No. 1124**

Semester

Credit .5

Grades 9, 10, 11, 12

The Team Sports elective is a high energy, game playing class designed to develop the basic skills, knowledge of game and rules, and strategies necessary to participate in various team sports. The team sports offered in this class are Wiffle ball flag football, soccer, volleyball, team handball, ultimate Frisbee, kickball, and basketball. The course will encourage lifelong participation in sports for fitness and enjoyment.

## Music Department Courses

| Course #     | Course Title                                    | Credit | Grade Level | Prerequisites   |
|--------------|---|--------|-------------|---|
| 1260<br>1261 | Symphonic Band/Marching Band<br>Percussion Only | 1.0    | 9-12        | Accomplished score on the playing test  |
| 1264         | Honors Wind Ensemble/Marching Band              | 1.0    | 9-12        | Students must earn a position by passing a competitive audition<br>Instructor Recommendation  |
| 1271         | Symphony Orchestra                              | 1.0    | 9-12        | Students in Grade 9 – participation in the Middle School Orchestra and teacher recommendation |
| 1272         | Honors Orchestra                                | 1.0    | 9-12        | Recommendation of orchestra director and successful audition                                  |
| 1203         | Concert Choir                                   | 1.0    | 9-12        |   |
| 1204         | Honors Concert Choir                            | 1.0    | 9-12        | Recommendation of choir director and successful audition                                      |
| 1202         | Music Theory                                    | 1.0    | 9-12        |   |
| 1200         | Introduction to Music Technology                | 0.5    | 9-12        |   |
| 1201         | Class Piano                                     | 0.5    | 9-12        |   |

### **SYMPHONIC BAND/MARCHING BAND**

**No. 1260**

**No. 1261 (Percussion Only)**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisites: At least an accomplished score on the playing test or instructor recommendation.

Symphonic/Marching Band is a co-curricular course that includes marching band and concert band opportunities. Students in this class play at an accomplished level. An emphasis will be placed on technical training, musicianship, and rehearsal etiquette. Repertoire selected for this ensemble will reside in the medium-advanced level of difficulty. Students will be exposed to musical genres that include pieces from the classical, romantic, 20<sup>th</sup> century, and contemporary periods of the band repertoire. Students will also be exposed to marches, rock, jazz, Broadway, and/or movie repertoire. Students are expected to practice daily. This course meets on a daily basis with the opportunity for students to apply and audition for PMEA and AV Honors Bands. 9<sup>th</sup> Grade students must attend Freshman Mini-Camp at the end of the school year. All students must attend Band Camp in August, two-night rehearsals per week for half of the football season and one night rehearsal per week for half of the football season. Attendance at all public performances is required, including concerts, adjudications, band festivals, parades, and football games. Marching Band performances will be graded for attendance. Students participating in another HTSD fall activity which forces the student to miss 33% or more of the marching band performances will be exempt from the marching component of this co-curricular course. Students will be selected for this group based on a performance assessment performed by all 8<sup>th</sup> – 12<sup>th</sup> grade students in early February.

## **HONORS WIND ENSEMBLE/MARCHING BAND No. 1264**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisites: Students must earn a position by passing a competitive audition and the instructor recommendation

Honors Wind Ensemble/Marching Band is a co-curricular course intended for the advanced and serious musician that includes marching band and concert band opportunities. This course provides the students with an intense, serious, and competitive ensemble experience. Students must possess advanced technical and musical abilities. An emphasis will be placed on technical training, musicianship, music theory, and rehearsal etiquette. Repertoire selected for this ensemble will be at the advanced – very advanced level of difficulty (college level). Students will be exposed to major works from the band repertoire, including selections from the classical, romantic, 20<sup>th</sup> century, and contemporary periods. Students will also be exposed to marches, rock, jazz, Broadway, and/or movie repertoire during the marching component of this course. Students must practice daily. This course meets on a daily basis with the opportunity for students to audition and apply for PMEA and AV Honor Bands. Students will be required to participate in morning sectional rehearsals prior to school during the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> grading periods. 9<sup>th</sup> Grade students must attend Freshman Mini-Camp at the end of the school year. All students must attend Band Camp in August, two-night rehearsals per week for half of the football season and one night rehearsal per week for half of the football season. Attendance at all public performances is required, including concerts, adjudications, band festivals, parades, and football games. Marching Band performances will be graded for attendance. Students participating in another HTSD fall activity which forces the student to miss 33% or more of the marching band performances will be exempt from the marching component of this co-curricular course. Percussion ensemble is pulled out of the regular rehearsal one or two days per week for added instruction.

## **SYMPHONY ORCHESTRA No. 1271**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisites:

1. Students in Grade 9—participation in Middle School Orchestra and teacher recommendations
2. Students in Grade 9-12 new to the district—an audition is required

The Symphony Orchestra is a performance-oriented course that aims to develop a varied repertoire of classical and popular orchestral works for performance both in and outside of the district, with emphasis on advanced individual and ensemble playing techniques. Repertoire will include pieces suitable for full symphony orchestra, as well as strings-only selections. The course will also develop student understanding of basic music theory and music history as it relates to the repertoire. This course meets on a daily basis with opportunities for individuals to audition for various honors ensembles throughout the area. Attendance at all public performances is required. Students will be assessed on daily performance in the classroom, individual development of technique, and written and aural analysis of music.

## **HONORS ORCHESTRA No. 1272**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisites: Recommendation of orchestra director and successful audition

Honors Orchestra is a course that runs concurrently with Symphony Orchestra. It is a performance-oriented course that aims to develop a varied repertoire of classical and popular orchestral works for performance both in and outside of the district, with emphasis on advanced individual and ensemble playing techniques. Repertoire will include pieces suitable for full symphony orchestra, as well as strings-only selections, and opportunities to develop chamber music skills in small groups. The course will also develop student understanding of basic music theory and music history as it relates to the repertoire. In addition, Honors Orchestra students are required to submit four projects per semester. These projects emphasize public performance in both large and chamber groups, as well as develop a more in depth understanding of the history behind the orchestra's repertoire. This course meets on a daily basis with opportunities for individuals to audition for various honors ensembles throughout the area. Students will be assessed on daily performance in the classroom, individual development of technique, and written and aural analysis of music, as well as completion of the four projects using a rubric for criteria.

Honors students are required to audition for PMEA District 1 Honors String Orchestra and apply for the District 1 Orchestra Festival, from which they may proceed to Region and All-State Festivals through audition.

### **CONCERT CHOIR No. 1203**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Concert Choir provides a choral environment in which the student may develop his/her music comprehension and vocal instrument to fullest capacity. Varied opportunities are available to students of all abilities and experience. Concert Choir is a performing group composed of soprano, alto, tenor, and bass voices that rehearse and perform music written for mixed voices in two to eight parts. Concert Choir is open to both changed voices and unchanged voices from grades 9 through 12. Students will be assessed on development of vocal production, skills in reading music notation, participation in class assignments and public performances. Those who excel may audition for Pennsylvania Music Educators Association District I Honors Choir and District I Choral Festival in which they may proceed to Region and All-State festivals through adjudication. Vocal production, choral diction, ear-training and sight-singing are taught, leading to performance of the best examples of the choral music literature.

### **HONORS CONCERT CHOIR No. 1204**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Prerequisites: Recommendation of choir director and successful audition

Honors Concert Choir is a course that runs concurrently with Concert Choir. It is a performance-oriented course that aims to develop a varied repertoire of classical and popular choral works for performance both in and outside of the district, with emphasis on advanced individual and ensemble singing techniques. Repertoire will include pieces suitable for chamber choir, and opportunities to develop chamber music skills in small groups. Some repertoires will be in addition to music being studied and rehearsed daily in class with all Concert Choir students. The course will also develop student understanding of basic music theory and music history as it relates to the repertoire. In addition, Honors Concert Choir students are required to submit one written listening journals per quarter (four per year). These journals will feature significant choral works that students will listen to and respond to through writing. This will help students develop a more in depth understanding of the history, cultural significance, variety of styles and genres, etc. of choral repertoire. This course meets on a daily basis with opportunities for individuals to audition for various honors ensembles throughout the area. Students will be assessed on daily performance in the classroom, individual development of vocal technique, preparation of additional and more advanced music, written and aural analysis of music, as well as completion of the four listening journals (using a rubric for criteria).

### **MUSIC THEORY No. 1202**

Full Year

Credit 1.0

Grades 9, 10, 11, 12

Music Theory is the study of the building blocks of music. Harmony is studied from three separate views. They include how it is built, how to play it, and how it sounds. Included in the course are the study of pitch, rhythm, major scales, minor scales, triads, seventh chords, diatonic chords, voice leading, part writing, harmonic progression, inversions, cadences, periods, non-chord tones, secondary chords, modulations, form, and analysis. Students will also develop their ears through melodic and rhythm dictation. A background in music is helpful, but not necessary. Music Theory is an excellent course for students who want to learn the fundamentals of music composition. This course covers most of what a 1<sup>st</sup> semester college music theory class will cover.

## **INTRODUCTION TO MUSIC TECHNOLOGY No. 1200**

Semester

Credit .5

Grades 9, 10, 11, 12

Throughout this course, students will be given the opportunity to experience several different music composition and technology options. After learning some basics related to music notation and introductory piano skills, students will work with web-based applications, such as Incredibox, allowing for creation of beatbox compositions using pre-made loops. Students will also use programs and applications that involve individual composition and creation, such as writing music in Finale, creating a unique new loop for use in a GarageBand project, and manipulating existing media for new purposes in iMovie. The course will then shift focus to sound recording, mixing, and editing through study and use of digital audio workstations (DAW). Students will learn, or be provided, a chord progression, associated bass pattern, and then create their own piece of music by utilizing the MIDI (Musical Instrument Digital Interface) keyboard controller. The final project will synthesize all that has been learned through the various technology outlets to create a fully composed and edited piece of music.

## **CLASS PIANO No. 1201**

Semester

Credit .5

Grades 9, 10, 11, 12

This course is designed to introduce students to the art of playing the piano at a basic functional level. Students will learn to read and play piano music in a variety of styles through technical instruction and individualized practice time. Students will learn to identify and perform a variety of different styles. Students will learn the elements of music (melody, rhythm, harmony, form, timbre, style) as they are applied to solo and ensemble performance. Students will perform in scheduled class recitals, which represent the outcome of the skills and knowledge gained through instruction. **No prior music knowledge is required for this class.**

## INTERDISCIPLINARY STUDIES AND SCHEDULED ACTIVITIES

All students, except seniors, must register for at least 7 full-credit courses or the equivalent thereof (two semester courses equal one full-credit course). Seniors must schedule at least 6.5 credits. **Scheduling an activity does not circumvent the minimum schedule requirements listed above.**

| Course #     | Course Title  | Credit  | Grade Level | Prerequisites   |
|--------------|---|---------|-------------|---|
| 1401         | Senior Internship   | 0.5     | 12          | The student must be on track to graduate (credits, community service, & job shadow hours), obligation free, and have their own transportation |
| 1402         | Dance Foundations   | 0.5     | 9-12        |   |
| 1403         | Technology Leadership   | 1.0     | 9- 12       |   |
| 1404         | Independent Study   | .05-1.0 | 9-12        |   |
| 1405         | Yearbook  | 0.0     | 9-12        |   |
| 1234<br>5678 | First Semester Academic Study Hall<br>Second Semester Academic Study Hall | 0.0     | 9-12        |   |

### SENIOR INTERNSHIP

**No. 1401**

Semester  
Credit 0.5  
Grades 12

Prerequisite: The student must be on track to graduate (credits, community service, & job shadow hours), obligation free, and have their own transportation

The Senior Internship Program is a course designed to provide differentiated opportunities to a select number of senior students to participate in career exploration and meaningful hands-on learning experiences in a professional setting. Students are placed with an adult mentor at the internship placement site and expected to work between 5 to 15 hours a week for the semester. Students are required to complete and submit weekly modules and weekly logs of their hours. During the semester, students are expected to attend informational meetings and sessions at the High School with the program supervisor. Students will receive an informal evaluation from their onsite mentors. Students will need to be able to demonstrate an ability to reflect on their experiences, learn from mistakes, challenge themselves, grow through adversity, ask questions, and show an increased awareness of interpersonal and professional skills. Internship placements vary based on student interests and the availability of quality placements that are willing and able to collaborate with the program. **Student enrollment in the course is limited. Students must complete an application to be considered.**

### DANCE FOUNDATIONS

**No. 1402**

Semester  
Credit 0.5  
Grades 9, 10, 11, 12

This movement-based course introduces students to the fundamentals of various dance styles, including ballet, modern, jazz, tap, etc. Students will learn the technique, vocabulary, history, and cultural significance of each style, while also improving their physical skills and overall coordination. This course is ideal for students of all experience levels, and it is intended to foster physical development, growth of self-expression, and a deeper appreciation for dance as an art form. Daily classes will primarily focus on learning the physical movements of dance; therefore, comfortable attire and appropriate footwear will be necessary.

### TECHNOLOGY LEADERSHIP

**No. 1403**

Year  
Credit 1.0 (Pass/Fail Only)  
Grades 9-12

Designed for independently driven students, the Technology Leadership program develops essential IT and soft skills through practical application. Students will learn to troubleshoot technical issues, design user-focused solutions, create instructional





## **A.W. Beattie Career Center Admissions Information**

All consortium secondary students are welcome to enroll in an advanced career pathway program with A.W. Beattie Career Center during their sophomore, junior or senior year. Enrollment is an open process in all available career programs. In the event that a career program has reached the maximum enrollment based on safety or by Joint Operating Committee action, new student enrollment will be determined by implementing the five (5) year average daily enrollment effective March 1<sup>st</sup> of the prior school year. In addition to the average daily enrollment, the sending school may also implement the student evaluation rubric to determine admission to a high demand program. No new enrollment will be accepted after the 10<sup>th</sup> day of the first semester, unless the student has prior education experience within a career center.

**All A. W. Beattie Career Center Programs offer advanced college credit upon successful completion. Potential college credits range from three to twenty credits.**

A.W. Beattie Career Center Programs are approved Programs of Study (POS) providing for seamless transition to post-secondary education through rigorous content aligned with challenging academic and relevant career context in a non-duplicative progression of courses aligned to post-secondary education. SOAR is a Pennsylvania program which allows CTE students to earn free college credits. Students earn free credits with a qualifying score from the NOCTI Senior year assessment and confirmation that they have completed the entire CTE program of study. To obtain these free credits, students must submit the proper paperwork to the college, as outlined below. This paperwork requires CTE administrative signatures for submittal.

### ***SEE WHICH COLLEGES OFFER FREE CREDITS FOR YOUR CTE PROGRAM OF STUDY (POS)***

To determine the free credits offered for Pennsylvania Career and Technical Educational Programs of Study (POS) visit the website <http://www.collegetransfer.net/>. After selecting your Program of Study and your high school graduation year, you can view all the colleges offering free credits for your particular CTE program. Additionally, A.W. Beattie Career Center maintains many college articulation agreements, along with dual enrollment and pre-apprenticeship opportunities for students. Please visit our website [www.beattietech.com](http://www.beattietech.com) for additional information.

Several of A. W. Beattie's programs require uniforms and equipment. The student and parents assume this cost. Therefore, students should obtain accurate cost information before enrolling for a course. Transportation is provided by the School District.

Applications to attend A.W. Beattie Career Center should be made during the second semester of the 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade and will be carefully reviewed. Further information regarding enrollment in A. W. Beattie Career Center program's is available in your high school Counseling Office.

| <b>A.W. BEATTIE CAREER CENTER PROGRAMS</b> |  |               |                    |
|--|--|---------------|--------------------|
| <b>Course #</b>                            | <b>Course Title</b>  | <b>Credit</b> | <b>Grade Level</b> |
| 1326                                       | Advertising Design-1   | 3             | 10,11,12           |
| 1327                                       | Advertising Design-2   | 3             | 11,12              |
| 1328                                       | Advertising Design-3   | 3             | 12                 |
| 1306                                       | Automotive Collision Technology-1                                      | 3             | 10,11,12           |
| 1307                                       | Automotive Collision Technology-2                                      | 3             | 11,12              |
| 1308                                       | Automotive Collision Technology-3                                      | 3             | 12                 |
| 1310                                       | Automotive Technology-1  | 3             | 10,11,12           |
| 1311                                       | Automotive Technology-2  | 3             | 11,12              |
| 1312                                       | Automotive Technology-2  | 3             | 12                 |
| 1314                                       | Carpentry/Building Construction-1                                      | 3             | 10,11,12           |
| 1315                                       | Carpentry/Building Construction-2                                      | 3             | 11,12              |
| 1316                                       | Carpentry/Building Construction-3                                      | 3             | 12                 |
| 1334                                       | Networks & Cyber Security-1  | 3             | 10,11,12           |
| 1335                                       | Networks & Cyber Security-2  | 3             | 11,12              |
| 1336                                       | Networks & Cyber Security-3  | 3             | 12                 |
| 1338                                       | Cosmetology-1  | 3             | 10,11,12           |
| 1339                                       | Cosmetology-2  | 3             | 11,12              |
| 1340                                       | Cosmetology-3  | 3             | 12                 |
| 1342                                       | Culinary Arts-1  | 3             | 10,11,12           |
| 1343                                       | Culinary Arts-2  | 3             | 11,12              |
| 1344                                       | Culinary Arts-3  | 3             | 12                 |
| 1346                                       | Dental Careers-1   | 3             | 10,11,12           |
| 1347                                       | Dental Careers-2   | 3             | 11,12              |
| 1348                                       | Dental Careers-3   | 3             | 12                 |
| 1318                                       | Early Childhood Education-1  | 3             | 10,11,12           |
| 1319                                       | Early Childhood Education-2  | 3             | 11,12              |
| 1320                                       | Early Childhood Education-3  | 3             | 12                 |
| 1378                                       | Robotics Engineering Tech-1  | 3             | 10,11,12           |
| 1379                                       | Robotics Engineering Tech-2  | 3             | 11,12              |
| 1380                                       | Robotics Engineering Tech-3  | 3             | 12                 |
| 1350                                       | Emergency Response Technology-1  | 3             | 10,11,12           |
| 1351                                       | Emergency Response Technology-2  | 3             | 11,12              |
| 1352                                       | Emergency Response Technology-3  | 3             | 12                 |
| 1354                                       | Health and Nursing Sciences-1  | 3             | 10,11,12           |
| 1355                                       | Health and Nursing Sciences-2  | 3             | 11,12              |
| 1356                                       | Health and Nursing Sciences-3  | 3             | 12                 |
| 1358                                       | Heating, Ventilating and Air-Conditioning Technology-1                 | 3             | 10,11,12           |
| 1359                                       | Heating, Ventilating and Air-Conditioning Technology-2                 | 3             | 11,12              |
| 1360                                       | Heating, Ventilating and Air-Conditioning Technology-3                 | 3             | 12                 |
| 1366                                       | Pastry Arts/Commercial Baking-1  | 3             | 10,11,12           |
| 1367                                       | Pastry Arts/Commercial Baking -2                                       | 3             | 11,12              |
| 1368                                       | Pastry Arts-/Commercial Baking-3                                       | 3             | 12                 |
| 1370                                       | Pharmacy Operations (11 <sup>th</sup> and 12 <sup>th</sup> Grade Only) | 3             | 11, 12             |
| 1382                                       | Sports Medicine – Rehab Therapy and Exercise Sciences Technology-1     | 3             | 10,11,12           |
| 1383                                       | Sports Medicine—Rehab Therapy and Exercise Sciences Technology-2       | 3             | 11, 12             |
| 1384                                       | Sports Medicine—Rehab Therapy and Exercise Sciences Technology-3       | 3             | 12                 |
| 1390                                       | Surgical Sciences-1  | 3             | 10, 11, 12         |
| 1391                                       | Surgical Sciences-2  | 3             | 11, 12             |
| 1392                                       | Surgical Sciences-3  | 3             | 12                 |
| 1386                                       | Veterinary Sciences Technology-1                                       | 3             | 10,11,12           |
| 1387                                       | Veterinary Sciences Technology-2                                       | 3             | 11, 12             |
| 1388                                       | Veterinary Sciences Technology-3                                       | 3             | 12                 |

**Full Year**  
**Credit 3.0**  
**Grades 10, 11, 12**

**Advertising Design** – The **Advertising Design** program at A. W. Beattie Career Center focuses on a wide variety of professional art-related fields, including: Digital Graphic Design, Multimedia, Digital Photography, and Web Design. Students will train in a dual-platform (Mac and PC) environment using the latest in professional graphic design software and equipment, such as: Adobe Photoshop CS5.5, Adobe Illustrator CS5.5, Adobe Premier Pro, Adobe Dreamweaver CS5.5, and many others. Achieve advanced standing at local colleges or universities by utilizing college credits you can earn while you are an Advertising Design student.

**Automotive Collision Technology** – The nationally recognized Inter-Industry Conference on Auto Collision Repair (I-CAR) is utilized in the **Automotive Collision Technology** program at A.W. Beattie Career Center. The I-CAR curriculum provides strict Industry standards supporting students with hands-on experience using equipment in our state-of-the-art auto collision lab. The **Automotive Collision Technology** program trains students in all aspects of the industry including: MIG Welding, computerized paint mixing, and automotive spraying techniques. Using the latest technology in our fully equipped auto collision shop keeps students up to date with current standards. Cooperative education experiences with local area employers provide necessary hands-on training outside the classroom.

**Automotive Technology** – The NATEF (National Automotive Technicians Education Foundation) ensures the **Automotive Technology** program within A. W. Beattie Career Center meets strict standards, providing students with hands-on experience using up-to-date diagnostic equipment in our state-of-the-art auto shop. **Automotive Technology** is an AYES (Automotive Youth Education Systems) training facility. AYES provides students authentic experiences during their senior year, with on-site experiences in local area dealerships, allowing for those important career connections. NATEF and AYES certifications assure students the best training and preparation to complete their ASE (Automotive Service Excellence) certification in less time, upon graduation. Students will have the opportunity to earn their PA Safety and Emissions Inspection credentials prior to graduation.

**Carpentry/Building Construction** – Students in this PBA (Pennsylvania Builders Association) endorsed program will receive classroom and hands-on training in carpentry, masonry, plumbing, residential wiring, and building a home for sale. Students also have the opportunity to join SkillsUSA where they can be involved in activities and competitions, as well as community projects that challenge the student during the year, preparing them for immediate employment. Students also have the opportunity to experience live work by taking part in the on-going project of building a modular home. Additionally, students will gain experience in the operations of forklifts, scissor lifts and industrial rigging systems.

**Cosmetology** – The A.W. Beattie Training Salon provides qualified **Cosmetology** students with the opportunity to use their energy, skills, and imagination on clients from the community in a state-of-the-art cosmetology salon. Students will study care of hair, nails, and skin. They will learn the proper use of cosmetology tools and equipment, as well as techniques in hair cutting, styling, coloring, permanent waving, relaxing, manicuring, pedicuring and skin care. Students will also focus on professionalism and customer relations and test for their Pennsylvania State Cosmetologist License when they have completed 1,250 hours of training.

**Culinary Arts** – The **Culinary Arts** program has built a reputation as one of the finest throughout the state. The A.W. Beattie Restaurant, given a three-star rating by the Post-Gazette, is student-run and serves breakfast and lunch to more than 180 people a day! The Bake Shop sells cookies, brownies, pies, cakes, and various pastries. Students learn all aspects of the restaurant business from meal planning, food preparation, baking and carving, to dining room management and banquet serving. There are many employment opportunities within the always-growing culinary industry. In this program, students practice their craft in a state of the art commercially equipped kitchen and bakery.

**Dental Careers** – **Dental Careers** provides students with the necessary skills for employment in Dental Assisting, Lab Technician, Infection Control Assistant, and many more opportunities within the dental industry that extend into a jumpstart for post-secondary education. Seniors participate in hands-on work experiences in dental offices, learning and assisting in four-handed dentistry, chair-side assisting, administrative skills and other techniques. Students will prepare to test for their PA Dental Radiology Certification. Students learn the latest techniques including digital x-ray.

**Early Childhood Education** – Qualified Students in **Early Childhood Education** (ECE) experience the opportunity to apply their child development and teaching skills daily, working with children in the on-site Kiddie Tech Child Care Center. In addition to a variety of classroom activities, students learn hands-on with infants, toddlers, and preschool age children. Students present a series of learning and developmental activities in the childcare facility, practicing and refining their creative teaching skills, as well as learning the basics in caring for and managing children. In partnership with Junior Achievement, students have the opportunity to teach in classrooms in local school districts. Additionally, through a pre-apprenticeship agreement with Carlow University, ECE students have the opportunity to earn transferable college credits.

**Emergency Response Technology** – **Emergency Response Technology** challenges students with exciting hands-on training in a fully equipped on-site lab, as well as field trips to local Police and Fire Academies throughout the school year. Students study several technical fields including police science, fire science, rescue operations, hazardous materials, and emergency medical services. Training for the Emergency Medical Responder and Emergency Medical Technician Certifications at A.W. Beattie Career Center will prepare students for immediate employment in the growing Emergency Response industry.

**Health and Nursing Sciences** – Today’s medical field is rapidly growing. Now, more than ever, health care professionals are in high demand and are essential employees. These professions include Patient Care Technicians, Nursing Assistants, Medical Assistants, EKG Technicians, Phlebotomy Technicians, Registered Nurses, Nurse Practitioners, Physician Assistants, etc. The **Health and Nursing Sciences** core curriculum will prepare students for future success in the health care industry. Students will have the opportunity to obtain many health care certifications. These include, but are not limited to, First Aid, CPR, Stop the Bleed, and Patient Care Technician. During the program, students will learn and develop essential hands-on clinical skills that are imperative for said health care professions. Students will also have the opportunity to engage in clinicals in a nursing home, hospital, and/or doctor’s office setting. This will allow students to experience health care professionals in action and help students identify which career they want to pursue in health care.

**Heating, Ventilating, and Air-Conditioning** – Prepares students with the necessary skills to become qualified technicians and mechanics in the HVAC field. Students learn heating installation and service, air-conditioning. Installation and service, plumbing, electrical wiring, refrigeration, and sheet metal fabrication. Qualified students have the opportunity to participate in Cooperative Education experiences outside of the classroom. They will test for their EPA Certification at A.W. Beattie Career Center, helping them to ensure immediate employment opportunities. Additionally, students will gain experience in the operations of forklifts, scissor lifts, and industrial rigging systems.

**Network Engineering & Cyber Security**– A.W Beattie Career Center offers a challenging networking cyber security program for high school students that teaches the fundamentals of how computers communicate with each other and how to protect them from malicious attacks. The program covers topics such as network architectures, protocols, devices, security principles, encryption, firewalls, malware, and ethical hacking. The program also provides hands-on experiences with various tools and software that are used in the field of cyber security and computer networking. The program aims to prepare students for careers or further education in computer networking and cyber security. The program also prepares students for industry certifications such as **CompTIA A+, Network+, and Security+**. The program also allows students to earn **college credits** through **articulation agreements**.

**Pharmacy Operations** – The **Pharmacy Operations** program will provide 11<sup>th</sup> and 12<sup>th</sup> grade students the opportunity to jumpstart their post-secondary training and work towards a career with increased employment opportunities over the next ten years. Students will learn compounding formulas and ratios, laws and regulations, participate in module lab work, practice sterilization skills, and demonstrate proficiency as required by industry standards. Student instruction includes the PassAssured interactive pharmacy training and test preparation for the Pharmacy Technician Certification exam. Students will participate in mock simulations and gain hands-on experience within the community. The program is limited to 11<sup>th</sup> and 12<sup>th</sup> grade students.

**Pastry Arts** – The **Pastry Arts** course provides students with an opportunity to learn all functions of a commercial bakery while perfecting their creative pastry skills. Students keep the bakery cases, located in the Beattie Dining Room stocked full of cakes, cookies, pies, brownies, breakfast pastries, and a variety of specialty breads and rolls. Students receive quality training in our fully equipped Pastry Arts lab learning everything from baked goods preparation to merchandising, and dining room service. There are classroom demonstrations from industry professionals throughout the school year, as well as field trips to local bakeries and restaurants. Students will prepare special orders for holidays, weddings, and special events throughout the year. Students have the opportunity to earn their SERV Safe Food Safety Certification.

**Robotics Engineering Technology (RET)** – Students interested in the most recent, innovative technology have an opportunity for training in **Robotics Engineering Technology**. Through a partnership with the Advanced Manufacturing Industry, California University of Pennsylvania, and support from Carnegie Mellon University, students move through in-depth activities into advanced design and control challenges using curriculum developed through the National Robotics Engineering Center. Due to the broad application of Robotics, numerous employment opportunities exist in the Pittsburgh area and nationally. Students also develop skills related to Advanced Manufacturing with CNC, FANUC Robotic Arm, and 3-D modeling. The RET program at AWBCC is endorsed by the Advanced Robotics Manufacturing Institute (ARM) which provides additional industry supports and resources that go beyond the classroom. Only programs that meet the highest standards set by the robotics industry in the categories of relevance to the industry, effective curriculum, efficiency of training, impact of the program, program sustainability and transportability can earn the ARM endorsement.

**Sports Medicine – Rehab Therapy and Exercise Science Technology (SMART-EST)** – The **SMART-EST** Program is designed for students that are looking towards the fields of: physical therapy, occupational therapy, physical rehabilitation, exercise physiology, and sports medicine. Students will develop valuable skills in diagnosis, differential diagnosis, assessment, and prevention, along with prognosis and the rehabilitation of bodily injuries and related health conditions. Students will learn the therapy and application principles of a patient care plan including: assessment, evaluation, interventions of exercise, manual therapy, modalities, and neuro re-education. Students will also develop goal setting and discharge plans for patients. Students will participate in nutrition understanding, as they learn how to develop proper diet plans for healthy individuals, and they will learn how to tailor diet plans for special populations. Students participating in the **SMART-EST** Program could be a Personal Trainer/Coach and Physical Therapy Aid out of high school. The program provides a core base that a student may build a post-secondary degree or advanced certification upon.

**Surgical Sciences** – The **Surgical Sciences** program is designed for students that are looking towards a career in surgery such as: Sterile Processing, Surgical Technology, Surgical Physician's Assistant, Surgical Anesthesia, Surgical Perfusionist, Surgical Sales Representative, Operating Room Nurse, or Surgeon. Students will develop valuable skills in sterile processing, surgical set up and instrumentation, surgical procedures, anatomy, and physiology, and more. Students will learn the full surgical patient path, starting from diagnosis to recovery. They will learn how to set up and sterilize surgical instrumentation, as well as set up, and management of a surgical sterile field. Students will learn surgical assisting, as well as the roles of the additional staff in an operating room. Students will learn to critically think, as well as manage themselves and others in tense or crisis medical situations. They will work on professionalism, interview skills, and be encouraged to explore

career paths that interest them. The program provides a core base advantage that a student may build a post-secondary degree, as well as equip them to enter the workforce in Sterile Processing Departments with a significant edge over other applicants.

**Veterinary Sciences Technology** – Students enrolled in A.W. Beattie’s National Association of Veterinary Technicians in America (NAVTA) approved **Veterinary Science** program will experience a wide variety of care and management techniques throughout the program. They will gain a solid foundation in the **Veterinary Sciences** program on which to build a post-secondary degree and entry level employment skills. Students will learn to maintain medical records, schedules, offer client education, explore authentic laboratory procedures, and assist with nursing and preparation for surgical duties; along with routine exams. They will learn how to execute basic animal examinations with dogs, cats and smaller animals brought in by instructors and staff. See your school counselor to sign up for a tour and apply for the program.

**Certifications:** Through strategic planning and partnerships with local employers, A.W. Beattie Career Center offers a variety of nationally recognized validated industry skills certifications. Senior students will participate in the annual National Occupational Competency Testing Institute exams (NOCTI).

Training related externships are required for all students wishing to earn a Performance Certificate with honors during their enrollment at A. W. Beattie Career Center. These related externship experiences can be paid or unpaid and fall into one of the following categories: Cooperative Education, Job Shadowing, Clinical Experiences or Internships, and Volunteer opportunities.

Student Success Center services are open to all students. The Center is designed to facilitate the needs of students to help them reach their full potential. Facilitators provide support services through tutoring, study guides, test assistance, and curriculum modification. Facilitators and Instructional Assistants offer support in the classrooms and labs.

**Accreditation:** A.W. Beattie Career Center meets all requirements as established by the PA Department of Education under the guidelines of Chapter 339. The A.W. Beattie Career Center is the first recognized United States Department of Education Green Ribbon School Award Recipient Career Center in Pennsylvania.

***Contact – A.W. Beattie Career Center for more information.***

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A.W. Beattie Career Center does not discriminate on the basis of race, color, age, creed, religion, sex, sexual orientation, ancestry, national origin, handicap/disability, gender identity or expression, or genetic information in its programs or activities.