

# *Chartiers-Houston School District*



Chartiers-Houston Junior-Senior High School  
2050 West Pike Street  
Houston, Pennsylvania 15342

## ***COURSE SELECTION BOOKLET***

### **2023 - 2024**

Principal:

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Chartiers-Houston Junior-Senior High School  
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## **COURSE SELECTION BOOKLET**

### **INTRODUCTION**

This booklet is designed for the use of students who will be enrolled in grades 9, 10, 11, 12 at Chartiers-Houston Junior-Senior High School during the 2023-2024 School year.

It is necessary that course selections for the next school year be completed as soon as possible. This will enable school personnel to evaluate material needs, class size, number of classes, etc.

In selecting courses for next year, you should consider the following: (1) the graduation requirements of Chartiers-Houston High School, (2) the courses that will meet future vocational and/or educational needs, and (3) your ability and aptitude to meet the class requirements. In order to achieve this agenda, you, the student, must plan and understand yourself, your capabilities, interests and limitations.

#### **\*Course Selection will be completed online and during school hours.**

You should plan ahead and discuss your course selections with parents/guardians, counselors, teachers or principals. If you wish to talk with the guidance counselor, you can make an appointment before going to first period in the morning. Parents or guardians wishing to discuss your selection(s) can call 724-745-3350 to schedule an appointment with a principal or guidance counselor. Students are reminded that it is their responsibility to ensure that all graduation requirements are met.

### **COURSE REQUIREMENTS**

As you select your courses, attention should be given to **course requirements, prerequisites,** and **course sequence.** You should realistically assess your capabilities, ambitions, and past achievements. If you have any doubts and/or questions concerning a course or your chances of success in it, you are certainly encouraged to discuss it with the appropriate teacher, counselor, or principal.

**IMPORTANT NOTICE TO STUDENTS AND PARENTS: BE ABSOLUTELY CERTAIN OF YOUR SELECTIONS. THERE WILL BE NO STUDENT OR PARENT INITIATED SCHEDULE CHANGES AFTER THE FIRST TEN DAYS OF SCHOOL. DROPPING A COURSE AFTER THE 10 DAY PERIOD WILL RESULT IN A WITHDRAW FAIL (WD/F) ON YOUR TRANSCRIPT**

## REQUIREMENTS

ALL STUDENTS ARE REQUIRED TO SCHEDULE A MINIMUM OF SIX FULL CREDIT COURSES EACH YEAR, PLUS WELLNESS (Grades 9-12).

### GRADUATION REQUIREMENTS

<u>Credits</u>	
English	4
Social Studies	4
Mathematics	4
Sciences	3
Arts or Humanities	2
Wellness	2
Electives	5
Graduation Project	1
	-----
Total	25

### **ACT 158 GRADUATION REQUIREMENTS**

#### **AN OVERVIEW OF THE 5 PATHWAYS TO GRADUATION**

Act 158 of 2018 provides an outline of five distinct pathways to meet graduation requirements starting with the graduating class of 2023

#### **Pathway 1 – Keystone Proficiency Pathway**

- Student will earn proficient or advanced on all three keystone exams (Algebra I, Literature, and Biology)

#### **Pathway 2 – Keystone Composite Pathway**

- Student will earn proficient or advanced on at least one keystone exam, **and** score at least basic on the other two keystone exams, **and** have a composite score of at least 4452.

#### **Pathway 3 – Career & Technical Education Pathway**

- Student will meet local requirements for academic content covered by the keystone exams for all subjects where they did not earn proficiency on the keystone.

#### **AND**

- *Either* - Attain an industry-based competency certification related to the CTE Concentrator's program of study.

#### **OR**

- Demonstrate a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study.

#### **Pathway 4 – Alternate Assessment Pathway**

- Student will meet local requirements for academic content covered by the keystone exams for all subjects where they did not earn proficiency on the keystone.

**AND -One of the Following**

- Attain an established score on an approved alternate assessment for each subject where the student did not earn proficiency. Approved alternate assessments are:
- AP (3), PSAT (970) , SAT (1010), ACT (21)
- ACT WorkKeys : Gold Level
  - ASVAB – minimum score required to gain admittance to a branch of the armed services in the year the student graduates

**OR**

- Successfully complete a concurrent enrollment course in an academic content area associated with each Keystone Exam in which the student did not achieve at least proficiency
- Credit-bearing non-remedial approved concurrent course
- Aligned to the respective keystone exams
- Passing grade on the approved concurrent course, high school or college transcript as evidence

**OR**

- N/A Successfully complete a pre-apprenticeship program

**OR**

- Be accepted in an accredited 4-year nonprofit institution of higher education and have evidence of the ability to enroll in college-level coursework
- Acceptance letter from an accredited 4-year nonprofit institution
- Placement test results indicating the student may enroll in college-level coursework
- College registration form confirming enrollment

Local profile of an acceptable high school GPA, attendance record, and SAT/ACT sc

**GRADE LEVEL PROMOTION**

Grades 7 and 8: Admission to grade 9 is based on the satisfactory completion of 3 of the 4 academic subjects (English, Math, Science, Social Studies.)

The policy guidelines for grades 9, 10, 11, 12 are as follows:

Grade 9: Satisfactory completion of at least 5 total credits  
 Grade 10: Satisfactory completion of at least 12 total credits  
 Grade 11: Satisfactory completion of at least 18 total credits

**GRADING SCALE**

A = 100 – 90  
 B = 89 – 80  
 C = 79 – 70  
 D = 69 – 60  
 F = 59 - 0

**COURSE WEIGHTING**

AP, College in H.S. & Advanced Courses will be awarded additional quality points as follows:  
 AP courses awarded 1.0  
 College in H.S. courses awarded .5  
 Advanced courses awarded .25

**\*AP COURSE EXPECTATIONS- ALL ENROLLED STUDENTS WILL BE EXPECTED TO TAKE THE AP EXAM. ANY STUDENTS NOT TAKING THE AP EXAM WILL NOT RECEIVE THE ADDITIONAL QUALITY POINT.**

**A student interested in scheduling AP courses should meet the following criteria:**

- Be a conscientious, diligent worker
- Demonstrate a high degree of interest in the subject area

Attain the required teachers' recommendations and fulfill course Prerequisite  
Have the encouragement of his or her parents/guardians  
Demonstrate a commitment in taking the Advanced Placement examination in the spring

### **GRADUATION PROJECT**

All students are required to complete the following for their Graduation Project. This project will count as 1.0 credit toward graduation.

REQUIREMENTS:    Grade 9 -        Smart Futures Activities # 1-5  
                          Grade 10-        Smart Futures Activities # 6-10  
                          Grade 11 -        All Smart Futures Activities must be completed by the end of 11<sup>th</sup> grade

### **SCHEDULE CORRECTIONS AND CHANGES**

Ordinarily, we expect student's to retain the program they have selected with the advice and consent of their parents. There are however, circumstances that arise which necessitate a change in an elected course. When **valid reasons** are presented and the parent agrees, adjustments may be made within the **first ten school days**.

#### **VALID REASONS FOR A SCHEDULE CORRECTION:**

1.        Scheduling Error
2.        Summer school work completed
3.        Insufficient credit for graduation
4.        Placed in the wrong level of a course
5.        Administrative Discretion

### **PROCEDURES**

**During the first ten days of school**, the counselor will make corrections in schedule errors without additional approval. These changes will be made through the **\*Schedule Change Form**.

**After the first ten days**, all requests for schedule changes must be done in the following manner:

1.        Students must obtain and complete a **\*Schedule Change Form** from the counselor.
2.        All teachers involved with the drop or change must sign the form.
3.        Parent/Guardian and Student must sign the form acknowledging that the student will now receive a WD/F.
4.        The signed form must be returned to the counselor.
5.        A WD/F will be issued to the student on his or her transcript.
6.        The WD/F may be made up at a later date resulting in the replacement of a new grade.

\*The Schedule Change Form may be picked up in the Guidance Office or the High School Main Office.

### **SUMMER SCHOOL**

It is the responsibility of the student to inform the High School Office personnel when an approved summer school class (or classes) has been completed to ensure proper class assignments. Transcripts will remain incorrect if High School office personnel are not informed and if evidence of the completion (i.e., transcripts) are not received by the counseling department.

### **TRANSFER COURSES**

If a student transfers from one section of a course to another, grades at the time of the change will be forwarded to the new teacher and included as part of the total year's grade.

## WESTERN AREA CAREER AND TECHNOLOGY CENTER

The Western Area Career and Technology is intended for those 10th, 11th, and 12th grade students who have the interest and the ability to profit from courses in career/technical education. This training prepares students for entry employment in various business and industries post secondary.

Students enrolled in this program are required to take English, Social Studies, Science, Math, Arts or Humanities & Wellness at Chartiers-Houston High School, during the first half of the school day.

**STUDENTS QUALIFIED TO ATTEND WACTC ARE COMMITTED TO REMAIN THE ENTIRE SCHOOL YEAR.**

All programs at WACTC are competency-based programs designed to prepare students for successful entry-level employment.

### COURSES OF STUDY OFFERED AT THE WESTERN AREA CAREER AND TECHNOLOGY CENTER:

\*students who fail to maintain academic requirements may be subject to Summer School or removed from WACTC.

<u>Course Level</u>	<u>Grade Level</u>	<u>Program Years</u>	<u>Credits Issued</u>
Heating & Air Conditioning	10-11-12	3	4.0
Collision Repair Technology	10-11-12	3	4.0
Auto Mechanics	10-11-12	3	4.0
Carpentry	10-11-12	3	4.0
Cosmetology	10-11-12	3	4.0
Networking	10-11-12	3	4.0
Electrical Occupation	10-11-12	3	4.0
Health Assistant	10-11-12	3	4.0
Machine Shop	10-11-12	3	4.0
Welding	10-11-12	3	4.0
Culinary Arts	10-11-12	3	4.0
Masonry	10-11-12	3	4.0
Emergency Protective Services	10-11-12	3	4.0
Automation and Robotics Engineering Technology	10-11-12	3	4.0

## ENGLISH

Language Arts offerings are designed to enhance development in all areas of communication including reading, writing, speaking, and listening. Course content will focus on using proper conventions of grammar and usage, analyzing and interpreting selections in a variety of genres, developing research skills, and applying career-enhancing reading and writing skills.

<u>COURSE NAME</u>	<u>GRADE</u>	<u>CREDITS</u>
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<u>ENGLISH 9</u>	9	1
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Students study and practice the basic concepts of composition, concentrating on sentence structure, grammatical construction, paragraph building, and multi-paragraph essays, as well as the creation of compare/contrast, informative, narrative, and persuasive essays. Students focus on the essential components of a Modern Language Association (MLA) research paper. Students study genres of literature such as short stories, poetry, drama, nonfiction, and novels for their structure and analyzed for use of figurative language, style, tone, and author's point of view, etc. Students study vocabulary within the context of the literature emphasizing correct usage. Also, students must present a prepared speech to the class. Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors

<u>ENGLISH 10</u>	10	1
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Students focus on the analysis of structure, literary techniques, and author's point of view through a variety of genres including, novels, short stories, poetry, drama, and non-fiction. The texts will be analyzed to examine deeper meaning; both literally and figuratively. Students will be expected to be actively engaged with the text to go beyond the written words but to make connections to literature, history, and world events. Preparation for the PA Keystone Literature Exam, in which all areas of the exam will be addressed throughout the study of each academic unit. Students will craft well-written essays that include specific details as well as support from the text as well as their own perspective. Technical research writing will be focused on as well, paying particular attention to posing an argument, researching for credible information, and including Modern Language Association (MLA) formatting. Students will continue their study of vocabulary, both within the text and independently. There will be a public speaking requirement through speeches, debates, and/or presentations. Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors.

<u>ENGLISH 11</u>	11	1
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Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors and to help make them more astute students of fiction and nonfiction literature. American literature is central; however, Shakespeare can be included. This is not strictly a literature course as there will be a strong focus on refining writing skills and building strong research foundations. Course work emphasizes higher-level thinking skills, including analysis, synthesis, evaluation, and creativity. Units can include: tests, projects, historical and socio-cultural context, active and silent reading, the craft of writing, vocabulary study, spoken and written response to literature, research, and specific literary terminology.

<u>ENGLISH 12</u>	12	1
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Students prepare for post-secondary education and career preparation through World literature fiction and nonfiction works. A strong emphasis will be on career readiness through historical and cultural influences. Oral and written communications will be addressed through presentations, writing portfolios and mock interviews. Students will also study research methods and create a formal research paper. Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors



## **ADVANCED ENGLISH**

Advanced English 9-12 is an accelerated English program that will provide the opportunity for highly motivated students to explore and study the world's great literature. Each course is designed to challenge the students to become both critical thinkers and communicators through an analysis of a variety of genre.

### **\*ADVANCED ENGLISH 9**

9

1

Additional .25 quality points

Students study and practice the basic concepts of composition, concentrating on sentence structure, grammatical construction, paragraph building, and multi-paragraph essays, as well as the creation of compare/contrast, informative, narrative, and persuasive essays. Students focus on the essential components of a Modern Language Association (MLA) research paper. Students study genres of literature, such as short stories, poetry, drama, nonfiction, and novels for their structure and analyzed for use of figurative language, style, tone, point of view, etc. Students study vocabulary within the context of the literature emphasizing correct usage. Also, students must present a prepared speech to the class. Students have additional rigorous and independent reading/writing assignments. Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors. **Students enrolling in this course will receive a summer reading assignment and a brief, response-based writing assignment for a selected reading.**

Prerequisite: Test Scores / Teacher recommendation

### **\*ADVANCED ENGLISH 10**

10

1

Additional .25 quality points

Students will analyze a variety of genres including novels, short stories, poetry, drama, and non-fiction to focus on analysis of structure, literary techniques, and author's point of view. The texts will be analyzed to examine deeper meaning; both literally and figuratively through annotation. Students will have independent reading assignments throughout the year. Preparation for the PA Keystone literature Exam, in which all areas of the exam will be addressed throughout the study of each academic unit. The students will use their study of literature as a vehicle for their compositions, while connecting universal themes to modern day examples. Technical research writing will be focused on as well, paying particular attention to posing an argument, researching for credible information, and including Modern Language Association (MLA) formatting. Students will continue their study of vocabulary both within the text and independently. There will be public speaking requirements through speeches, debates, and/or presentations. Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors. **Students enrolling in this course will receive a summer reading assignment and a brief, response-based writing assignment for a selected reading.**

Prerequisite: Test scores / Teacher recommendation

### **\*ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION**

11, 12

1

Additional 1 quality point

The AP® English Language and Composition course is designed to focus on a rhetorical analysis of nonfiction prose and the development and revision of well-reasoned, evidence-centered analytic and argumentative writing. The study of prose in AP Language will facilitate informed citizenship and increase student capacity to enter into intellectual conversations, verbally and written, about meaningful issues. Students will learn skills to effectively analyze text organization, syntax, rhetorical devices, and argumentative strategies. Because our students live in a highly visual world, we also study the rhetoric of visual media such as photographs, advertisements, comic strips, graphs, and

infographics. Summer reading and writing may be given for this course. Materials will be distributed to students near the end of the current school year.

Prerequisite: Department recommendation  
"B" average in their previous English course

**\*ADVANCED ENGLISH 12** 12 1  
Additional .25 quality points

Students prepare for post-secondary education through the study of fiction and nonfiction works of World literature. Students integrate historical and cultural influences, while learning to apply critical lenses, preparing them for the rigors of collegiate study. Students will write critical analyses of works and write creatively. Students will also study research methods and create a formal research paper. Microsoft 365 will be integrated in class to allow students to incorporate 21<sup>st</sup> Century learning for all post-secondary endeavors. Summer reading and writing is required for this course, and materials will be distributed to students near the end of the current school year.

Prerequisite: Test scores / Teacher recommendation

**\*ADVANCED PLACEMENT  
ENGLISH LITERATURE & COMPOSITION** 11, 12 1  
Additional 1 quality point

The AP ® (Advanced Placement) English Literature and Composition is designed to provide students with the rigor of a typical undergraduate English Literature course. This course will survey British and American texts from the 16th century to the present and will be organized by theme to ensure opportunities for comparison and analysis between poems, novels, essays, and short stories. The goal of the course is to enhance a student's close reading skills, provide opportunity for discussion practice, and develop their analytical and critical writing skills. Students will learn how to identify themes of literature independently and how to articulate the evidence necessary to argue their reading of the text. This course serves as a solid foundation for any student who plans on pursuing a degree in humanities, art, and/or culture. Summer reading and writing may be given for this course and materials will be distributed to students near the end of the current school year.

Prerequisite: Department recommendation  
"B" average in their previous English course

## **ENGLISH ELECTIVES**

**JOURNALISM I** 9-12 .5

Journalism is a semester course to study of mass media and its role in a democratic society. Students will write news stories, editorials, features, sports stories, columns, and other features within a newspaper. They will be taught the responsibilities and ethics necessary for excellence in the media and are responsible for producing the school newspaper. A focus on the continuing development of composition skills is a major component of this course. The first part of the class will focus on the history of the press, the 1st Amendment, and print journalism (reporting, photography and editing stories for newspapers). Only students committed to the creation of quality printed material should elect to take this course.

**\*This course does not fulfill an English requirement**

## **JOURNALISM II**

9-12

.5

In Journalism II, students who have successfully completed Journalism I may continue to write news, feature, and other stories with a special focus on the Chartiers-Houston school district creating a school newspaper, district newsletter, and working on creating and editing yearbook content. Students will have real world experience helping to manage the district's social media accounts, as well as working on delivering the school's daily announcements. Journalism II will focus on Broadcast and Multimedia/ Digital journalism.

**\*This course does not fulfill an English requirement**

## **MEDIA LITERACY**

9-12

.5

Media Literacy is a semester course designed for students interested in mass media as defined as television, movies, newspapers, magazines, music, the Internet, etc. In order to become media literate, one must gain the ability to question, understand, interpret, analyze, and evaluate the content, intent, strategies, and effects of the mass media on our daily lives. Being media literate means that you can control the interpretation of the media, instead of it controlling you. Students will become aware of principles, myths, and techniques in media by utilizing guided examples of current example of media from Super Bowl commercials to documentaries and the news, from video games to sports sponsorships. As Journalism I & II focus on the history and the professions in mass media, media literacy will focus on mass media as the consumer.

**\*This course does not fulfill an English requirement**

## **CONTEMPORARY/YA FICTION**

9-10

.5

This course will explore contemporary fiction and modern-day issues that the novels encompass. In addition, the novels we will read all connect through the concept of prisons, whether they are self-created or by others. We will not only explore the numerous forms these “prisons” can take, but also delve into how people come to understand these restrictions/boundaries and the impact of this realization, or in many cases, this obliviousness.

**\*This course does not fulfill an English requirement**

## **FANTASY FICTION**

9-10

.5

This course will posit that speculative fiction represents one of the only still viable generic forms that deals with the present in an allegorical form. Starting from this premise, we will address a number of issues in contemporary culture through the fictions we will be reading and viewing on screen, specifically postmodernism, the Holocaust, and the late capitalism. I will suggest, in other words, that speculative fiction gives us a special access to the ways we make sense of the world in our everyday lives. By pushing to the limits such issues as subjectivity, temporal sequentially, and representation, speculative fiction can uncover the ways ideology, narrative, and epistemology function on a day-to-day basis. In short, as we progress through this semester we will be taking “science fiction” seriously and will consequently be dealing with a number of “serious” issues that concern us in our contemporary culture.

**\*This course does not fulfill an English requirement**

## **HORROR FICTION**

11-12

.5

Do you like scary stories? Do you enjoy being creeped out by nefarious characters and eerie settings? If so, you are in the right place...welcome to Horror Fiction! In this class we will explore the genre of Supernatural Horror, reading and watching many examples of the gothic, the macabre, and the downright frightening. We will begin with a brief

overview of the history of horror fiction before moving on to a wide selection of short stories, poems, novellas, and films that reflect the last 200 years of the genre in Western culture. We will end the semester with a creative project that will allow you to take a stab (pun intended) at creating your own horror fiction! Our guiding questions this semester will be: Why do we enjoy being scared? What scares us? What do scary stories have to teach us?

**\*This course does not fulfill an English requirement**

### **TRUE CRIME LITERATURE**

11-12

.5

This course will study the history of true crime narratives (including podcasts and documentaries) in America, from the Colonial Period to the present. Included readings such as nonfiction selections such as Michelle McNamara's, *I'll Be Gone in the Dark* and the podcast *Serial*, will be included in this course. Successful true crime texts draw the reader in with the ability to situate a crime within various social and historical context and by examining crime through lenses of race, socioeconomics, religion, gender, and more. True crime is forever interested in the effects of crime on all of us, and the specific effects of crime on particular places and groups.

This course will analyze popular contemporary true crime texts and documentaries, which – yes, will include murder and violent crimes, as well as white collar crimes. Our texts and listening suggestions will provide opportunities to consider the perspective from which true crime is told; from those involved in a crime, those that report the crime, those that investigate the crime, those that join the investigation, and those that seek justice.

**\*This course does not fulfill an English requirement**

### **FILM ANALYSIS**

9-12

.5

This course is designed to introduce the student to the elements of cinematic art through analysis of critically acclaimed films. Students will learn to view film as a literary work with respect to authorship, setting, character, plot, theme, symbolism and cultural significance. Students will participate in listening and speaking activities including class discussions, informal responses, formal presentations and projects. Students will also learn the basics of film analysis such as cinematic editing and camera angles. More than just a class for movie watching, this course is designed for those who want to learn about analyzing film.

**\*This course does not fulfill an English requirement**

### **CREATIVE WRITING**

9-12

.5

This course is designed for students who enjoy writing as a form of art and personal expression. In this course, students will explore the elements of numerous literary genres (short fiction, poetry, drama, and film) and the power of both print and multimedia formats. Students will create original forms of descriptive writing, poetry, drama and fiction. Vocabulary development, creative writing techniques and skills are explored. Students will be encouraged to publish written work through a variety of online sources. Students would contribute original articles to the school newspaper.

**\*This course does not fulfill an English requirement**

### **MYTHOLOGY**

9-12

.5

This course will examine several questions: What are the origins and functions of mythology? What mythologies exist in different cultures and how do they differ from one culture to the next? What does a culture's mythology indicate about its people? What is the difference between "myth," "legend," and "folktale"? What mythological allusions can be found in our daily lives? To answer these questions, course materials will include mythology and folklore from a variety of cultures, including (but not limited to) Greek, Roman, Native American, Egyptian, Norse, Asian, African myths as well as modern cultural legends in the making. Major archetypes, or recurring patterns in mythology, are studied and applied to contemporary literature and the arts. Vocabulary connections between the English language and mythology will also be examined. You will be evaluated through written essays, class

discussion and participation, responses to reading and film clips, as well as completion of independent/group projects. This class is designed to challenge you, to provide you with philosophical insights, and to make you think about diverse cultures and their stories.

**\*This course does not fulfill an English requirement**

**PUBLIC SPEAKING**

9-12

.5

This course is an introduction to speech communication, which emphasizes the practical skill of public speaking, including techniques to lessen speaker anxiety, and the use of visual aids to enhance speaker presentations. Public speaking is an essential part of the workforce today and everyday life. This course’s goal is to prepare students for success in typical public speaking situations and to provide them with the basic principles of organization and research needed for effective speeches. The students will practice and be evaluated on the following public speaking criteria: Volume, Inflection, Poise/Posture, Eye Contact, and Rate (V.I.P.E.R). The following speeches/speaking situations include (but are not limited to): Introduction Speech- “Show and Tell”; Demonstrative Speech; Persuasive Speech; Impromptu Speech; Podcast/Newscast Creation; Mock Interview (online); Dramatic Reading Speech; Partner/Group Speech; Ceremonial Speech; Special Occasion Speech; Debate.

**\*This course does not fulfill an English requirement**

**SAT / ACT PREP ENGLISH**

10, 11

.5

The SAT/ACT Prep course concentrates on SAT/ACT reading, vocabulary and writing skills. The course includes practice in taking the SAT test, as well as strategies for the question types (sentence completion, vocabulary, critical reading, and writing – finding errors / revision). The course will focus on the new SAT test, using a variety of sources as well as to focus on classroom reading, vocabulary, grammar lessons and practice tests.

**\*This course does not fulfill an English requirement**

**SOCIAL STUDIES COURSE SEQUENCE**

**9<sup>th</sup> Grade**

Core:

American Cultures I

Electives:

American Gov/Civics

Emerging Worlds

**10<sup>th</sup> Grade**

Core:

American Cultures II

Electives:

American Cultures III

Law

Economics

American Gov/Civics

Emerging Worlds

**11<sup>th</sup> Grade**

Core:

World Cultures

Electives:

American Cultures III

Law

Economics

Psychology

American Gov/Civics

World War II

Emerging Worlds

A.P. Gov’t/Politics (2023-24)

**12<sup>th</sup> Grade**

Core:

American Cultures III

Electives:

American Cultures III

Law

Economics

Psychology

American Gov/Civics

World War II

Emerging Worlds

A.P. Gov’t/Politics (2023-24)

## SOCIAL STUDIES

<u>COURSE NAME</u>	<u>GRADE</u>	<u>CREDITS</u>
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<u>AMERICAN CULTURES I</u>	9	1
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American Cultures I explores the beginning of society in the United States, starting with the European exploration of the New World. The course investigates the establishment and development of the English colonies in North America and the three-way struggle for control of North America by the French, English and Indians. The student will discuss and evaluate the economic, social and political motivations for the Revolution leading to independence. They will examine the country's expansion and analyze the causes of the civil war. The students will develop an understanding of the philosophy and structure of American government.

<u>AMERICAN CULTURES II</u>	10	1
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American Cultures II is a continuation of the freshman course. The course begins after the Civil War and continues through the twentieth century. Emphasis is placed on political, social & economic developments and intellectual, moral, and military ideas are presented.

Prerequisite: American Cultures I

<u>AMERICAN CULTURES III</u>	11, 12	.5
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American Cultures III is an advanced history class designed to offer unique material never previously offered or only briefly mentioned in other social studies classes. The time period discussed will center primarily on the 1960's to the present time. We will look closely at Vietnam's impact in the United States. We will study and analyze the social, political, and military events of the Cold War, the Nixon years, the Gerald Ford-Jimmy Carter administrations, the Reagan Revolution, the Bush-Clinton-Bush administrations, and the history of terrorism.

Prerequisite: American Cultures I & II

<u>LAW</u>	10-12	.5
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The course focuses on modern United States law, by way of its history and evolution. The content of the Law course includes: the goals of law; ethics of law; history of the United States legal system; individual rights and liberties; criminal law; civil law/ torts; juvenile law; consumer, business, and housing law; family law; and judicial procedure.

Highlighting this course is a mock trial and guest speaker(s). Assignments, individual and group projects, Internet activities, Assessments and class participation characterize the rigor of the Law course.

<u>WORLD CULTURES</u>	11	1
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World Cultures will introduce students to a background of the world's cultures and briefly examines the early culture and history of the peoples inhabiting the five major continents. The student will discuss and evaluate the political, economic, and cultural developments of these societies to the present. Students will participate through class discussions, oral and written reports, group competitions, interpretive drawings, and analytical compositions.

Prerequisite: American Cultures II

**ECONOMICS**

10-12

.5

Students will engage in the study and application of economics principles using textbooks, workbooks, newspapers and multimedia. In an effort to provide the most current educational resources, materials have been collected from such sources as the Wall Street Journal Classroom Edition and Economics Pennsylvania. Students can be expected to explore career options, engage in personal finance management and conduct brief presentations of current economic issues.

**PSYCHOLOGY**

11, 12

.5

Social Science Research is designed to introduce academically oriented students to research techniques. Students are taught interviewing methods, library research, phrasing techniques, and the basic components of a research paper. Students will produce a major research paper that will be counted as part of their 9 weeks grade and as the mid-term.

Psychology is an in-depth study of the various aspects of human development and the causes of human behavior. Emphasis is on the student's relationships with his peers, parents, and future family. Students will participate in discussions, experiments, activities, and evaluations to demonstrate their knowledge of the subject.

**AMERICAN GOVERNMENT / CIVICS**

9-12

.5

American Government / Civics is a course designed to educate students about the U.S. Government. Students will study topics that include: The Application of the Constitution to the current day, court cases that have shaped the government, political ideologies, interests groups, public opinion, and how the media influences our society. The class will deepen the basic knowledge students have about our country, and is intended for those that have an interest in government, the Constitution, and politics.

**WORLD WAR II**

11, 12

.5

The course focuses on World War II, including its early stages, the campaigns and the aftermath. The content of the course includes: analyzing how the end of World War I led to World War II, Nazi Germany, World Leaders, Geography, The Holocaust, Propaganda, War Games, the European campaign, the Pacific campaign, the end of the war and the aftermath.

Prerequisite: American Cultures II

**EMERGING WORLD**

9-12

.5

Students in this course will examine contemporary issues facing the world today. The course will focus on investigating topics, evaluating sources and formulating arguments regarding current events while looking at the historical framework. Students will engage in civil discourse to become literate about the world around them as well as learning the value of different opinions, while reinforcing them with facts and resources.

**\*CHS SURVEY OF ECONOMICS**

10- 12

1

Additional .5 quality points

Survey of Economics is an introductory survey of the major elements of economics. Students will learn to apply economic analysis to understand macroeconomic and microeconomic issues. Among the topics covered are the operation of markets, fiscal and monetary policies, and international economics.

**\*ADVANCED PLACEMENT UNITED STATES HISTORY**

11, 12

1

Additional 1 quality point

**AP® United States History is an elective Social Studies course offered to juniors and seniors.** The AP® United States History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history from 1607 to 1996. By making demands upon students equivalent to those made by a full-year introductory college course, such as: integration of extensive reading; teaching by students; writing; visual aids; and comparison, the students will be prepared for intermediate and advanced college courses. Students will learn to assess historical materials – their relevance to a given interpretive problem, reliability, and importance – and to weigh the evidence and interpretations presented in historical scholarship. The AP® United States History course will thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Extensive out of class assignments, independent projects, and frequent assessment define the rigor of this course. A summer assignment of reading and keeping a log/journal is **required**. This course will be a rotating course every other year with AP U.S. Government & Politics.

★ This course **WILL NOT** be offered for 2023-2024.

Prerequisite: Test scores / Teacher recommendation

**\*ADVANCED PLACEMENT U.S. GOVERNMENT & POLITICS**

11, 12

1

Additional 1 quality point

The goal of the AP® U.S. Government & Politics course is to provide an in-depth understanding of the operation of America's national government. The course will be guided by the major areas of U.S. government that are emphasized by the college testing service guidebook: Constitutional Underpinnings; Civil Rights and Civil Liberties; Political Beliefs and Behaviors of Individuals; Political Parties, Interest Groups, and the Mass Media; the Major Institutions of National Government; Public Policy. This course will give students an analytical perspective on government and politics in the United States. It will include both the study of general concepts used to interpret U.S. politics and the analysis of specific contemporary examples. It also requires students to familiarize themselves with the various institutions, groups, beliefs, and ideas that constitute our political system. Students will become familiar with the variety of theoretical perspectives and explanations for various behaviors and outcomes. This course will be a rotating course every other year with AP® U.S. History.

★ This course **WILL** be offered for 2023-2024.

Prerequisite: Test scores / Teacher recommendation

**TEACHER RECOMMENDED SCIENCE SEQUENCE**

- The sequences below are designed to be *suggested* courses of study.
- Students are encouraged to speak with their current science teacher.
- Students ***must*** obtain the signature of their current science teacher for the following year's science course selection.

**STUDENTS MUST TAKE THREE OF THE FOLLOWING CLASSES:**

- **BIOLOGY \*Required for Keystone**
- **CHEMISTRY I**
- **PHYSICS I**
- **EARTH SYSTEMS SCIENCE**
- **PHYSICAL SCIENCE**



**Minimum Requirements:**

9 <sup>th</sup> grade	10 <sup>th</sup> grade	11 <sup>th</sup> or 12 <sup>th</sup> grade-Select one
Biology	Earth Systems Science	Chemistry I Physics Physical Science

**Suggested sequence for the College Bound/Non-Science student:**

9 <sup>th</sup> grade	10 <sup>th</sup> grade	11 <sup>th</sup> grade	12 <sup>th</sup>
Biology	Earth Systems Science Chemistry I Physics AP Physics 1	Chemistry I Physics Earth Systems Science Physical Science	Chemistry I Physics Earth Systems Science Physical Science CHS Biology 101 CHS Meteorology CHS Anatomy & Physiology

**Suggested sequence for the College Bound Science student:**

9 <sup>th</sup> grade	10 <sup>th</sup> grade	10 <sup>th</sup> , 11 <sup>th</sup> and 12 <sup>th</sup> grade
Biology and Chemistry I	Physics and Chemistry I (If not taken in 9 <sup>th</sup> grade) or AP Physics 1 CHS Meteorology CHS Anatomy & Physiology	A.P. Chemistry Organic Chemistry Anatomy AP Physics 1 AP Physics 2 AP Physics C Mechanics CHS Biology 101 CHS Meteorology CHS Anatomy & Physiology

**SCIENCE**

**COURSE NAME**

**GRADE**

**CREDITS**

**BIOLOGY**

9

1

The purpose of this course is to provide each student with a working knowledge of biology, the life science. Biology I is a general survey/overview of the nature and continuity of life, cellular biology, genetics and heredity, diversity of life, microbiology, biotechnology, botany, zoology, human anatomy and physiology, and ecology. The practical application of the material and concepts learned occur through frequent laboratory activities/investigations (microscopy and dissections are stressed). The philosophy of this course is not only to prepare the college-bound

student, but to benefit the student who will enter the working world also. Especially stressed in the course will be Eligible Content mastery for the Keystone Exam: Biology.

## **CHEMISTRY I**

9- 12

1

This class is designed to give students a confident grasp of the fundamental concepts of chemistry. Using algebraic skills to a significant degree, students will explore: The States of Matter, Atomic Structure, Periodic Trends, Chemical Reactions, Bond Theories, Nomenclature, Stoichiometry and the Gas Laws. Laboratory work and computer applications will be utilized to enrich student exploration.

Prerequisite: Algebra I Parts I and II with a “C” or better  
Teacher Recommendation  
Biology (or taking concurrently with teacher recommendation)

## **PHYSICS**

10- 12

1

This is an introductory-level physics course designed to survey the significant topics in mechanics. This is meant to be a first year physics course. Conceptual understanding of the topics of Mechanics is emphasized. Although this course is not as focused on math as the AP courses, a significant amount of mathematical computation is required in any physics course. For this course, an understanding of Algebra 1 and simultaneous completion of geometry is sufficient. Students will learn the basic physics concepts in the areas of Kinematics, Vectors, Forces (Newton’s Laws), Work, Energy, Conservation of Energy, Universal Law of Gravitation, Linear Momentum, Rotational Motion, Waves, Sound, and Electrostatics. Students will also learn the basic procedure for advanced scientific laboratory work, including how to present and interpret data in a lab report.

Prerequisite: Successful completion of Algebra 1;  
concurrently taking Geometry or Algebra 2.

## **EARTH SYSTEMS SCIENCE**

10- 12

1

Earth Systems is a year-long course that is designed to continue investigations that began in Middle School Science and Biology. Students will discover the connections among the Earth’s systems throughout Earth’s history. These systems (the atmosphere, hydrosphere, geosphere, and biosphere) interact through time to produce the Earth’s landscapes, ecology, and resources. This course develops explanations of phenomena fundamental to the sciences of geology and physical geography including early history of the Earth, plate tectonics, landform evolution, and weather and climate.

Prerequisite: Teacher Recommendation

## **PHYSICAL SCIENCE**

11, 12

1

This course will introduce general principles of both physics and chemistry. Physics topics will include measurement practices, characteristics of motion, Newton’s laws of motion, concepts of energy, work and power, characteristics of heat, the structures and characteristics of waves, basics of optics, basic circuitry and other concepts in electricity and magnetism.

The Chemistry topics will include the structure of matter, states of matter, chemical bonding, naming of compounds, the characteristics of solutions and mixtures, basics of chemical reactions, characteristics of acids and bases, and basic carbon chemistry.

Prerequisite: Teacher Recommendation

### CHS BIOLOGY 101

10-12

1

Additional .5 quality points

CHS Biology 101 is an academic course designed for those students who are planning a career or further study in the sciences beyond high school. CHS Biology 101 is a dual enrollment course through St. Francis University in which you can earn 3 college credits. The topics of Taxonomy/Classification, Botany/Dendrology, Experimental Design, Evolution, Zoology, Microbiology, and Ecology will be investigated (as time permits) in this course using a laboratory-oriented approach. Students will be involved in research, fieldwork and data analysis, and participate in more complex dissections and further microscopy.

Prerequisite: Biology (and have achieved a proficient or advanced on Keystone Biology exam)  
Chemistry I  
Teacher Recommendation

### ORGANIC CHEMISTRY

10-12

.5

Organic Chemistry is a semester course designed for students who plan to pursue a career in the science, engineering or health-related fields. This course is an introduction to the chemistry of carbon compounds which will include naming and drawing organic molecules based on the IUPAC rules (including functional groups and stereochemistry), and reactions including addition, substitution, polymerization, esterification, fermentation, saponification and combustion.

**\*This course does not fulfill science requirement**

Prerequisite: Chemistry I  
Teacher Recommendation

### ANATOMY

10-12

.5

This semester course will cover the structure and function of each of the human body's main systems. Systems covered will include skeletal, muscular and fascia, blood and circulatory, nervous, digestive, reproductive, urinary and excretory, lymphatic and immune, and endocrine. This course will focus on gross structure and function only, excluding most physiology.

**\*This course does not fulfill science requirement**

Prerequisite: Students enrolling in this course must first complete Biology I AND Chemistry I

### CHS ANATOMY & PSYCHOLOGY

10-12

1

Additional .5 quality points

This course is a comprehensive study of the structure and function of the human body. The dynamics of the cells are discussed with emphasis on the function of DNA. Tissues and organ systems are treated with referenced to their function in metabolism. The energy relationship of the systems and homeostasis is emphasized. The skeletal, muscular, cardiovascular, and lymphatic systems are integrated to show the students their interdependence.

Prerequisite: Chemistry I  
Biology I

**CHS METEOROLOGY**

10-12

1

Additional .5 quality points

This course is a general introduction to meteorology for the science major. The historical development of the science of meteorology is reviewed. The physical and chemical properties of the atmosphere are presented. The dynamic state of the atmosphere and the forces that produce it are examined. Elements of weather forecasting are presented. The effect of pollution on the atmosphere, biosphere, hydrosphere, and lithosphere are discussed. Course includes a laboratory/recitation period which includes hands-on demonstrations of topics reviewed in lecture and experimentation utilizing the analytical techniques and equipment reviewed in the course. The course is intended to support the academic preparation of those students pursuing a degree in environmental science or another related discipline that requires an understanding of meteorology. The course provides professional preparation for environmental scientists, meteorologists, and other earth science professionals. The course assumes some basic mastery of biology, chemistry, and physics.

Prerequisite: Chemistry I

**\*ADVANCED PLACEMENT CHEMISTRY**

10-12

1

Additional 1 quality point

AP Chemistry is designed to be comparable to the general chemistry course usually taken during the student's freshman year of college. Lecture, laboratory investigations, and computer technology usage will be utilized to help students build upon the core knowledge they gained in general chemistry. AP topics include: the basic principles of atomic structure, chemical bonds, intermolecular forces, reactions, kinetics, thermodynamics and properties of acids and bases.

Prerequisites: Chemistry I and Algebra II  
Teacher Recommendation

**\*ADVANCED PLACEMENT PHYSICS 1**

10-12

1

Additional 1 quality point

This is an introductory, algebra-based course for students excelling in math and science. AP® Physics 1 is designed to be taught over the course of a full academic year and may be taken as a 1<sup>st</sup> year physics course with no prior physics coursework necessary. This course does require the use of trigonometric functions; this understanding can be achieved in the math course or the AP® Physics 1 course itself. Students will develop a deep understanding of foundational principles of physics in classical mechanics by applying these principles to complex physical situations that combine multiple aspects of physics rather than present concepts in isolation. Through inquiry based learning, students will develop critical thinking and reasoning skills, as defined by the AP® science practices. AP® Physics 1 courses focus on the Big Ideas typically included in the *first* semester of an algebra-based introductory college-level physics course and provide the students with enduring understandings designed to support future coursework in the sciences.

***Taking the AP ®Physics 1 Exam in May of the academic year is required.***

**Topics Covered in AP Physics 1:** The AP® Physics 1 exam covers topics in mechanics, electricity, and waves (a single test score is reported). These topics include: Kinematics, Dynamics (Newton's Laws), Circular Motion, Universal Law of Gravitation, Simple Harmonic Motion, Impulse, Linear Momentum, Conservation of Momentum, Collisions, Work, Energy, Conservation of Energy, Torque, Rotational Motion, Angular Momentum, Electrostatics, DC Resistors, Mechanical Waves, and Sound.

Prerequisite: Successful completion of Geometry & completion of (or concurrently taking) Algebra 2.

**\*ADVANCED PLACEMENTS PHYSICS 2**

11, 12

1

Additional 1 quality point

This is a 2<sup>nd</sup> year, algebra-based physics course for students excelling in math and science. AP<sup>®</sup> Physics 2 is designed to be taught over the course of a full academic year and should be taken as a 2<sup>nd</sup> year course after students have completed AP<sup>®</sup> Physics 1 or similar introductory course. Students will develop a deep understanding of foundational principles of physics in classical mechanics and modern physics by applying these principles to complex physical situations that combine multiple aspects of physics rather than present concepts in isolation. Through inquiry based learning, students will develop critical thinking and reasoning skills, as defined by the AP<sup>®</sup> science practices. AP<sup>®</sup> Physics 2 courses focus on the Big Ideas typically included in the *second* semester of an algebra-based introductory college-level physics course and provide the students with enduring understandings designed to support future coursework in the sciences.

***Taking the AP<sup>®</sup> Physics 2 Exam in May of the academic year is required.***

**Topics Covered in AP<sup>®</sup> Physics 2:** The AP<sup>®</sup> 2 exam covers topics in the following areas, again with a single score being reported: Thermodynamics, Kinetic Theory, Fluid Statics and Dynamics, Electrostatics (Electric force, Electric Field, Electric Potential), DC Circuits, Steady-state RC Circuits, Magnetism, Induction, Geometric and Physical Optics, Atomic Physics, Nuclear Physics, and Quantum Physics.

Prerequisite: Successful completion of AP Physics 1 or comparable introductory course. Successful completion of (or concurrently taking) Pre-Calculus.

**\*ADVANCED PLACEMENT PHYSICS C MECHANICS**

11, 12

1

Additional 1 quality point

AP<sup>®</sup> Physics C Mechanics is equivalent to a one-semester, Calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physics, physical science or engineering. Introductory differential and integral calculus is used throughout the course. Students will use methods of differential and integral calculus to formulate physical principles and solve complex physical problems. Topics for study in this course are similar to those in AP<sup>®</sup> Physics 1. It should be noted that fewer topics may be covered in Physics C, but they are covered in greater depth and with greater analytical and mathematical sophistication.

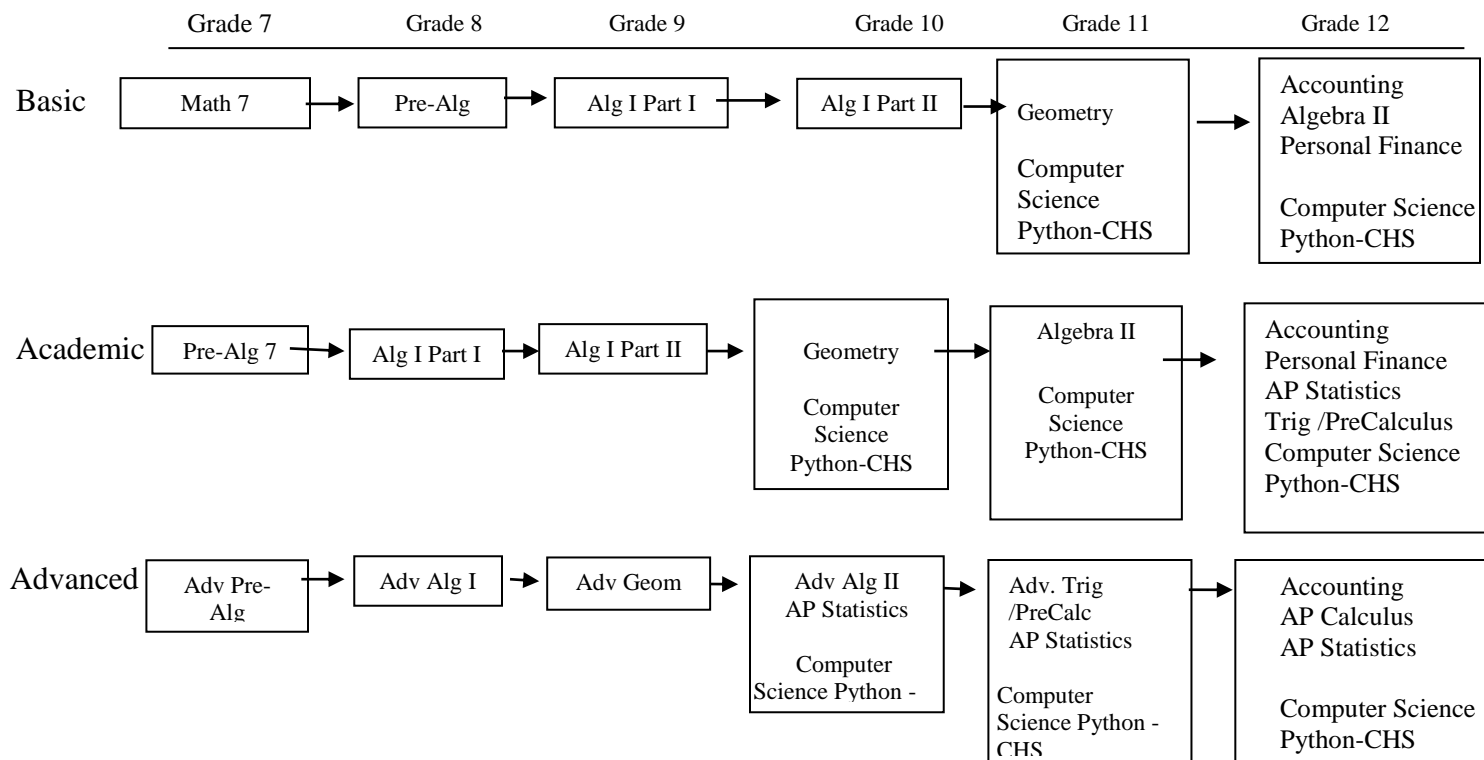
***Students are required to take the AP<sup>®</sup> Physics C Mechanics Exam in May of the academic year.***

Also available to students of AP<sup>®</sup> C Mechanics is the option to take this course concurrently as a College in High School (CHS) course, run through the University of Pittsburgh. It is designed to be taught over 1 full academic year and is equivalent to a 1<sup>st</sup> semester Calculus-based college-level physics course. College-level exams and college credit (through the University of Pittsburgh) can be earned if the student enrolls through the CHS Program (there is a fee assessed for college credit). Three major exams and a final exam are administered through the CHS program. Course topics are identical to the topics covered in the AP<sup>®</sup> C Mechanics course, allowing the course to be taught as a dual enrollment course.

**Topics Covered in AP<sup>®</sup> C Mechanics:** Kinematics, Work, Energy, Power, Newton's Laws, Systems of Particles, Linear and Angular Momentum, Circular Motion, Rotation, Torque, Oscillation, Gravitation, Mechanical Waves, and Kinetic Theory of Gasses.

Prerequisite: Successful completion of a high school laboratory science course.  
Successful completion of a 2<sup>nd</sup> year Algebra Course, including Trigonometry.  
Successful completion of (or taking concurrently) a Calculus course.

## Teacher Recommended Math Sequence



Math Electives: This course will be awarded a Math credit when taken in the senior year, but may be doubled-up with other Math classes prior to the senior year.

Accounting I

Personal Finance

### MATHEMATICS

#### COURSE NAME

#### GRADE

#### CREDITS

#### ALGEBRA I PART I

9

1

This course will begin with a review of arithmetic and pre-algebra concepts. Traditional algebraic topics will then be taught in depth so that each student can master these concepts. This class will prepare the student for Algebra I Part II.

Prerequisite: Pre-Algebra / Department Recommendation

#### ALGEBRA I PART II

9, 10

1

This course is a continuation of algebraic topics and introduces geometry. Basic and intermediate algebra concepts are stressed to strengthen the student's mathematical foundation. The students will explore these topics by traditional textbook instruction that reinforces and expands on what was learned in Algebra I Part I

Prerequisite: Algebra I Part I

**GEOMETRY**

10-12

1

Geometry continues to develop the algebraic and geometric concepts introduced in Algebra, with special emphasis on coordinate geometry. Concepts of logic are more fully explored. Properties of triangles, quadrilaterals, and other polygons are analyzed.

Prerequisite: Algebra I Part II

**\*ADVANCED GEOMETRY**

9

1

Additional .25 quality points

Advanced Geometry continues to develop the algebraic and geometric concepts introduced in Advanced Algebra I, with special emphasis on coordinate geometry. Fundamental concepts of points, lines, and angles are covered. Logical reasoning is fully explored and directly applied to algebraic and geometric proofs. Properties of geometric shapes are explored in terms of congruence, similarity, area, surface area, and volume. This advanced course is intended for students with above average mathematical and problem solving skills. Assignments will include substantial work with the skills and concepts presented in the lesson, more complex applications, and challenging exercises.

Prerequisite: Students must earn a **minimum B average** grade in Advanced Algebra I & Department recommendation

**ALGEBRA II**

11, 12

1

Algebra II continues to build upon basic algebra concepts taught in Algebra I Part I and Algebra I Part II. Throughout the year algebraic concepts are extended to include higher level problems that include the complex number system, exponents and radicals.

Prerequisite: Algebra I Part II or Advanced Algebra I & Geometry & Department recommendation

**\*ADVANCED ALGEBRA II**

10

1

Additional .25 quality points

Advanced Algebra II continues to build upon the foundations of algebra and geometry developed in the Advanced Algebra I courses. The concept of function is introduced and integrated throughout the course. Algebraic concepts are extended to include simplifying polynomials, the complex number system and rational, exponential and logarithmic functions.

Prerequisite: Students must earn a **minimum B average** grade in Advanced Geometry & Department recommendation

**TRIGONOMETRY/ PRE-CALCULUS**

11, 12

1

This course begins with a review of Algebra II skills, moves on to Pre-Calculus, then completes the year with a study of Trigonometry. Students will study linear, quadratic, polynomial, radical, rational, power, exponential and logarithmic functions and their inverses, learning algebraic, numeric, and graphic techniques for analysis and understanding. Trigonometric topics include radian and degree measure, right triangle trigonometry, general definitions and functions of any angle, Unit Circle and identities and applications.

Prerequisite: Geometry, Algebra II, B average or better in all math classes  
Proficient or Advanced on Keystone Algebra I test

**\*ADVANCED TRIGONOMETRY/ PRE-CALCULUS**

11

1

Additional .25 quality points

This course assumes proficiency in Algebra II skills and jumps into Pre-Calculus topics including a study of polynomial, radical, rational, power, absolute value, exponential and logarithmic functions and their inverses. Trigonometric concepts include radian and degree measure, right triangle trigonometry, general definitions and functions of any angle, Unit Circle, inverse functions, identities (including double and half angle), graphs and translations of functions, Laws of Sine and Cosine, and application problems. Sequences and series, conic sections, polar coordinate system and parametric equations are also included. An introduction to Limits completes the year. This is a rigorous and fast-paced study of topics to prepare students for AP Calculus AB.

Prerequisite: Advanced Geometry, Advanced Algebra II, B average or better in all math classes.  
Advanced on Keystone Algebra I test & Department Recommendation

**\*ADVANCED PLACEMENT CALCULUS**

12

1

Additional 1 quality point

This course is designed for those students with superior motivation and ability in mathematics who plan to attend a college or university. This course is the standard first course in a basic calculus sequence required for all mathematics, science, engineering, and statistics students. Topics covered in this course include functions and graphs, limits, derivatives, trigonometric functions, application of the derivative, integral, applications of the integral, and exponential and logarithmic functions. AP<sup>®</sup> College Calculus is primarily concerned with the student's understanding of the concepts of college-level calculus and providing an in-depth experience with its methods and application. It is a challenging and demanding course intended to fully prepare the student for the College Board's Calculus AB Examination. This course is also offered as a 4-credit College in High School Class through the University of Pittsburgh.

Prerequisites: Students must earn a **minimum B average** grade in Adv. Trig/Pre-Calculus & Department recommendation

**ACCOUNTING I**

10- 12

1

Accounting I introduces the student to the orderly procedures of the accounting cycle and to specific problem solving within that cycle. Students will use Microsoft Excel and tax preparation software (Federal, State, and Local). In addition, this course will offer analysis of company portfolio, payroll, stock, bankruptcy laws, debt ratio, tax, profit margin, and inventory turnover rate. This is a valuable course for anyone planning to enter the workforce after high school or college. One third of all college majors choose careers in marketing/sales, banking, insurance, real estate, law, financial management or accounting.

**\*This course will be awarded a Math credit only when taken in the senior year.**

**PERSONAL FINANCE**

12

1

Personal Finance is a consumer awareness class that has students in grade 12 prepare for the adult world of consumer topics, number theory review, wages, taxes, commission, checking & savings accounts, loans, vehicle transportation, mortgages, insurance, investments, and preparing a budget are the many units in the applied math curriculum. Students will see "The Worth" of studying such topics and better prepare themselves to be an informed adult consumer.

Prerequisite: Department Recommendation



**\*ADVANCED PLACEMENT STATISTICS**

10-12

1

Additional 1 quality point

This full-year course follows the same syllabus as the Advanced Placement Testing Service and is designed for the student who wishes to study statistics and related topics at an accelerated pace comparable to courses in colleges and universities. Students have the *option* of registering with the University of Pittsburgh for four (4) college credits and will then be required to pay a fee. Some of the topics taught include: data collection and description, frequency distributions, counting techniques, probability, probability distributions, the Normal Distribution, confidence intervals and sample size, hypothesis testing, correlation and regression, chi-square tests, and analysis of variance.

Prerequisites: Students must earn a **minimum B average** grade in Algebra II or a **minimum C average** grade in Adv. Algebra II or Department recommendation

**\*COMPUTER SCIENCE PYTHON – CHS**

10-12

1

Additional .5 quality points

**This course in computer science is at the Collegiate Level.** The objectives of this course are to use the computer in an interactive environment to analyze problems, to develop algorithms, to learn the Python language, to design code and to document programs using techniques of good programming. Students may elect to take this course for three (3) college credits through the University of Pittsburgh.

Prerequisite: Algebra I Part II, or Advanced Algebra I & Department Recommendation

**SAT/ACT PREP MATH**

10, 11

.5

This one semester course helps college bound students to prepare for both the ACT and SAT math sections from college entrance exams. Students will be given test taking strategies on the general format of the test, as well as, on various types of questions. The student will work in the following areas that make up the math sections: basic math, equations, percentages, radicals, and other principles of algebra and geometry. Students will also gain familiarity of the test formats through practice tests along with online websites.

**\*This course does not fulfill a math requirement.**

**WELLNESS**

**WELLNESS**

9- 12

.5

(1 Semester Required)

Wellness is a combination of physical and health education. Wellness meets daily for one semester for students in grades 9-12. Emphasis will be placed on overall health and well-being in both the classroom and during physical activities. Students will be encouraged to participate in various strength and cardio respiratory training activities. Also, students will participate in individual, team, and lifetime sports. The primary content will start with the Health Triangle. The triangle consists of physical, mental and social components. Students will be presented material on healthy food options, exercise, relationships, and abstinence from drugs and alcohol in various ways. This information will help students form favorable habits now and understand the importance of achieving optimal health and fitness levels in the present and future. Our goal is to arm students with information to make smart decisions with regards to their physical, mental/emotional, and social health. Achieving over all well-being will allow students to live a higher quality of life now and in the future.

## FOREIGN LANGUAGE

<u>COURSE NAME</u>	<u>GRADE</u>	<u>CREDITS</u>
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<b><u>FRENCH I</u></b>	9-12	1
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French I is an introduction to the language and culture of French speaking countries. Students will learn basic conversation, vocabulary, and grammatical structures, and will be expected to develop skills in speaking, reading, writing, and oral comprehension, as well as become able to appreciate other cultures.

Prerequisite: None  
Recommended: C or above in English or Exploratory Language

<b><u>FRENCH II</u></b>	10-12	1
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French II is a continuation of grammar and culture from French I. Students will be working toward ever increasing creative language expression. Students will further build upon skills in the areas of speaking, reading, writing, oral comprehension, and cultural awareness. Excerpts from French literature will be read and discussed.

Prerequisite: French I  
Recommended: C or above in French I

<b><u>FRENCH III-CHS</u></b>	11, 12	1
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French III is a continuation of grammar and culture from French II. In addition, more time will be denoted to reading than in the previous two levels. Students will work toward increased oral proficiency. Literature and art, taught in the target language will be introduced in the second semester. All students will keep a personal journal.

Prerequisite: French II  
Recommended: C or above in French II

<b><u>FRENCH IV-CHS</u></b>	12	1
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Students will expand upon the knowledge and skills already developed in French I, II, and III. Students will also read various literary and journalistic selections, and will make oral and written presentations.

Prerequisite: French III  
Recommended: C or above in French III

<b><u>SPANISH I</u></b>	9- 12	1
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Spanish I is an introduction to the Spanish language and culture. Students will learn basic conversation, vocabulary and verb conjugation. They are expected to be able to read, write, comprehend and converse in Spanish.

Prerequisite: None  
Recommended: C or above in English or Exploratory Language

**SPANISH II**

10-12

1

Spanish II is a continuation of grammar and culture from Spanish I. The focus is on the present and past tenses. Students will be asked to create/perform dialogs in the target language, read selected cultural stories, and discuss/write about daily activities as well as past events in order to build their listening, oral, reading and writing comprehension skills. A few excerpts from major literary works will also be read and discussed.

Prerequisite: Spanish I  
Recommended: C or above in Spanish I

**SPANISH III-CHS**

11, 12

1

Spanish III is a continuation of grammar, culture, and literature from Spanish II. The students will focus on several verb tenses. Students will read and discuss short stories in the target language, write compositions, give individual and group presentations on several cultural topics and role-play. A few excerpts from major literacy works will be used for building reading comprehension skills and class discussion. The class will be conducted primarily in the target language.

Prerequisite: Spanish II / Teacher Signature Required for CHS  
Recommended: C or above in Spanish II

**SPANISH IV-CHS**

12

1

Spanish IV will be a continuation of grammar from Spanish I, II, and III with an emphasis on conversation. Students will read a short story and write in the target language. Projects and presentations will also be required. Furthermore, culture and literature will be utilized as a tool for conversation.

Prerequisite: Spanish III / Teacher Signature Required for CHS  
Recommended: C or above in Spanish III

**COMPUTER TECHNOLOGY****COURSE NAME****GRADE****CREDITS****COMPUTER APPLICATIONS I**

9- 12

.5

Computer Applications I will provide students practical applications of computer software through “hands-on” instruction. The student will become familiar with the use of the computer as a tool for both work and personal applications, computer related careers, and computer terminology. Course content will also include understanding hardware, software, operating systems and care/operations. The practical approach to software will include Microsoft Office and Google software.

**COMPUTER APPLICATIONS II**

9- 12

.5

Computer Applications II will provide students an advanced, in-depth study of Microsoft Office and Google software. Areas of focus include graphic design using digital publisher (photos, laying out brochures, magazines, and business cards), data analysis, data management, and introduction of programming and computer science

Prerequisite: Computer Applications I (recommended)

**WEB DESIGN**

10- 12

.5

Web Design will give students a working knowledge of Adobe Dreamweaver and Google software. They will have the opportunity to create websites that include various student interests such as sports, club activities, drama productions, creative writing, and more. Students will produce all of the content for their websites by writing, revising, editing the text, and taking accompanying photographs. Students will be developing technology and design skills.

Prerequisite: Computer Applications I (recommended)

**TECHNOLOGY**

**DESIGN – BUILD - TEST**

9- 12

1

Students will use problem solving and critical thinking skills along with math and science skills to develop, plan, draw and implement engineered solutions to problems. Students will build models and prototypes using laboratory tools and machines, CNC machines, and laser engraving and cutting. Prototypes will be tested by in-class competitions. A variety of STEM related careers will be explored.

**ADVANCED DESIGN – BUILD - TEST**

10-12

1

Students will demonstrate the application and design processes of engineering. Students will form engineering teams and create and select a design, models and address specific engineering problems. Teams will use communications, graphics, mathematics and community resources to solve problems. Students will work with all laboratory fabricating equipment (wood, metal, and plastic), 3-D CADD design, 3-D printing, laser engraving, robotics systems (vehicle electrical, structural, mechanical drive train, and remote control systems) and have the opportunity to participate in engineering competitions.

Prerequisite: Design–Build–Test and Engineering-Manufacture-Construct

**ENGINEER – MANUFACTURE - CONSTRUCT**

9- 12

1

Students will learn the fundamentals of manufacturing technology and develop an understanding of how things are made. Introduction to manufacturing tools and machines, their operation, CNC machining, developing bill of materials, along with reading plans are all topics that will be introduced in an activity-based curriculum. All students will complete a custom project by turning raw materials into finished products,

**ENGINEER – MANUFACTURE – CONSTRUCT II**

10- 12

1

Students will gain competence and self-confidence through the integration of designing, manufacturing and constructing advanced products. This course provides students with the opportunity to study tools, materials and processes used in manufacturing and construction today. Students will experience building pieces of furniture with opportunities to work on construction products. Designing, researching cost estimating, CNC machining, researching and development, financing, and production and marketing are all concepts that will be introduced through an activity-based curriculum.

Prerequisite: Engineer-Manufacture-Construct

## FAMILY & CONSUMER SCIENCES

<u>COURSE NAME</u>	<u>GRADE</u>	<u>CREDITS</u>
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<b><u>FOODS I</u></b>	9-12	.5
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An introduction to foods and nutrition, this one semester course is geared toward those interested in learning or improving basic survival skills in the kitchen. This includes planning, preparing, and serving a wide variety of foods. Key nutritional information is included in each unit. Students may choose to take foods for one semester or for one full year by selecting Foods 1 and Foods 2.

<b><u>FOODS II</u></b>	9-12	.5
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Focusing on food, nutrition, and worldwide cuisine, this semester course builds on the basic skills learned in Foods 1. Food selections will be discussed and prepared with healthy choices in mind. Students will develop an understanding of other cultures through exploration including projects and foods based learning.

Prerequisite: Foods 1

<b><u>FOODS III: Advanced Foods</u></b>	10-12	.5
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This semester advanced foods course focuses on creative food preparation and presentation. An assortment of topics and techniques that will be covered including but not limited to plating and garnishing skills; utilizing special cooking techniques and skills needed for modifying diets; preparing food items for service projects.

Prerequisite: Foods 2

<b><u>FOODS IV: Food for Entertaining</u></b>	10-12	.5
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This semester advanced foods course is centered on entertaining. Students will plan, prepare, and formally serve meals. All skills learned in previous foods courses will be applied to this experience, as well as learning different types of meal service, table settings, and proper etiquette when entertaining. Besides entertaining, a focus on regional cooking within the United States will be included within this semester course.

Prerequisite: Foods 3

<b><u>INDEPENDENT LIVING</u></b>	10-12	.5
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This course begins with a self-evaluation that allows them to establish future goals. Several topics included in this course are preparing for a job or college interview, renting a house, buying a car, balancing a checkbook, and using credit. This course includes hands on classroom projects, several guest speakers, and instructional materials to help prepare them for adulthood.

<b><u>CHILD GROWTH AND DEVELOPMENT</u></b>	10- 12	.5
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This one semester courses encourages an understanding of all aspects of children's physical, intellectual, social, emotional, and moral development. This course will be followed from the prenatal period through school age. This course includes the "Baby Think It Over" doll simulator where students will simulate a care-giving experience outside the classroom. In addition to concepts of child development, this course will teach students the skills necessary for care-giving and future parenting.

## MUSIC

<u>COURSE NAME</u>	<u>GRADE</u>	<u>CREDITS</u>
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<u>BAND</u>	9- 12	1
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Participation in band is designed to develop leadership, physical and mental skills, and musicianship through instrumental band performance. A challenge and tryout system provides opportunities for recognition of individual accomplishment. Opportunities to perform at county, district, regional and state band and orchestra festivals are available. Band membership is determined by the director's evaluation of the student's ability to perform on their instrument. It is mandatory for an instrumentalist to schedule Band to participate in the Marching Band. Grade evaluation will be determined by performance, conduct, attitude and attendance at all required rehearsals and performances, throughout the year, in various musical settings and experience music through active participation.

Prerequisite: Director's evaluation

<u>JAZZ ENSEMBLE</u>	9- 12	1
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Students enrolling in this course will be exposed to a variety of jazz and popular styles of music. Music theory as it relates to chord structure, rhythm and melody indigenous to this type of music will be discussed and applied. Improvisational techniques will be discussed and applied. Grade evaluation will be determined based on performance, attendance at rehearsals and performances, attitude and improvement throughout the scholastic year. Students must be enrolled in Band to participate in this ensemble unless band members do not provide ample instrumentation. Selection for this ensemble will be by audition and/or director selection.

Prerequisite: Teacher recommendation

<u>CONCERT CHOIR</u>	9- 12	1
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The student will learn to sing in harmony and to appreciate good choral music from all periods of choral writing. Solo, small ensemble and full ensemble experiences are given. Performance experience is gathered through participation in school assemblies, community programs, public concerts, county, district, regional, honors, and state festivals. Grade evaluation will be determined by performance, conduct, attitude and attendance at all required performances and rehearsals.

<u>MUSICAL THEATRE</u>	9- 12	.5
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This course is designed for students with an interest in musical theatre. Students will be introduced to the history and development of American musical theatre and its influences. The course will also explore the aspects involved in musical theatre including performance and stagecraft. Students will actively participate in class activities.

<u>INTRODUCTION TO PIANO</u>	9- 12	.5
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This course is designed for students with an interest in beginning to learn how to play the piano. Individual, small, and large group instruction will be provided. Students will be expected to practice and perform during class.

## ART

<u>COURSE NAME</u>	<u>GRADE</u>	<u>CREDITS</u>
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<b><u>DRAWING:</u></b>	9-12	.5
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This course is project based and will focus on the fundamentals of artistic expression through various drawing mediums. The class will learn and apply different techniques using materials such as pencil, pastel, charcoal, and marker. Students will be exposed, discuss, and interpret significant drawing throughout Art history from Pre-historic to Contemporary Art.

<b><u>PAINTING:</u></b>	9-12	.5
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This course is project based and students will learn to work with the four major types of paint (Tempera, Acrylic, Watercolor, and Oil paint), creating original artworks while learning various brush techniques and the application on a multitude of surfaces. Students will be exposed, discuss, and interpret significant paintings throughout Art history from Pre-historic to Contemporary Art.

<b><u>SCULPTURE:</u></b>	9-12	.5
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Working within a 3-dimensional space, students will be creating original artworks, whether “in-the-round” or “relief”, using various media in this project based course. Materials used in this sculpture course can range from cardboard and plaster, to clay, wood, and even paper. Students will be exposed, discuss, and interpret significant sculptures throughout Art history from Pre-historic to Contemporary Art.

<b><u>PRINTMAKING:</u></b>	9-12	.5
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This project based course will focus on the various types and styles of printmaking, and how they were implemented throughout history; from the printing of newspapers, the recreation of artworks for distribution, to it becoming a recognized art form. Students will create original works using methods of screen printing, linoleum block, wood cut, and stencil. Students will be exposed, discuss, and interpret significant Printmaking throughout Art history.

<b><u>ADVANCED ART CONCEPTS:</u></b>	11-12	.5
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This course is reserved for students that have been exposed to and are fluent in various methods, materials, techniques, and design. Project based, students will have the freedom of self-expression through materials of their choice. Themes and ideas are provided to the class, and the students will select their preference in media to execute the idea to the best of their ability.

<b><u>3D MODELING</u></b>	9-12	1
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Learn the 3D modeling techniques used in movies, visual effects, video games, cartoons, commercials, and animation! Using 3DS Max, you will work in this highly skill-based art form to manipulate and sculpt pre imagination into substantial forms. By the end of the course, you will have developed a portfolio of original projects that you can use when applying for an internship, higher education, or a job.

<b><u>MINECRAFT COURSE (CHARTIERSCRAFT)</u></b>	9-12	.5
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In this course, students will develop their own character and play the game to achieve specific tasks, mine, build and create within the world. Collaboration with other classmates is encouraged as you design and create your base, start up a business, learn to use enchantments, potions, and redstone.