

Walter Payton College Preparatory High School



Course Guide
2017-2018

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THE PAYTON VISION

We develop these habits...

<ul style="list-style-type: none"> • Access, analyze, interpret, and evaluate multiple arguments and sources of evidence for our ideas and positions • Discover patterns in facts, theories, and behaviors within and across disciplines • Discover our passions and follow them 	<ul style="list-style-type: none"> • Act with integrity • Take responsibility for our personal growth and development 	<ul style="list-style-type: none"> • Face our fears and challenge our conventional wisdoms • Respond to setbacks and constraints with resilience and determination • Strive for social justice 	<ul style="list-style-type: none"> • Appreciate differences in perspective, privilege, background, culture and circumstance • Serve others
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...so that we can become...

Inquisitive, creative, and skeptical problem solvers who can formulate and articulate complex ideas	Ethical and engaged representatives of our local and global communities	Appropriately disruptive of the status quo	Empathetic to the physical, emotional, social, and intellectual well-being of ourselves and others
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...in order to embody and live by these values...

CURIOSITY	CHARACTER	COURAGE	COMPASSION
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GRADUATION REQUIREMENTS

Graduating classes of 2018 and 2019

High School Graduation Requirements

- 4.0 English
 - 3.0 Mathematics
Algebra, Geometry, Adv Algebra /Trig
 - 3.0 Science
(Biology as a lab science and 2 additional lab sciences)
 - 3.0 Social Sciences
(World Studies, US History, elective)
 - 2.0 World Language (Single language)
 - 4.0 Physical Education
 - 2.0 Fine/Performing Arts from any two of the following disciplines: Music; Visual Art; Drama; Dance
 - 2.0 College/Career Ed Pathways
 - 1.0 Elective
- 24 Credits**

Walter Payton College Prep Standards

- 4.0 English
 - 4.0 Mathematics
Algebra, Geometry, Adv Algebra /Trig, Pre-calculus
OR Geometry, Adv Algebra/Trig, Pre-calculus, AP Calculus/elective
OR Adv Algebra/Trig, Pre-calculus, AP Calculus, elective
 - 4.0 Science
(Physics, Chemistry, Biology, elective)
 - 3.0 Social Sciences
(World Studies *OR* AP Human Geography, US History *OR* AP US History, elective)
 - 4.0 World Language (Single language)
 - 4.0 Physical Education
 - 2.0 Fine/Performing Arts from *any* of the following disciplines: Music; Visual Art; Drama; Dance
 - College/Career Ed Pathways met by taking the additional classes above
 - 3.0 Electives
- 28 Credits**

General Notes

A program of courses is developed with the student, his or her parents or guardians, and an advisor. In addition to the course requirements above, students must meet the following additional graduation requirements:

- Pass an examination on the Declaration of Independence, the flag of the United States, the Constitution of the United States and the Constitution of the State of Illinois.
- Complete three substantial (15+ hours) service learning projects. Each Sweetness Day project, in which a student fully participates, counts as one project towards this requirement.
- Pass the driver's education course offered during Physical Education II.
- Pass the consumer education course as part of a social science elective.

Graduation Requirements

Graduating classes of 2020 and 2021

High School Graduation Requirements

- 4.0 English
 - 3.0 Mathematics
Algebra, Geometry, Adv Algebra /Trig
 - 3.0 Science
(Biology as a lab science and 2 additional lab sciences)
 - 3.0 Social Sciences
(World Studies, US History, Civics/Elective)
 - 2.0 World Language (Single language)
 - 4.0 Physical Education
 - 2.0 Fine/Performing Arts from any *two* of the following disciplines: Music; Visual Art; Drama; Dance
 - 1.0 Computer Science
 - 1.0 College/Career Ed Pathways
 - 1.0 Elective
- 24 Credits**

Walter Payton College Prep Standards

- 4.0 English
 - 4.0 Mathematics
Algebra, Geometry, Adv Algebra /Trig, Pre-calculus
OR Geometry, Adv Algebra/Trig, Pre-calculus, AP Calculus/elective
OR Adv Algebra/Trig, Pre-calculus, AP Calculus, elective
 - 4.0 Science
(Physics, Chemistry, Biology, elective)
 - 3.0 Social Sciences
(World Studies *OR* AP Human Geography, US History *OR* AP US History, Civics/Elective *OR* AP US Government)
 - 4.0 World Language (Single language)
 - 4.0 Physical Education
 - 2.0 Fine/Performing Arts from *any* of the following disciplines: Music; Visual Art; Drama; Dance
 - 1.0 Computer Science
 - College/Career Ed Pathways met by taking the additional classes above
 - 2.0 Electives
- 28 Credits**

General Notes

A program of courses is developed with the student, his or her parents or guardians, and an advisor. In addition to the course requirements above, students must meet the following additional graduation requirements:

- Pass an examination on the Declaration of Independence, the flag of the United States, the Constitution of the United States, and the Constitution of the State of Illinois.
- Complete at least two service learning projects. One project will be completed during Civics or AP US Government class and the other(s) will be satisfied each Sweetness Day.
- Pass the driver's education course offered during Physical Education II.
- Pass the consumer education course as part of a social science elective.

COMPUTER SCIENCE

Honors Exploring Computer Science

Honors Exploring Computer Science is a nationally recognized introductory college preparatory computer science course composed of the following six foundational units: human computer interaction, problem solving, web design, programming, computer and data analysis, and robotics. Assignments and instruction are contextualized to be socially relevant and meaningful. Units utilize a variety of tools/platforms, and culminate with final projects around each unit. This course is best suited for students who have had little exposure to the foundations of computer science.

Prerequisite: none

Graduation Credit Earned: Computer Science; College/Career; Elective

Advanced Placement Computer Science Principles

AP Computer Science Principles introduces students to the central issues of computer science, inviting students to develop the computational thinking vital for success across multiple disciplines. The course is unique in its focus on fostering students to be creative and encouraging students to apply creative processes when creating computational artifacts. Students design and implement innovative solutions using an iterative process similar to what artists, writers, computer scientists, and engineers use to bring ideas to life. Themes include connecting computing, creating computational artifacts, abstracting, analyzing problems and artifacts, communicating, and collaborating. No prior programming experience is necessary; conversely, students with some programming experience will still find much to challenge them in this course.

Prerequisite: Algebra I

Graduation Credit Earned: Computer Science; College/Career; Elective

FINE AND PERFORMING ARTS

Visual Arts

Honors Art I

Art I is a multi-level art course in which students of varying abilities will have an opportunity to work with a wide range of materials and techniques including: painting/drawing, ceramics, sculpture, printmaking, photography, fiber arts and computer graphics. Student work will be inspired by the art history and arts and crafts of cultures around the world. As a result of this course, students will be able to speak critically about works of visual art while gaining a better appreciation for its creation.

Prerequisite: none

Graduation Credit Earned: Fine Arts – Visual Art; College/Career; Elective

Honors Studio Drawing and Painting I, II

Students will explore drawing and painting by experimenting with a wide range of wet and dry materials such as acrylic paint, watercolor, charcoal, ink, pencil and pastel. Students will learn to draw realistically from observation and to create abstract works. By the end of the year, students will have more confidence in their artistic perceptions as well as their drawing and painting skills. (A special note for students who want to learn to draw and paint but are scared: Welcome! There will be a variety of levels of experience and confidence among students, but don't worry. This class will be a great place to build your skills.)

Prerequisite: Successful completion of any level of any fine arts class

Graduation Credit Earned: Fine Arts – Visual Art; College/Career; Elective

Honors Studio Sculpture I, II

Students in this course will explore a wide variety of sculpture media such as clay, plaster, paper mache, wire, wood, and stone. Through modeling, casting, carving and construction, students will create three-dimensional works of art. Form and function will be considered as students make art objects ranging from ceramic containers to musical instruments to abstract forms. Class projects will include traditional as well as modern artworks such as conceptual installations.

Prerequisite: Successful completion of any level of any fine arts class

Graduation Credit Earned: Fine Arts – Visual Art; College/Career; Elective

Advanced Placement Studio Art 2D: Photography I, II, III

Students in AP Photography will create a portfolio of digital images for AP studio art credit. First semester, students learn the basics of photographic exposure through the manual and automatic settings of digital cameras. Class assignments will include portraiture, landscape, and abstract photography using available light, flash, and studio lighting. Color correction, image resolution, and digital airbrushing will be addressed through Adobe Photoshop. (This is a non-darkroom course.) Second semester, students work individually to create a concentration of photographs with a unifying concept. AP Photo II/III students will have the opportunity to work on advanced assignments in lighting and digital darkroom as well as create a sophisticated conceptual portfolio for the AP exam. Students must bring their own digital compact or DSLR camera. *Students should be able to work independently and meet deadlines. Anticipate an average of 2 hrs taking photos outside of class each week.*

Prerequisite: Successful completion of any level of any fine arts class

A or B in humanities classes recommended (English, social science, fine arts) or AP Photography I, II

Graduation Credit Earned: Fine Arts – Visual Art; College/Career; Elective

Dance

Honors Dance I, II

In this year-long course, students will engage in a variety of dance-based physical activities designed to promote and create lifelong health and fitness skills. Students will develop kinesthetic awareness, proper body alignment, strength, flexibility, as well as learn general dance principles and dance history/culture/connections. This course is also designed to further establish students' artistic appreciation in addition to their understanding of dance as an art form. The curriculum emphasizes students' acquisition of beginning to intermediate movement skills and refined motor control through the study of ballet, jazz, modern, and other dance techniques. Students' movement experiences will also include dance combinations, choreography, and performances throughout the year.

Prerequisite: PE I, PE II

Graduation Credit Earned: Fine Arts –Dance; College/Career; Elective Also satisfies PE III or PE IV enrollment requirement

Drama

Honors Drama I

This course is an elective that introduces students to various acting techniques and the elements of theater. Basic concepts are presented through the use of exercises and improvisation. Students develop the skills and freedom necessary to react spontaneously and honestly moment to moment. The objectives of the course include (1) providing students with a working knowledge of theatre terminology, history, and theory; (2) encouraging students to read plays and view theatre performance critically; (3) developing and improving fundamental performance and production skills. The first and third quarters will focus on world theatre history and theory, and the second and fourth quarters will be mainly performance based. Major topics include history and genre study, play script analysis, design, scene study, criticism, movement, improvisation, and production. In some cases, practical experience will be gained by work on one or more Payton Players' productions. This course can satisfy one of a student's two required credits in Fine Arts. This class will be a multi-level class incorporating students in Drama II.

Prerequisite: none

Graduation Credit Earned: Fine Arts – Theatre/ Drama; College/Career; Elective

Honors Drama II

Drama II will introduce the study of advanced acting techniques including Stanislavski, Meisner, Viewpoints, etc. using scripted material, improvisation, and physical work. This course focuses on developing the fundamental skills used in rehearsing and performing modern realistic plays. Through an exploration of various acting techniques, students acquire the tools and skills necessary for honest characterization. Students will also study and apply directing skills and techniques. Directors will work with actors throughout the entire course and learn techniques on how to communicate with actors and evoke natural, spontaneous performances. Directors will focus on detailed scene work as well as the practical and technical aspects of directing. Note: This class will be a multi-level class incorporating students in Drama I.

Prerequisite: Drama I

Graduation Credit Earned: College/Career; Elective

Music

Honors General Music

This course is designed to explore the history of western music from the medieval/Renaissance to the present time. A variety of both secular and sacred music from all periods of history will be studied.

Prerequisite: none

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Beginning Mix Chorus

If you like to sing, but do not have much experience and would like to learn more, this chorus is for you! While working toward the final goal of a choral performance, students will learn the basics of note reading, music theory, and good, solid vocal production. Choral music appropriate to the age and vocal maturity of the group will be explored, as well as an eclectic approach to choral literature. Students will begin to understand the steps to singing and performing well, thus building self-confidence and esteem.

Prerequisite: none

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Intermediate Mix Chorus

The intermediate chorus is for those students who have previous experience in a choral program and want to expand their knowledge of choral singing, music theory and choral literature. Ear training and sight singing will be emphasized. Membership in this group is by audition only. Any student with previous choral experience may audition. There will be a final concert performance with the possibility of other performing opportunities.

Prerequisite: Audition required

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Advanced Mix Chorus

This Advanced Chorus (previously known as Concert Choir) is for those students who have extensive choral experience and an intensive love of choral singing. The course will explore advanced choral singing skills and choral literature as well as music history, theory, and sight singing. A final concert performance will be presented. The Concert Choir will also attend CPS and Illinois State competitions and will be featured in other community performances.

Prerequisite: Audition required

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Beginning Band

Instruction offered on woodwind, brasswind and percussion instruments. The school furnishes these instruments. Course includes the study of musical rudiments, theory and the applications to the specific instrument of study. No previous experience is required.

Prerequisite: none

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Advanced Band I, II, III, IV

Open to students who have successfully completed Beginning Band or who already play a woodwind, brasswind or percussion instrument. Various styles of band literature are presented for study. Performances will occur at various events throughout the year.

Prerequisite: Audition required

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Advanced Orchestra I, II, III, IV

This course is open to all students who have experience on a string instrument (violin, viola, cello and double bass). The course includes the study of various styles and composers of orchestral literature. Performances will occur at various events throughout the year.

Prerequisite: Audition required

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

Honors Jazz Orchestra I, II, III, IV

Open to students through audition. Big band limited to: two alto sax; two tenor sax; bari sax; four trumpets; four trombones; piano; bass; drums; guitar. Various styles of jazz are explored with opportunities for improvisation. Performances occur at various events throughout the year.

Prerequisite: Audition required

Graduation Credit Earned: Fine Arts – Music; College/Career; Elective

ENGLISH

Honors English I

Honors English I students will engage in grade level Common Core State Standards (CCSS) aligned reading and writing practices through a wide range of literary and informational texts in order to bridge their learning from middle school to high school. Students will engage in practices to support their emerging mastery of the CCSS for Writing in their grade band and express themselves in multiple writing formats including literary analyses, research papers, and presentations. Across all writing formats, students will write in the conventions of the CCSS writing modes. Students in English I will employ academic English in discussion that aligns to CCSS for Speaking & Listening. In an honors class students will be expected to meet the standards with less teacher scaffolding and more collaborative and independent practice. Students at all levels of learning will have access to rigorous texts and grade level appropriate experiences. This honors level courses may include advanced expectations in the following areas: text complexity, complexity of tasks and responses, and pacing. Students in Honors English I will engage in practices that prepare them for future honors and AP coursework.

Prerequisite: none

Graduation Credit Earned: English I

Honors English II

In Honors English II, students will engage in grade-level Common Core State Standards (CCSS), aligned reading, and writing practices through a wide range of literary and informational texts that will build upon Honors English I. Students will engage in practices to support their mastery of the CCSS for Writing in their grade band, and express themselves in multiple writing formats, including narratives, literary analyses, and research papers. Across all writing formats, students will write in the conventions of the CCSS writing modes. Students in English II will employ academic English in discussion that align to CCSS for Speaking & Listening. Students will be expected to meet the standards with less teacher scaffolding and more collaborative and independent practice. Although students at all levels of learning will have access to rigorous texts and grade level-appropriate experiences, this honors level course may include advanced expectations in the following areas: text complexity, complexity of tasks and responses, and pacing. Students in English II honors will engage in practices that will prepare them for future honors and AP coursework.

Prerequisite: English I

Graduation Credit Earned: English II

English III and English IV Requirement

Choose one of the following classes your junior year and a different class your senior year.

Honors African American Literature

In African American Literature, students will engage in grade level Common Core State Standards (CCSS) aligned reading and writing practices through a wide range of literary and informational texts that builds upon English I and English II. Students will evaluate the multiple vantage points of blackness, issues of representation, and the cultural and historical context of African American literature. Students will express themselves in multiple writing formats including narratives, literary analyses, syntheses, research papers, projects, and presentations. Across all writing formats, students will write in the conventions of the CCSS writing modes. Students will employ academic English in discussions that align to the CCSS for Speaking & Listening. In an honors class students will be expected to meet the standards with less teacher scaffolding and more collaborative and

independent practice. Students at all levels of learning will read rigorous texts including literary criticism. This honors level course includes advanced expectations in the following areas: text complexity, complexity of tasks and responses, and pacing.

Prerequisite: English II

Graduation Credit Earned: English III; English IV

Honors Latin American Literature

In Latin American Literature, students will engage in grade level Common Core State Standards (CCSS) aligned reading and writing practices through a wide range of literary and informational texts that builds upon English I and English II. Students will evaluate the multiple vantage points of Latinidad, issues of representation, and the cultural and historical context of Latinx and Latin American literature. Students will express themselves in multiple writing formats including narratives, literary analyses, syntheses, research papers, projects, and presentations. Across all writing formats, students will write in the conventions of the CCSS writing modes. Students will employ academic English in discussions that align to the CCSS for Speaking & Listening. In an honors class students will be expected to meet the standards with less teacher scaffolding and more collaborative and independent practice. Students at all levels of learning will read rigorous texts including literary criticism. This honors level course includes advanced expectations in the following areas: text complexity, complexity of tasks and responses, and pacing.

Prerequisite: English II

Graduation Credit Earned: English III; English IV

Honors Asian American Literature

In Asian American Literature, students will engage in grade level Common Core State Standards (CCSS) aligned reading and writing practices through a wide range of literary and informational texts that builds upon English I and English II. This course is a survey of Asian American literature. We will explore major works from the late 19th century to the present, with a focus on canonical and contemporary literature. While reading and writing, we will identify the writers' recurring themes, as well as examine the social and political contexts of each text. We will concentrate on the immigrant experience as it relates to the following significant themes of identity, memory, alienation, assimilation, solidarity, and resistance. The course focuses on prose (the novel, literary criticism, short stories, creative non-fiction and autobiography), poetry, drama, and film. In addition, we will discuss what lies ahead for Asian Americans and all Americans in a multicultural world.

Prerequisite: English II

Graduation Credit Earned: English III; English IV

Advanced Placement English Language and Composition

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. The purpose of the AP English Language and Composition course is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Like typical college composition courses, the main goal of AP Language and Composition is to create strong writers who have the skills to write effectively in college courses and in their personal and professional lives. With this in mind, AP Language and Composition asks students to read and write many different kinds of essays: argumentative, expository, analytical, personal, even creative. Students read

widely and experiment with a variety of essay formats to help them understand how the writers' audience and purpose shape his or her or their material. Students are also encouraged to take risks when they write and to evaluate their own work.

Prerequisite: Juniors and seniors only; A or B in current English II or English III/AP English course

Graduation Credit Earned: English III, English IV

Advanced Placement English Literature and Composition

An AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone.

Prerequisite: Juniors and seniors only; A or B in current English II or English II/AP English course

Graduation Credit Earned: English III, English IV

Electives

Honors Creative Writing

Honors Creative Writing allows students to develop fluency in the language of literature in order to reap more pleasure from the experience of skilled reading and skilled writing. Students read and discuss published works by classic and contemporary writers, using them as models and springboards for original pieces of literature. Regular writing workshops offer writers the opportunity to gather and provide feedback on drafts that will be submitted for publication within the school and out in the world. Students spend 5-10 weeks studying each of the following genres: poetry, drama, fiction and literary non-fiction.

Prerequisite: Juniors and seniors only

Graduation Credit Earned: College/Career; Elective

Honors Journalism - Newspaper I, II, III

Journalism: Newspaper is a year-long elective course during which students produce a monthly print newspaper, Paw Print, as well as a monthly online newspaper, Paw Print Online. Objectives include: 1) researching and writing articles; 2) designing print layout; 3) taking candid photos and editing photos; 3) developing and improving journalistic writing, editing, and interview skills; and 4) filming and editing short video news stories for the online paper. Class activities also include sales of advertising space, field trips to conferences, and presentations by guest lecturers. Students assume leadership roles as editors of sections as well as overall editors of the print and online papers as part of the Payton News Network (PNN).

Prerequisite: Juniors and seniors only

Graduation Credit Earned: College/Career; Elective

Honors Broadcast Journalism I, II, III

Journalism: Broadcast is a year-long elective course that focuses on producing daily newscasts, special reports, and live sports broadcasts and play-by-play action, which are streamed through the WPCP website and viewed in all of the classrooms during advisory. The class also produces promotional videos for events such as Open House and graduation. Students develop hands-on experience by writing, editing, producing, directing, and filming newscasts, PSAs, and feature films on a daily basis. Students learn technical skills such as operating video

cameras, editing video, using audio equipment, creating media graphics, generating special effects with the green screen, monitoring lighting and set design, and directing the newscast. Students also appear on camera live and taped, advancing their speech communication skills. All students enter video contests and collaborate with students internationally through Adobe Youth Voices. Students assume leadership roles as producers and directors as part of the Payton News Network (PNN).

Prerequisite: Juniors and seniors only

Graduation Credit Earned: College/Career; Elective

Honors Journalism - Yearbook I, II

Yearbook is a year-long elective open to all junior and senior Payton students. The course introduces students to photo journalism techniques required to create and produce, as well as the skills needed to advertise and market the Payton's yearbook, Nauta. The course is student-centered, focusing on developing students' skills in photography, writing, layout/design, and marketing. Students, working with the yearbook advisor form a yearbook production staff that develops the production plan for publishing the current yearbook. Leadership opportunities are available to any student interested in taking on the role of managing editors or section editors. Students interested in marketing, advertising, or business are encouraged to work in the capacity of Business Manager to develop the yearbook sales campaign and marketing strategies. Students who are interested in developing or using their desktop publishing skills will be thrilled to work with our eDesign software (an internet-based platform similar to Adobe In-Design) which allows students access to the yearbook 24-7. Art and photography students are encouraged to use their knowledge of art, photography, and Photoshop to assist staff in the creation of layouts, cover and endsheet designs, and graphics as well as scheduling photography shoots, selecting and cataloguing photographs, and maintaining photography files. Yearbook is a wonderful experience for students because it captures and records the history of Payton one day and one year at a time.

Prerequisite: Juniors and seniors only

Graduation Credit Earned: College/Career; Elective

Honors Drama I

This course is an elective that introduces students to various acting techniques and the elements of theater. Basic concepts are presented through the use of exercises and improvisation. Students develop the skills and freedom necessary to react spontaneously and honestly moment to moment. The objectives of the course include (1) providing students with a working knowledge of theatre terminology, history, and theory; (2) encouraging students to read plays and view theatre performance critically; (3) developing and improving fundamental performance and production skills. The first and third quarters will focus on world theatre history and theory, and the second and fourth quarters will be mainly performance based. Major topics include history and genre study, play script analysis, design, scene study, criticism, movement, improvisation, and production. In some cases, practical experience will be gained by work on one or more Payton Players' productions. This course can satisfy one of a student's two required credits in Fine Arts. This class will be a multi-level class incorporating students in Drama II.

Prerequisite: none

Graduation Credit Earned: Fine Arts – Theatre/ Drama; College/Career; Elective

Honors Drama II

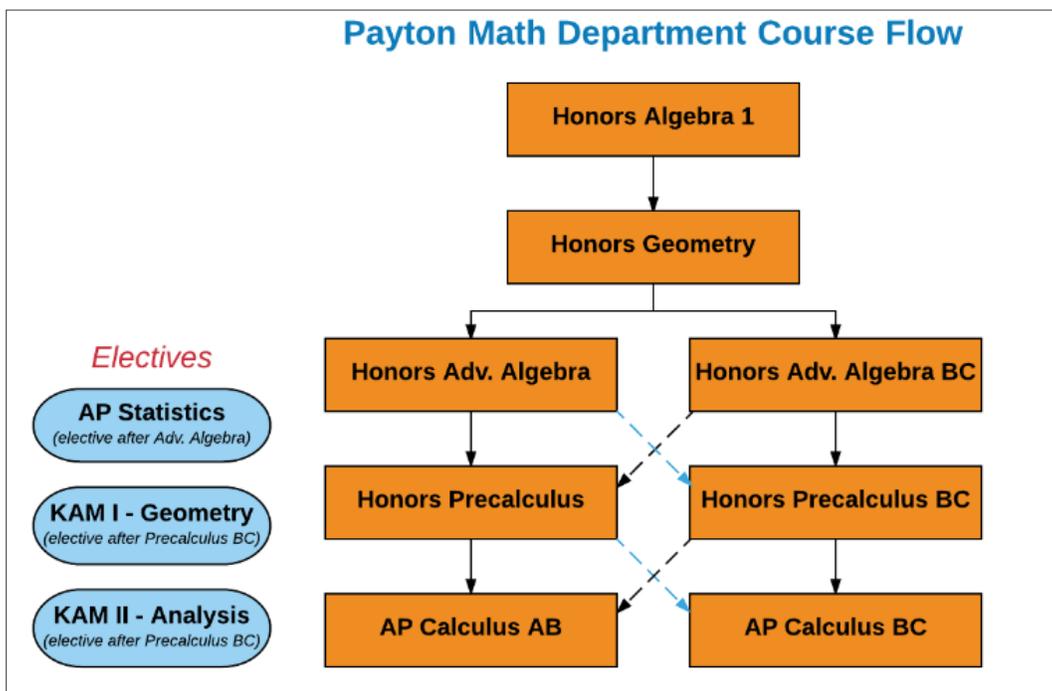
Drama II will introduce the study of advanced acting techniques including Stanislavski, Meisner, Viewpoints, etc. using scripted material, improvisation, and physical work. This course focuses on developing the fundamental skills used in rehearsing and performing modern realistic plays. Through an exploration of various acting techniques, students acquire the tools and skills necessary for honest characterization. Students will also study

and apply directing skills and techniques. Directors will work with actors throughout the entire course and learn techniques on how to communicate with actors and evoke natural, spontaneous performances. Directors will focus on detailed scene work as well as the practical and technical aspects of directing. This class will be a multi-level class incorporating students in Drama I.

Prerequisite: Drama I

Graduation Credit Earned: College/Career; Elective

MATHEMATICS



Honors Algebra I

Students learn to manipulate algebraic expressions and use them to model real world phenomena. An emphasis is placed on representing problems both graphically and symbolically. Students learn problem-solving strategies and how to recognize, describe, and use number patterns.

1st Semester: Properties of Equality, Substitution and Distribution, Signed Numbers, Algorithms for Solving linear Equations and Inequalities, Linear Graphing, Systems of Equations

2nd Semester: Functions, Exponents, Radicals, Polynomials, Proportions, Quadratics

Prerequisite: none

Graduation Credit Earned: Algebra

Honors Geometry

Investigation, justification and proof are themes repeated throughout this course. With GeoGebra, students investigate geometric situations and learn to justify their conjectures using a variety of methods. Whenever possible, paper folding and other “hands on” methods are used to introduce concepts.

1st Semester: Habits of Mind, Constructions, Congruence, Area

2nd Semester: Volume, Similarity, Coordinates, Vectors, Trigonometry

Prerequisite: Algebra I

Graduation Credit Earned: Geometry

Honors Advanced Algebra with Trigonometry

This course reviews material from Algebra I in greater depth and introduces new topics, such as logarithms and exponentials, which will be extended in Pre-Calculus. We use CAS and graphing calculators as a tool for investigation.

1st Semester: Linear Graphs, Functions, Systems of Equations, Quadratics, Right Triangle Trigonometry, Circular Functions

2nd Semester: Exponentials, Logarithms, Polynomials, Rational Expressions

Prerequisite: Algebra I and Geometry

Graduation Credit Earned: Adv Alg/Trig

Honors Advanced Algebra with Trigonometry BC

This course revisits some Algebra I material, but at a fast pace and in combination with other ideas and as extensions. Trigonometry is integrated throughout the course, including a study of the unit circle, as well as the laws of sines and cosines. Classroom instruction emphasizes problem solving and discovery over practice. Students are expected to become fluent in paper-and-pencil calculations, and to offer algebraic proofs of identities and extensions. The course reviews basic statistics and connects those ideas to combinatorics and the Binomial Theorem.

1st Semester: The Real Number System, Combinatorics, Linear Equations and Inequalities, Systems of Equations, Exponents, and Factoring

2nd Semester: Rational Expressions, Radicals, Quadratics, Exponentials, Logarithms, and Complex Numbers

Prerequisite: Algebra I, and an A or B in Geometry

Graduation Credit Earned: Adv Alg/Trig

Honors Pre-Calculus

All of the functions that are necessary to take a full Calculus course are studied here. Polynomial, rational, exponential and logarithmic functions are studied in greater depth than in Algebra 2. Unit circle trigonometry is revisited, this time with the introduction of radian angle measures, along with graphing in the coordinate plane and manipulations using identities. Transformation of functions is a recurring theme of this course and receives strong emphasis. Finally, the concept of the derivative is developed in anticipation of Calculus. As in all math courses at Walter Payton, students learn to move fluidly between graphic, numeric and symbolic representations of functions.

1st Semester: Transformations of Functions, Exponentials, Logarithms, Trigonometry

2nd Semester: Further Trigonometry, Polynomials, Rational Functions, Conic Sections, Limits, Derivatives

Prerequisites: Advanced Algebra with Trigonometry

Graduation Credit Earned: Pre-Calculus; College/Career; Elective

Honors Pre-Calculus BC

Honors Pre-Calculus BC extends and deepens the concepts of Honors Algebra II BC while allowing the students to explore newer ideas as well, providing them with a solid foundation for AP Calculus BC and beyond. Students should leave the course with the facility to perform algebraic manipulations, to see structure at various levels in mathematical expressions, to achieve desired geometric transformations of graphs, to encode given information in mathematical relations, to optimize relevant quantities, to determine and interpret rates of change, to work in the coordinate system that is natural to a given scenario, and to persevere in solving problems.

Effectively a double-honors course, Honors Pre-Calculus BC spends less time on review to allow more time on solving interesting problems. In nearly all activities, students collaborate in the problem-solving process, forming and testing conjectures while critiquing the ideas of others, thus engaging in the Standards for Mathematical Practice as defined by the Common Core. The mathematics is understood in terms of big ideas, and connections are made frequently with concepts from Honors Geometry and Honors Algebra II BC. Furthermore, topics specific to the AP Calculus BC curriculum are covered during the year, and students completing Honors Pre-Calculus BC will have seen what is essentially the first quarter of college-level introductory calculus course.

The mathematical content of the course includes Parametric Equations; Relations and Transformations; Rates of Change; Sequences and Series; Counting and Probability; Inductive Proof; Exponential, Logarithmic, Logistic, Radical, and Rational Functions; Triangle Trigonometry; Unit Circle Trigonometry; Trigonometric Identities and Equations; Polar Graphing; Vectors; Complex Numbers; Theory of Equations; Conic Sections; and Markov Chains.

Prerequisites: A or B in Advanced Algebra with Trigonometry BC

Graduation Credit Earned: Pre-Calculus; College/Career; Elective

Advanced Placement Calculus AB

Students will learn Calculus through multiple representations - numeric, graphic and symbolic. The graphing calculator will be used to develop conceptual understanding, and traditional paper manipulation will be emphasized. The outline for this course, AP Statistics and AP Calculus is available through the College Board's website (collegeboard.com). All students will be expected to take the AP exam in May. Many colleges will grant *one* semester of Calculus credit for successful completion.

1st Semester: Continuity, Limits, and Derivatives with Applications

2nd Semester: Integrals, The Fundamental Theorem of Calculus, Polynomial Approximation and Series

Prerequisites: Pre-Calculus

Graduation Credit Earned: College/Career; Elective

Advanced Placement Calculus BC

All of the topics in AB Calculus are included in BC Calculus; additional topics include Taylor Series, Parametrics as well as polar Equations, Vectors, L'Hospital's Rule, Euler's Method and Improper Integrals. The outline for this course, AP Statistics and AB Calculus is available through the College Board's website (collegeboard.com). All students will be expected to take the AP exam in May, for which many colleges will grant *two* semesters of Calculus credit.

1st Semester: Continuity, Limits, Derivatives with Applications, Integrals, and The Fundamentals Theorem of Calculus.

2nd Semester: Approximation and Series, Taylor Series, Improper Integrals, Vector Calculus, Calculus in Polar Coordinates

Prerequisites: A or B in Pre-Calculus BC

Graduation Credit Earned: College/Career; Elective

Advanced Placement Statistics

The Advanced Placement course in statistics will introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: (1) exploring data: observing patterns and departures from patterns; (2) planning a study: deciding what and how to measure; (3) anticipating patterns: producing models using probability theory and simulation; and (4) statistical inference: confirming models and using sample data to make inferences about the entire population. Students will learn to use statistics software both on the computer and on the TI-83 calculator, and the course will not emphasize rote computation, but rather interpretation of the computed output. All students

will be expected to take the AP exam in May, for which many colleges will grant credit and placement for freshman statistics.

Prerequisites: Advanced Algebra with Trigonometry or Advanced Algebra with Trigonometry BC (C or higher is recommended)

Graduation Credit Earned: College/Career; Elective

Honors Advanced Mathematics (KAM) I (Offered alternating years)

KAM-I/Geometry is a college-level course similar to 100- or 200-level courses in advanced geometry (first semester) and dynamical systems (second semester). The course begins with topics in Euclidean geometry beyond what is covered in the Geometry I curriculum: advanced constructions, triangle centers, the Fermat Point, the Nine Point Circle, etc. We discuss the algebra of transformations and include an in-depth look at synthetic inversion. In the second quarter we will go on to study axiomatic non-Euclidean Geometry, including Hilbert's axioms, Spherical, and Hyperbolic geometry. The second semester of KAM I will involve a thorough introduction to iteration, fractals, and chaos, including some advanced work with metric spaces and dynamical systems theory. Julia sets and the Mandelbrot sets will be studied at the conclusion of the course. Both semesters involve writing rigorous proofs, weekly problem sets, and a few out-of-class projects of various lengths; during the first semester, all students will complete an independent math research project.

1st Semester: Advanced Euclidean geometry, Inversion, Absolute, Spherical, Hyperbolic geometry

2nd Semester: Iteration, Fractals, Chaos, fractional dimension, Complex dynamics, Julia sets, the Mandelbrot set

Prerequisites: A or B in Advanced Algebra with Trigonometry

Graduation Credit Earned: College/Career; Elective.

Honors Advanced Mathematics (KAM) II (Offered alternating years)

KAM II/Analysis aims to introduce students to three core areas of mathematics while developing the capacity to solve problems, make and probe conjectures, and prove theorems. Course topics will include number theory, analysis of functions, and, time permitting, the theory of computation; specific subtopics, and the amount of time allocated to each topic, will be decided throughout the year based on students needs and interests.

Prerequisites: A or B in Pre-Calculus BC

Graduation Credit Earned: College/Career; Elective.

Note: Students who are considering enrollment in a qualified accelerated summer math program should discuss their summer plans and programming options with the Math Department Chair before enrolling in the math program and prior to programming themselves in Payton Sound Programming.

PHYSICAL EDUCATION

State law requires all Illinois public school students to be enrolled in a physical education course for 4 years. At Payton juniors and seniors can take the following courses:

- Honors Dance (Fulfills fine arts credit and meets the PE enrollment requirement)
- Honors Personal Fitness and Wellness
- Honors Anatomy & Physiology (Fulfills non-lab science credit and meets the PE enrollment requirement)

Payton juniors and seniors may meet the following exemptions:

- Ongoing, active participation in an IHSA-approved sport the previous year and a commitment to participate in the same sport during the applicable academic year.
- Participation in an external adaptive physical education program. Please consult the special education case manager.
- Enrollment in AP Capstone. These students are required to take three AP courses in addition to the two years of AP Capstone. These students are waived from years three and four of Physical Education.
- In very rare instances, a student may be exempt if they need to take courses to recover credits not earned as a freshman or sophomore and/or if a college requires a prospective student to take a specific assortment of courses in order to be considered for admission (Please see your counselor.)

More about the exemption for student-athletes who participate in an IHSA-approved sport:

- Students must participate in one of the IHSA-approved sports offered at Payton or through the Payton-Jones Co-op:
 - **Girls:** Basketball, Bowling, Cheerleading, Cross Country, Golf, Soccer, 12-inch Fast-pitched Softball, Swimming and Diving, Tennis, Track and Field, Volleyball, Water Polo, Poms, Lacrosse
 - **Boys:** Baseball, Basketball, Bowling, Cross Country, Football, Golf, Soccer, Swimming and Diving, Tennis, Track and Field, Volleyball, Water Polo, Lacrosse
- Participation in 'emerging sports' and/or 'special activities' do not exempt a student from the 4-year PE requirement. Similarly, participation in a non-IHSA sport such as boys' 16-inch softball does not exempt a student.
- 'Ongoing participation' means the student-athlete was an active member of the IHSA-approved sport during the fall, winter, or spring season during the previous academic year and is committed to participating the following academic year.
- 'Active participation' as a member of a Payton athletic team includes participation in: practices; team meetings; conditioning; pre-season, regular-season and playoff (city and state) competitions, and other reasonable components of a competitive, interscholastic junior varsity or varsity interscholastic team.

Student athletes who meet the above requirements are certainly welcome to take additional Payton PE courses. Those who choose to seek an exemption must print, complete, and turn in the Physical Education Waiver Request to the PE department chair by the deadline posted each year. Failure to do so will lead us to believe that you are not seeking the waiver. You will be programmed into a PE course. You will not be able to make an alteration to your schedule after the due date of the waiver request.

For questions regarding the PE requirement, please see the PE chair, the athletic director, or your counselor.

Physical Education I - Health

The course will cover twenty weeks of health and twenty weeks of physical education. The first year course has a heavy emphasis on decision-making skills. The health portion of the twenty weeks will work on the following topics; Wellness, Stress, Muscles & Bones, Nutrition, Human Sexuality (AIDS, Sexually Transmitted Diseases, Reproduction, & Resistance Skills), Drugs (Tobacco, Alcohol, Steroids & Club Drugs), Infectious & Non-Infectious Diseases. The physical education portion will cover a broad overview of adventure education, team sports, individual sports, and aerobic activities, along with pre and post Fitnessgram testing.

Prerequisite: Freshmen only

Graduation Credit Earned: PE I

Physical Education II (with Driver Education)

The course will cover 30 weeks of physical education and ten weeks of driver education. The physical education portion will cover a broad overview of team sports, individual sports and aerobic activities. The driver education portion will cover the basics of driving with the skills necessary to pass the state driving test.

Sophomores who have completed a driver's education course in the summer or previous semester must give a copy of the permit and certificate of completion to the PE II teacher. These students will be enrolled into another physical education class, which meets the same class period, for ten weeks, and then return to their PE II course after the driver's education portion is complete. These students will meet the driver's education graduation requirement and earn a full year of physical education credit on their transcript.

Prerequisite: Sophomores only

Graduation Credit Earned: PE II, Driver's Education requirement

Honors Dance I, II

In this year-long course, students will engage in a variety of dance-based physical activities designed to promote and create lifelong health and fitness skills. Students will develop kinesthetic awareness, proper body alignment, strength, flexibility, as well as learn general dance principles and dance history/culture/connections. This course is also designed to further establish students' artistic appreciation in addition to their understanding of dance as an art form. The curriculum emphasizes students' acquisition of beginning to intermediate movement skills and refined motor control through the study of ballet, jazz, modern, and other dance techniques. Students' movement experiences will also include dance combinations, choreography, and performances throughout the year.

Prerequisite: Juniors and seniors only; PE I and PE II.

Graduation Credit Earned: Fine Arts –Dance; College/Career; Elective. Also satisfies PE III or PE IV enrollment requirement.

Honors Intro and Advanced Personal Fitness and Wellness

These are year-long courses covering group fitness, circuit training activities, core strength, weight training, cardiovascular fitness and plyometrics. Many activities in adventure education as well as orienteering and outdoor education will also be explored. Students will participate in activities that improve their individual fitness capacity at all levels including cardio/respiratory capacity, muscular strength, endurance as well as flexibility while learning about the kinesiology of muscles, power, balance and speed. Students with credit for Intro to Personal Fitness and Wellness can enroll in the advanced course the following year.

Prerequisite: Juniors and seniors only; PE I and PE II, (Intro is the prerequisite for advanced course.)

Graduation Credit Earned: Elective. Also satisfies PE III or PE IV enrollment requirement

SCIENCE

Honors Astronomy

Astronomy is the study of the universe, basically everything outside of our own small planet. This course will cover a wide variety of topics from ancient astronomy to the newest discoveries and theories. Topics may include: familiarity with the night sky; cosmology; stars and galaxies; past and future explorations; exoplanets and the use of technological tools. Emphasis will be placed on modeling, inquiry learning, and technology.

Prerequisite: Juniors and seniors only

Graduation Credit Earned: College/Career; Elective; (Meets lab science requirement)

Honors Biology

Honors Biology examines the living world using the knowledge and skills students have acquired in Physics and Chemistry. The explosion of information that occurred since the elucidation of the structure of DNA exemplifies the connections among the sciences. Students in this course will examine cell structure and function, energy relations within and among cells, genetics, evolution and the relationship between organisms and their environment. The threads that unite the sciences will be emphasized and students will be encouraged to make connections with prior knowledge.

Prerequisite: Chemistry or AP Chemistry

Graduation Credit Earned: Biology (Meets lab science requirement)

Honors Biotechnology

Honors Biotechnology gives students a comprehensive introduction to the scientific concepts and laboratory research techniques currently used in the field. In addition, students develop the laboratory, critical thinking, and communication skills currently used in the biotechnology industry. Furthermore, students will explore and evaluate career opportunities in the field of biotechnology through extensive readings, laboratory experiments, class discussions, and research projects. Course objectives include both academic knowledge (theory and facts) and technical skills (laboratory techniques), and are presented in a progressively rigorous manner.

Prerequisite: Biology or AP Biology

Graduation Credit Earned: College/Career; Elective

Honors Chemistry

Honors Chemistry is a physical science course extending freshman physics. This course is designed to be student-centered and lab-intensive. Students will use experimentation to discover and support chemical concepts and theories with a hands-on approach. Lectures are minimized, and students will spend the majority of class time working in small groups or analyzing concepts in a laboratory setting. By the end of this introductory course, students will be well versed in atomic theory, be able to qualify and quantify chemical reactions in all states of matter, discuss how energy is involved in chemical reactions and phase transformations, define how structure is related to chemical properties and reactivity, and to integrate previous knowledge such as energy conservation and forces to illustrate chemical behavior at a molecular level.

Prerequisite: Physics

Graduation Credit Earned: Chemistry (Meets lab science requirement)

Honors Human Anatomy & Physiology

This course presents the study of basic biochemical principles as applied to body systems (such as the nervous, circulatory, respiratory, skeletal, integumentary, and muscular). Instruction in these systems is offered via

lectures, field trips, speakers, laboratory dissections and hands on activities. This includes microscopic (examination of tissues and cells) and macroscopic (dissection of hearts, brains and eyes) examinations.

Prerequisite: Juniors and seniors only

Graduation Credit Earned: College/Career; Elective; also satisfies PE III or PE IV enrollment requirement

Honors Physics

Honors Physics is the introductory physical science course at Payton. Honors Physics provides a firm foundation for future studies in the physical and biological sciences by exposing students to fundamental scientific concepts, developing students' hands-on laboratory skills and mathematical reasoning abilities, and instilling habits of mind that are vital to learning in all contexts. The first semester introduces students to data collection and error analysis through the study of vibrations and waves of many kinds. Work and energy conclude the first semester. The second semester provides an exciting exposure to electricity and magnetism.

Prerequisite: none

Graduation Credit Earned: Physics (Meets lab science requirement)

Advanced Placement Biology

Advanced Placement Biology is the equivalent of a college level introductory biology course usually taken by biology majors. Passing the AP Biology exam in May normally qualifies the students for college credit. The course aims to provide students with the conceptual framework, factual knowledge and analytical skills necessary to deal critically with the rapidly changing science of biology. The topics covered include those of high school biology as well as the anatomy and physiology of both plants and animals. Topics in this AP course are covered in a much broader range and in greater depth than in high school biology. The lab work required is inquiry-based and time intensive as in a college class. Most homework concerns the daily reading of the college level text. Students, who have an interest in biology, are highly motivated and have a great deal of self-discipline will do well in this course. In order to accommodate the extensive class and lab work required, students must enroll in AP Biology as a double period. Dissection is required.

Prerequisite: A or B in Chemistry and/or current science class

Graduation Credit Earned: Biology (Meets lab science requirement); College/Career; Elective

Advanced Placement Chemistry

Advanced Placement Chemistry is an in-depth, critical examination of the study of matter. There are five specific segments: Structure of Matter, States of Matter, Chemical Reactions, Descriptive Chemistry, and Laboratory. Specifically, the AP Chemistry course is an extension of Honors Chemistry, and introduces new concepts such as computer modeling of molecules, crystallization, organic chemistry, nuclear chemistry, reaction equilibria, quantitative analysis, thermochemical analysis and thermodynamics. This course is equivalent to an introductory collegiate chemistry class, and the comprehensive laboratory will include experiment design, instrumental analysis, and formal presentation of data in written and verbal formats. In order to facilitate the extensive class and lab work, students must enroll in AP Chemistry as a double period.

Prerequisite: A or B in Chemistry and current science class.

(Rising sophomores without Chemistry credit may be considered for this course- see your current science teacher. A signed consent form is required.)

Graduation Credit Earned: Chemistry (Meets lab science requirement); College/Career; Elective

Advanced Placement Environmental Science

A college course revolving around ecology, systems of Earth, nonrenewable and renewable resources, consequences of pollutants, conservation, and concerns for the future. This course will allow students to make connections between human actions and environmental impacts, an ever increasing concern in today's society.

Students will study environmental topics on a global scale. Laboratory and field studies will follow recommendations set by the College Board. Community service projects will be built into the curriculum.

Prerequisite: Biology or Chemistry, and/or A or B in current science class.

Graduation Credit Earned: College/Career; Elective (Meets lab science requirement)

Advanced Placement Physics C: Mechanics

This course corresponds to the second semester of a collegiate introductory physics sequence, for students planning to specialize in a physical science or engineering, and utilizes guided inquiry and student centered learning, to foster the development of critical thinking skills. Furthermore, introductory differential and integral calculus throughout the course, to investigate the following content areas in depth: kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Previous or concurrent enrollment in Calculus is expected.

Must be taken concurrently with AP Physics C: Electricity and Magnetism

Prerequisite: Successful completion of Pre-calculus

Graduation Credit Earned: College/Career; Elective (Meets lab science requirement)

Advanced Placement Physics C: Electricity and Magnetism

This course corresponds to the second semester of a collegiate introductory physics sequence, for students planning to specialize in a physical science or engineering, and utilizes guided inquiry and student centered learning to foster the development of critical thinking skills. Furthermore, introductory differential and integral calculus throughout the course, to investigate the following content areas in depth: electrostatics; conductors, capacitors and dielectrics; electric circuits; magnetic fields; and electromagnetism.

Must be taken concurrently with AP Physics C: Mechanics

Prerequisite: Successful completion of Pre-calculus

Graduation Credit Earned: College/Career; Elective (Meets lab science requirement)

SOCIAL SCIENCES

Honors World Studies

The objective of this introductory survey course is to help students understand how the world has arrived at its present condition through studies of past developments. The themes of civilization-building, cultural, social, and political development, cross-cultural interaction, and the rise, fall and reorganization of states are addressed through a chronological and thematic global approach. Mastery of this content helps students learn to view the world through various social sciences - as geographers, historians, political scientists, economists, anthropologists, and sociologists.

Prerequisite: Freshmen only

Graduation Credit Earned: World Studies

Advanced Placement Human Geography

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. The course covers a broad range of topics including economics, political geography, urban studies, culture, population, and agriculture. Students also learn about the methods and tools geographers use in their science and practice. Throughout the course students will ask the fundamental question that geographers are concerned with: where and why? Upon successful completion of this course, students will be able to:

- Use and think about maps and spatial data.
- Understand and interpret the implications of associations among phenomena in places.
- Recognize and interpret at different scales the relationships among patterns and processes.
- Define regions and evaluate the regionalization process.
- Characterize and analyze changing interconnections among places.

Prerequisite: Freshmen only

Graduation Credit Earned: World Studies; College/Career; Elective

Honors United States History

U. S. History offers students a survey of the major social, political, cultural, and economic movements from colonial times to the modern day. While the course is a survey course, recurring themes and ideologies resonate throughout the course, including diversity, identity, expansion, and (in)tolerance. By examining diverse cultural texts and historical documents we will work to understand what "America" means and what it means to be American. We investigate whether a shared cultural and historical American heritage informs our notions of citizenship and national identity and ask "What is the American Dream?"

Prerequisite: World Studies or AP Human Geography

Graduation Credit Earned: US History

Advanced Placement United States History

AP U. S. History is a demanding introduction to American History and culture that assumes a high level of interest and competence on the part of the student. Because this course is similar to a first-year college course,

students should expect a heavier workload than most regular high school history courses. The analytical thinking, writing, and reading skills that students develop in AP US History will equip them for college and lifelong learning.

Prerequisite: A or B in World Studies or AP Human Geography
Graduation Credit Earned: US History; College/Career; Elective

Electives

Students must take at least one elective in addition to the World Studies/AP Human Geography requirement and US History/AP US History requirement. Beginning with the class of 2020, one of those electives must be Honors Civics/Elective or AP US Government in order to meet the Civics graduation requirement.

The consumer education graduation requirement will be met in students' Social Science elective.

Honors Civics/Honors Contemporary American History

One semester: **Civics** Who is included in "we the people?" Was its meaning defined in 1787 or does it change over time? If it does change, what determines the change? What are the reciprocal rights and responsibilities between people and their government and among people? Why do these rights and responsibilities exist? In this course students will explore both history and current events to investigate answers to these questions and practice the skills of healthy democracy. Through simulations and real world experiences students will learn how to be engaged and active in their community and government.

One semester: **Contemporary American History** This course will be taught through the theme of The Cold War. For forty years, the United States and the Soviet Union participated in an unusual struggle for world power. Through first-hand accounts as well as secondary interpretations, the course explores the progression of the Cold War from 1945 to 1991—from the birth of a Superpower to the fear of extinction to the dangerous dance of diplomacy and eventual demise of a Superpower. The course hopes to answer questions such as the following: Why did the United States and the Soviet Union build such large arsenals? How do nuclear weapons keep you safe? What role does international politics play in civil wars? Should statesmen support coups or revolutions to best protect the interests and physical security of their countrymen? Are violent conflicts unnecessary or preventable? Why does a stronger nation strike a weaker one?

These courses are open to all students, grades 9-12. They build on the skills, ideas, and themes developed in other social studies courses.

Prerequisite: none

Graduation Credit Earned: Social Science Elective; College/Career; Elective, and meets Civics Grad Requirement

Honors Human Rights/Honors Sociology

One Semester: **Human Rights** What exactly are human rights? Should international law have an impact on US behavior? Why is your iPhone not PC? Is globalization good or bad for human rights? What motivates people to engage in evil behavior that violates others' human rights? How can other people just stand by while atrocities, such as genocide, occur? What motivates others to risk their lives to try to save strangers? This course aims to investigate these questions and provide the necessary historical background to current conflicts. It is designed to make complex historical phenomenon understandable as well as to demonstrate to students the range of options that existed which could have significantly altered the course of the 21st century.

One semester: **Sociology** Sociology is an introduction to the systematic scientific study of human society. Students will utilize the scientific method as it applies to sociological research, develop an understanding of major core concepts of sociology, and apply these concepts to their own lives and modern day society. Students will begin the semester by developing an understanding of major principles of sociology and social psychology

and apply these findings to various sociological concepts including: delinquency and the prison system, race, sex and gender, and socioeconomic stratification. Why are African Americans disproportionately represented in the criminal justice system? Why do women make up only 4.6% of Fortune 500 CEO's but make up roughly 50% of the population? All of these are questions that will be examined in this class.

Prerequisite: Juniors and seniors only

Graduation Credit Earned: Social Science Elective; College/Career; Elective

Advanced Placement Microeconomics

Do seatbelts increase automobile accidents? Are cashmere sweaters too cheap, even at a price of \$100? Can a minimum "living" wage cause more harm than good? Why are illegal drug cartels diversifying into the avocado business? Are drug dealers rational in the first place? How can cable companies be so customer-unfriendly? AP Microeconomics, like all social science courses, examines human behavior. This course underscores that in the face of scarcity, choices must occur. Students will examine how individual decision-makers, such as consumers, producers, and organizations, behave when confronting scarcity. Using concepts of demand, supply, opportunity cost, efficiency, equity, comparative advantage, incentives, transaction costs, and property rights, students will explore methods by which economic decisions occur, and resources are allocated, in a world of unlimited wants but limited resources. The course places emphasis on the study and application of economic theory through experiential learning and analysis of current events. Together we will explore why gas stations often appear right across the street from one another; why Chicago contains hundreds of taco joints but only one electric company; why college costs so much. From pollution to human organ trafficking, to nuclear weapons and game theory, we will learn to look at the world through the powerful lens of economics. Once the AP exam is over, we'll delve into personal finance skills, including money management and financial literacy.

Prerequisite: A or B in US History, AP US History or current social science class

Graduation Credit Earned: Social Science Elective; College/Career; Elective

Advanced Placement Psychology

What affects your behavior and mental processes? Is it genetics, environment, or a combination of both? This year-long course is meant to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and animals. Students are exposed to the psychological facts, principles and phenomena associated with the major fields within psychology. They also learn about the methods psychologists use to explore the processes involved in normal and abnormal perceptions, thoughts, feelings and actions. The course aims to instill knowledge, skills and attitudes that are applicable to their own lives and to prepare them for the AP Psychology exam.

Prerequisite: A or B in US History, AP US History or current social science class

Graduation Credit Earned: Social Science Elective; College/Career; Elective

Advanced Placement United States Government

How did Barack Obama win the presidency? Is democracy the best form of government (note: totalitarianism is far more efficient)? Do representatives actually represent their constituents and should they represent their constituents (or is it more important for them to do what they think is best regardless of the interests of their constituents)? What do Locke, Bentham, Mill, Voltaire, JFK, and you think about this? Will a \$2,500 campaign donation get you a meeting with a U.S. Senator? Why is it that most people think the Electoral College should be abolished, but there are no serious efforts to abolish it? Why is it that, if you want your vote to really matter, you should move to Idaho? What are the rules surrounding one's freedom of speech and search and seizure (e.g. can the government troll a high school student's e-mail or cell for illicit material) and other constitutional issues? Why is it that conservatives want the federal government to spend billions of dollars on defense, but far

less (if any) federal money on education? Why do liberals want the federal government to spend more by taxing wealthy Americans at a higher tax rate than other Americans? Students in A.P. U.S. Government explore these and similar inquiries about our particular American form of democracy. Students explore the numerous factors that weigh upon the policy-making process and recognize the political philosophies that underpin the form and function of our government. Students will delve into topics relating to the Constitution, citizens' beliefs and behaviors pertaining to government, translating institutions (including political parties, interest groups, political action committees, media), the legislative, executive (including bureaucracy), and judicial branches of government, the policy-making processes and specific policy areas (including economic, social, welfare, military and foreign policies), and civil liberties and civil rights. Students in this course will also participate in the American Constitutional Law Program, wherein they will work with mentor attorneys to digest a current U.S. Supreme case and make oral arguments for that case to a panel of judges. (The American Constitutional Law Program occurs during course time; it is not an extracurricular activity.)

Prerequisite: Juniors or seniors; A or B in US History, AP US History or current social science class

Graduation Credit Earned: Social Science Elective; College/Career; Elective and meets Civics Grad Requirement

Advanced Placement World History

AP World History is a demanding course that takes a wide-angle view of human history, spanning millennia (8000 B.C.E. –present), focusing on certain examples of different types of human societies, and always looking for trends in global processes. This course focuses on selective factual knowledge and appropriate analytical skills to examine evidence and assemble arguments like a historian, such as examining causes and consequences and making comparisons among major societies. In doing so, this course examines how cultural, political, and technological trends continue or change over time. Some of the big guiding questions of the course are: Why have there always been inequalities between people? Why have certain societies had more or fewer inequalities based on race/gender/class? What is power? How have governments and people interacted through cooperation and contention? Are there alternatives to modern arrangements of power? How have religions and belief systems influenced both individual lives and the long arc of history? What makes a new idea a “good” one that gives it influence in the history of the world? How have people been connected (or separated) through systems of exchange and trade? How and why have different societies experienced similarities and differences? How and why have the conditions in different societies transformed over time? What do historians do? How do we know what we “know” about the past?

Prerequisite: A or B in US History, AP US History or current social science class

Graduation Credit Earned: Social Science Elective; College/Career; Elective

WORLD LANGUAGE

Modern World Languages curriculum at every level will be centered on overarching themes from the Advanced Placement and ACTFL's Keys to Planning curricula, including Personal and Public Identities, Families and Communities, Contemporary Life, Beauty and Aesthetics, Science and Technology, Global Challenges, Well-Being, Exploring Time and Place, Creativity, and Discovery.

The Latin curriculum will be centered on American Classical League standards (https://www.aclclassics.org/uploads/assets/files/Standards_Classical_Learning.pdf) and the College Board's Advanced Placement Latin (Vergil) Course.

The [Comprehensible Input Theory](#) of language acquisition is the guiding philosophy in all World Languages and levels, and is accomplished through teacher and student input, incorporation of authentic materials from multiple print and multimedia sources, and skill-building through the use of formative and summative performance-based assessments in interpersonal communication, presentational speaking and writing, and interpretive listening, reading and writing, according to the [American Council of the Teaching of Foreign Languages Can-Do Benchmarks](#) outlined for each level below.

Honors French I, Mandarin I, and Spanish I

Level: Novice Low to Novice High

Upon successful completion of the Level I course, it is expected that students will perform at the Novice High proficiency level in all skill areas, and be able to do most of the following, within the context of everyday life: communicate and exchange information about familiar topics using phrases and simple sentences, sometimes supported by memorized language; handle short social interactions in everyday situations by asking and answering simple questions; present basic information on familiar topics using practiced language using phrases and simple sentences; write short messages and notes on familiar topics and often understand words, phrases, and simple sentences; recognize pieces of information and sometimes understand the main topic of what is being said; understand familiar words, phrases and sentences within short and simple texts; can sometimes understand the main idea of what is read. Target language culture(s) will be embedded in thematic units throughout the year.

Graduation Credit Earned: World Language; College/Career; Elective

Honors Latin I

The Latin I class is a window into one of the most fascinating civilization that has left such a captivating impact on our own civilization. The main focus of the class is to provide the skills needed for reading and translating the Latin language. This will be done by learning the grammar, syntax, and vocabulary of the language. To fully understand the ancient Romans and see the connections to our own world, students will also become historians, archaeologist, anthropologist, art historians along the way. Students will learn Roman mythology and connect it to literature and art. Latin I students are required to take the National Latin Exam and encouraged to participate in the CPS Latin Olympics and the Illinois Certamen Competition.

Graduation Credit Earned: World Language; College/Career; Elective

Honors French II, Mandarin II, and Spanish II

Level: Novice High to Intermediate Mid

Upon successful completion of the Level II course, it is expected that students will perform at the Intermediate Mid level in all skill areas, and be able to do most of the following: participate in conversations on familiar topics using sentences and series of sentences; handle short social interactions in everyday situations by asking and answering a variety of questions; usually say what he/she wants to about his/her everyday life; make presentations on a wide variety of familiar topics using connected sentences; write on a wide variety of familiar topics using connected sentences; understand the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies; understand the main idea in conversations that are overheard; understand the main idea of texts related to everyday life and personal interests or studies. Target language culture(s) will be embedded in thematic units throughout the year.

Prerequisite: Successful completion of level I or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Honors Latin II

The Latin II course builds on previously learned skills of Latin I. In this second year most grammatical structures will be acquired by the student. Students will begin to read first hand historical accounts that will allow them to further their understanding of Roman expansion. Students will focus on the history of the Republic, the Punic wars, and the civil wars leading to the beginning of the Empire. They will continue to learn about Mythology and the stories that will be related to text of future readings. The students of Latin II are required to take the National Latin Exam and encouraged to participate in the CPS Latin Olympics and the Illinois Certamen Competition.

Prerequisite: Successful completion of Latin I or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Honors French III, Mandarin III, and Spanish III

Level: Intermediate Mid to Intermediate High

Upon successful completion of the Level III course, it is expected that students will perform at the Intermediate High level and be able to do most of the following: participate with ease and confidence in conversations on familiar topics; usually talk about events and experiences in various time frames and describe people, places, and things, and handle social interactions in everyday situations, sometimes even when there is an unexpected complication; make presentations in a generally organized way on school, work and community topics, and on topics they have researched; make presentations on some events and experiences in various time frames; write on topics related to school, work and community in a generally organized way; write some simple paragraphs about events and experiences in various time frames; easily understand the main idea in messages and presentations on a variety of topics related to everyday life and personal interests and studies; usually understand a few details of what is overheard in conversations, even when something unexpected is expressed; sometimes follow what is heard about events and experiences in various time frames; easily understand the main idea of texts related to everyday life, personal interests and studies; sometimes follow stories and descriptions about events and experiences in various time frames. Target language culture(s) will be embedded in thematic units throughout the year.

Prerequisite: Successful completion of level II language or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Honors Latin III

The Latin III course focuses on reading authentic Latin text. It is through the authors like Caesar that students will understand the expansion of Rome, with Cicero students will understand the political breakdown of the Roman Republic and the choices made during a civil war, Catullus will allow students to see how poetry and politics can dictate love. Students will also have a chance to read contemporary work of Latin through stories like Harry Potter as well. These readings will strengthen the students' vocabulary as well as appreciate the art of Latin. There will be a focus on literary devices, scansion, plot and character analysis so that the student will master the Latin Language appreciating the full historical connection of the Roman Empire on today's society. Latin III students are required to take the National Latin Exam and encouraged to participate in the CPS Latin Olympics and the Illinois Certamen Competition.

Prerequisite: Successful completion of Latin II or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Honors French IV, Japanese IV, Mandarin IV, and Spanish IV

Level: Intermediate High to Advanced Low

Upon successful completion of the Level IV course, it is expected that students will perform at the Advanced Low Level and be able to do most of the following: participate in conversations about familiar topics that go beyond everyday life; talk in an organized way and with some detail about events and experiences in various time frames; describe people, places, and things in an organized way and with some detail; handle a familiar situation with an unexpected complication; deliver organized presentations appropriate to one's audience on a variety of topics; present information about events and experiences in various time frames; write on general interest, academic and professional topics; write organized paragraphs about events and experiences in various time frames; understand the main idea and some supporting details in organized speech on a variety of topics and personal and general interest; follow stories and descriptions of some length and in various time frames; understand information presented in a variety of genres on familiar topics, even when something unexpected is expressed; understand the main idea and some supporting details on a variety of topics of personal and general interest; can follow stories and descriptions of some length and in various time frames and genres.

Prerequisite: Successful completion of level III language or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Honors Latin IV

Latin IV course offers students the opportunity to read the Aeneid and Caesar's De Bello Gallico in its original text. As the students translate this epic poem and commentaries, they will make connections between Latin grammar and syntax, the story itself and the context of which both authors wrote. This course will help students learn how to read and provide literal translations. As the student read and translate they will also be able to recognize literary device found within the given lines and how to scan lines in order to fully understand word use and beauty of the original Latin. The students will also learn how to use the text as evidence while developing their skills through short and long written responses. Latin IV students are required to take the National Latin Exam and encouraged to participate in the CPS Latin Olympics and the Illinois Certamen Competition.

Prerequisite: Successful completion of Latin III or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Advanced Placement Chinese Language and Culture, French Language and Culture, Spanish Language and Culture

Level: Intermediate High to Advanced Range.

The AP Courses will follow the College Board's Advanced Placement Curricular Themes. Upon completion of AP courses, it is expected that students will perform consistently in the Advanced Range, and be able to: express oneself freely and spontaneously, and for the most part accurately, on concrete topics and on most complex issues; usually support one's opinion and develop hypotheses on topics of particular interest or personal expertise; deliver detailed presentations, usually with accuracy, clarity and precision, on a variety of topics and issues related to community interests and some special fields of expertise; write extensively with significant precision and detail on a variety of topics, most complex issues, and some special fields of expertise; easily follow narrative, informational and descriptive speech; understand discussions on most topics that deal with special interests, unfamiliar situations, and abstract concepts; can sometimes follow extended arguments and different points of view; can easily follow narrative, informational, and descriptive texts; understand what is read on most topics that deal with special interests, unfamiliar situations, and abstract concepts; can sometimes understand extended arguments and different points of view.

Prerequisite: A or B in French III, Japanese III, Mandarin III or Spanish III, or successful completion of French IV, Japanese IV, Mandarin IV, Spanish IV, or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Advanced Placement Spanish Literature

Level: Advanced range. The AP Spanish Literature and Culture course is designed to introduce students to the formal study of a representative body of literature, written in Spanish, from Spain, Latin America and the United States. The course is conducted entirely in Spanish and provides students with ongoing and varied opportunities to develop proficiency in Spanish across a full range of skills, with emphasis on critical reading and analytical writing. It also encourages students to reflect on the many voices and cultures included in a rich and diverse body of literature written in Spanish.

Prerequisite: Successful completion of AP Spanish Language, or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

Advanced Placement Latin: Vergil

AP Latin requires students to read in-depth the poetic and prosaic works of various Roman authors as listed on the AP reading list. Students will read specifically from Vergil's Aeneid and Caesar's Commentarii de Bello Gallico in both Latin and English. As the students translate these works, they will make connections between grammar, syntax and the historical context in which both Vergil and Caesar wrote. Special attention is given to metrical patterns of hexametric poetry, literary and rhetorical figures, and the analysis of scholarly commentaries. Students will also practice sight reading, critical analysis and composing literary responses connecting the precise mechanics of the language and context of the Latin work.

Prerequisite: A or B in Latin III or successful completion of Latin IV, or through Payton placement exam

Graduation Credit Earned: World Language; College/Career; Elective

ADVANCED PLACEMENT CAPSTONE

AP Capstone is a two-year sequence of courses designed to promote students' ability to generate questions, research and understand possible solutions, evaluate what they learn, and synthesize, transform, and transmit their ideas in a variety of formats. In the second year of the course, students complete an independent research project under the mentorship of an outside advisor that they will select with the assistance of their Capstone teacher.

Note: Students who take AP Capstone are automatically granted the PE waiver for PE 3 and PE 4 (even if they take AP Seminar during their sophomore year, although in that case, the waiver won't take effect until 11th and 12th grade). Students who take AP Seminar are committing to take AP Research the following year.

Advanced Placement Capstone I: Advanced Placement Seminar

AP Seminar teaches fundamental research, reading and writing skills at a college level through a sequence of three interdisciplinary units. The direction of these thematic units will be determined in part by student interest and the questions that students themselves generate during daily discussions. Students in AP Seminar should expect a substantial amount of reading, critical thinking, and writing as part of their daily homework load. Students will be responsible, among other assignments, for three major projects: an independent paper of 1200 words (plus 800 words reflection), a group project synthesizing several papers into one essay of 3000 words and a presentation, and an individual research assignment based on a prepared packet of materials. At the end of the course, students will be responsible for selecting a topic and obtaining an off-campus advisor for their yearlong AP Research project.

Prerequisite: An A or B in both English and Social Studies courses. Students who take AP Capstone I (AP Seminar) are committing to take AP Capstone II (AP Research) the following year. A signed consent form is required.

Graduation Credit Earned: College/Career; Elective

Advanced Placement Capstone II: Advanced Placement Research

AP Research consists entirely of an independent research project conducted under the supervision of an off-campus advisor. The final product of this research will be a paper of about 5000 words (25 pages) in length, and a formal presentation with questions and answers.

Prerequisite: Successful completion of AP Capstone I: AP Seminar.

Graduation Credit Earned: College/Career; Elective

ADVANCED STUDIES

The Payton Advanced Studies Program (PASP) is designed to give select twelfth graders the opportunity to pursue a passion that takes them well outside Payton's standard course offerings. Advanced Studies can take the form of an independent study course or an independent project. In 2012-2015, independent study courses included an introduction to modern philosophy, programming and computer science in Java, an introduction to Neuroscience, the study and design of allergen detectors, and a literature and writing course on The American Dream. Projects in 2012-2015 included the development of a prosthetic arm, an interdisciplinary project to design and examine the potential impact of a low-cost water filter, an examination of the experience of Asian-American teenagers through photographs and personal essays, and a video documentary about the Arab-Israeli conflict from the perspective of kids growing up in Israel and the U.S. The common thread is that an independent study course or project has a structured plan to learn, think about, and do something that matters deeply to you.

To enter the program, students must complete a program application. Applications will be reviewed by Mr. Adamji and sent back for revision; only when a final application has been accepted will the student be accepted into PASP.

COLLEGE BRIDGE and ADVANCED ARTS

College Bridge

The College Bridge program is offered through the City Colleges and through the University of Chicago. It allows qualified students to take courses on college campuses with actual college students for dual enrollment, that is, enrolled in the class as both a college class for college credit and as high school class for high school credit. Students wishing to enter the College Bridge program should see their counselors for specific information about applying. More information about courses at the City Colleges is at chooseyourfuture.cps.edu/high-school-college-career/programs/dual-enrollment/. More information about courses at the University of Chicago is at collegebridge.uchicago.edu/academic-year-bridge.

In general, students interested in College Bridge should be aware of the following:

- College Bridge courses are only open to juniors and seniors, and are only available to students who have exhausted Payton's options in a particular field. For example, students who wish to take Biology through College Bridge should already have taken AP Biology (although they need not have taken all other AP Science courses).
- Because of the transportation requirements, students will generally be restricted to taking *either* a course that meets in the afternoon (after 1pm) or taking a course that meets on Tuesdays and Thursdays at 8:00am. Students will have two periods blocked out of their schedules (either periods 1 and 5 or periods 4 and 8) plus potentially a lunch period (2A or 7B, depending on whether the course is morning or afternoon).
- Freeing up these periods is a substantial constraint on seniors' schedules; students enrolled in College Bridge should assume that they may not get their first choices of other courses. Students taking afternoon College Bridge courses will generally also miss their enrichments on days when the course meets.
- Regardless of the college or university's policies, students enrolling in College Bridge must take College Bridge courses both semesters (or all three quarters) of the academic year.
- College Bridge courses will be listed as "A" (Advanced) courses and count as such on students' transcripts.

Advanced Arts

The Advanced Arts program at Gallery 37 provides students with the opportunity to work deeply in the visual and performing arts, including Culinary Arts, 3D Computer Modeling, Video Production, and Graphic Design. Admission is by application and audition at Gallery 37; scheduling Advanced Arts involves many of the logistical issues mentioned above for College Bridge. More information is at advancedarts.cps.edu.