

Upper School Course Offerings 2020-2021

Sacred Heart Academy 480 Bryn Mawr Avenue Bryn Mawr, Pennsylvania, 19010

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Sacred Heart Academy Goals

As a member of the Network of Sacred Heart Schools, Sacred Heart Academy, Bryn Mawr, commits itself to educate to:

A personal and active faith in God;
A deep respect for intellectual values;
A social awareness which impels action;
The building of community as a Christian value; and Personal growth in an atmosphere of wise freedom.

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Graduation Requirements

English (4 years): Must include Literary Genres, British Literature, and American Literature.

Theology (4 years): Must complete four years of theology courses.

Social Studies (3 years): Must include World History, European History, and American History.

Science (3 years): Must include Biology, Chemistry, and Physics.

Mathematics (3 years): Must include Algebra I, Algebra II, and Geometry.

World Languages (3 years): Must progress to the third year of a language AND complete three years of a world language.

Arts (2 semesters): Must include Visual Arts I and Visual Arts II.

Electives (8 semesters): Seniors must take four elective classes, including 3 academic classes.

Wellness (2 semesters): Freshmen and sophomores must take a semester of Wellness.

College Counseling (2 semesters): Juniors and seniors must take a semester of College Counseling.

^{*}All courses which Sacred Heart Academy anticipates offering for the 2020-2021 academic year are included in this guide. However, courses that do not have sufficient enrollment will not be offered. Enrollment in elective courses is not guaranteed.

English Department

Literary Genres

The goal of the ninth-grade literary genres course is to introduce students to an array of literary genres in order to sharpen their skills at analyzing literature. Students study both fiction and nonfiction works in order to improve their familiarity with the traditions of literary writing. They learn to identify genres as well as the elements specific to each genre. At the culmination of the course, students recognize the importance of their past, how it provides the framework to their present and shapes their future. Throughout the course, students develop an understanding and appreciation for the writing process. Students explore arguments in order to support claims, using valid reasoning and relevant and sufficient evidence. Students conduct research projects to answer a question or solve a problem by gathering information from various sources, with careful assessment of the reliability of each source. Texts include *Odyssey, Antigone, How Dare The Sun Rise* and *Romeo and Juliet*.

Honors Literary Genres

The goal of the ninth-grade literary genres course is to introduce students to an array of literary genres in order to sharpen their skills at analyzing literature. Students study both fiction and nonfiction works in order to improve their familiarity with the traditions of literary writing. They learn to identify genres as well as the elements specific to each genre. At the culmination of the course, students recognize the importance of their past, how it provides the framework to their present and shapes their future. Throughout the course, students develop an understanding and appreciation for the writing process. Students explore arguments in order to support claims, using valid reasoning and relevant and sufficient evidence. Students conduct research projects to answer a question or solve a problem by gathering information from various sources, with careful assessment of the reliability of each source. Texts include *Odyssey, Antigone, How Dare The Sun Rise* and *Romeo and Juliet*.

In the honors level course, students are expected to show interest, ability and motivation in order to meet the challenges of the coursework. In Honors Literary Genres, the content provides enrichment not acceleration. Classroom activities and assessments require students to take greater responsibility for their work. The course provides an environment conducive to written expression, discussions and oral presentations. Students are encouraged to evaluate issues, generate and defend arguments and manufacture ideas. The teacher expects an honors level student to produce creative and complex critical thinking skills. Entrance into this course requires department approval.

British Literature

Students in this course study British Literature beginning in the Renaissance period (1500s) and moving through to the early twentieth century. Since the novel was not fully developed or popular until the nineteenth century, the class begins by studying primarily poetry and plays and then moves into the novel. In addition, students engage in diverse writing assignments that allow them to explore ideas and improve writing skills. Writing remains an integral part of the curriculum, as this is a vital skill for all individuals no matter what they decide to do in life. Discussion also serves as an important part of the class, with an emphasis on captivating conversations that help students to articulate their ideas clearly and effectively. Texts include *A Midsummer Night's Dream, A Tale of Two Cities, Frankenstein* and *Pride and Prejudice*.

Honors British Literature

Students in this course study British Literature beginning in the Renaissance period (1500s) and moving through to the early twentieth century. Since the novel was not fully developed or popular until the nineteenth century, the class begins by studying primarily poetry and plays and then moves into the novel. In addition, students engage in diverse writing assignments that allow them to explore ideas and improve writing skills. Writing remains an integral part of the curriculum, as this is a vital skill for all individuals no matter what they decide to do in life. Discussion also serves as an important part of the class, with an emphasis on captivating conversations that help students to articulate their ideas clearly and effectively. Texts include *A Midsummer Night's Dream, A Tale of Two Cities, Frankenstein* and *Pride and Prejudice*.

In the honors level course, students are expected to show interest, ability and motivation in order to meet the challenges of the coursework. In Honors British Literature, the content provides enrichment not acceleration. Classroom activities and assessments require students to take greater responsibility for their work. The teacher expects an honors level student to produce creative and complex critical thinking skills. Entrance into this course requires department approval.

American Literature

American Literature is a survey course that explores our country's literary past through the lens of history. The required readings cover numerous movements including Romanticism, Transcendentalism, Realism and Modernism and Postmodernism, and students discuss how these movements, which affect both literature and art, were influenced by historical change. Texts could include *The Scarlet Letter*, *The Narrative of the Life of Frederick Douglass*, *The Great Gatsby*, the poetry of Emily Dickinson, various short stories by women and *Homegoing*. In addition, a heavy emphasis is placed on the process of writing. Students draft, revise and complete many types of papers for various audiences over the course of the year, including the college essay. One major project is a jointly-assigned, history-English research paper. This assignment is intended to help students become independent in crafting a thesis, researching an

argument, synthesizing information and documenting resources in a well-written and engaging paper.

AP English Language and Composition

AP Language/Honors American Literature is a survey course that explores our country's literary past through the lens of history. The required readings cover numerous movements including Romanticism, Transcendentalism, Realism and Modernism and Postmodernism, and students discuss how these movements, which affect both literature and art, were influenced by historical change. Texts could include *The Scarlet Letter*, *The Narrative of the Life of Frederick Douglass*, *The Great Gatsby*, the poetry of Emily Dickinson, various short stories by women and *Homegoing*. The honors section of this course requires a more advanced reading, discussion and analysis of these texts, sometimes involving the application of literary theory. As in the College Prep section, a heavy emphasis is placed on the process of writing. Students will draft, revise and complete many types of papers for various audiences over the course of the year, including the college essay. One major project is a jointly assigned, history-English research paper. This assignment is intended to help students become independent in crafting a thesis, researching an argument, synthesizing information and documenting resources in a well-written and engaging paper.

In addition, the honors section of this class has been approved by the College Board as an AP Language course. Students will learn to identify and utilize various rhetorical devices. Special attention is focused on the art of argumentation and the process and craft of writing. AP Language works especially well in conjunction with American Literature as it offers many excellent examples of advanced rhetoric.

AP English Literature and Composition

AP English Literature and Composition is a unique course because it is the culmination of the high school English experience. Students come to the course already prepared with many of the skills they need to be successful on the test. Over the course of the year, we read in a variety of genres from a variety of time periods. Students complete papers that require them to write for different audiences and for different purposes, while at the same time using effective and engaging rhetoric. The revision process is also a key piece of the writing curriculum. This course fosters a love of literature and prepares students to be critical thinkers and effective communicators in college and beyond. This class has been approved as an AP English Literature course by the College Board.

Crime Stories (Fall and Spring Semesters)

A student may register for only one semester of Crime Stories.

This course will explore criminal fiction and nonfiction as it has developed as a formula since the nineteenth century. Students will study the ideological underpinnings of the detective narrative,

the formal requirements of the genre and how the detective figure has shifted over time from a single professional investigator to a team of experts. The course will explore the following questions: What social function do detective narratives serve? What role has true crime played in detective narratives? What do these narratives suggest about the rule of law? Students will read fiction and nonfiction and discuss contemporary popular iterations. In addition to readings and discussions, students will complete a variety of papers and reflections that require them to write for different audiences and purposes.

Voices on the Margins (Fall Semester)

This course is a natural extension of American Literature and will explore a variety of voices that often go unheard. What do these voices have in common? What makes them unique? What makes them American? How do we define American Literature? Who is included and who is left out? Particular attention will be paid to the immigrant experience and to the voices of marginalized groups who have not traditionally been represented. We will focus primarily on books and stories written in the last twenty years and consider where American literature might be headed next

Literature and Technology (Fall Semester)

As humans, we are technological by nature. Whether we need to adapt our environment, communicate with one another or read a course description for an English class, we rely on tools that we or others have designed. In this course, we will explore the past, present, and possible future effects of science and technology on society and humankind, and how we in turn shape science, technology, and society. We will use nonfiction articles, various stories and other media as tools to consider how technology interacts with our bodies, how it affects the stories we tell about ourselves and how society's relationship with technology shifts over time.

Literature and Film (Spring Semester)

This course is for those interested in analyzing the written word as it is translated to the screen. What aspects of the novel are intrinsic to its themes and must be included in the movie? Which elements of the story are essential, and what can or should be changed? Why does the director choose to portray a character in one way, when the author chose a completely different way? Students will read and analyze characters, plots and themes and then see how they are developed in the movie version. Students will study a variety of modern stories and novels and compare and contrast the impact both genres have on the audience.

Creative Writing (Spring Semester)

Creative Writing offers students an opportunity to write in various forms including personal narrative, short story, poetry and playwriting. The course allows students to experiment and to develop their own strengths and voices in a variety of writing styles. A significant amount of

class time is devoted to group workshops in which students share work and offer and receive constructive feedback in a helpful and encouraging atmosphere. The semester-end project gives each student the freedom to create a portfolio in the form she feels best showcases her talents.

Journalism *Not Offered 2020-2021

This course will equip students with an understanding of the principles and practices of journalism. It will offer students an introduction to the profession of journalism as a whole. Students will be introduced to the historical importance of print and online journalism in America. Throughout this course, students will read works from journalists from a variety of genres to gain insight into how they gathered and reported news and information. Students will discuss, examine and practice responsible reporting and journalistic writing techniques as they read, respond to, and write their own news and feature articles. This course will contain strong writing and discussion components. Students will investigate, research, interview, write and edit stories for multiple media platforms as well as engage in ongoing collaborative discussions.

Dystopian Literature *Not Offered 2020-2021

The focus of this course will be on the different definitions of dystopia as explored by authors of novels from a variety of time periods. Students will analyze how these governments, both modern and futuristic, impact individual creativity, population, and progressive thinking. There will be comparisons and contrasts made, and students will debate and discuss the ramifications of the choices depicted as it relates to our society and government today. Novels such as 1984, Handmaid's Tale, Brave New World, A Clockwork Orange are a few examples of the kinds of books we may read. There will be a strong emphasis on class discussion as well as reflective writing.

Literature of the Holocaust *Not Offered 2020-2021

The recent rise in anti-Semitism has made the teaching of the Holocaust even more important. This course will explore the events that gave rise to the Holocaust and the variety of literature and art that emerged from it. Texts may include *Night* by Elie Wiesel, *All But My Life* by Gerda Weissmann Klein and *Maus* by Art Spiegelman. The course will focus on the question: How was such an atrocity allowed to happen, and how can it be prevented from happening again?

Modern Short Story *Not Offered 2020-2021

There is an abundance of material available for exploring this genre. Authors such as Tim O'Brien, John Updike, Jhumpa Lahiri will be studied and analyzed. What is it about this form of literature that is so unique? Short stories can be so powerful, even in a few pages. Why? Students will follow the development of characters, plot and themes in a variety of stories. The course will look for similarities and differences in the distinct styles of certain authors and then students can

look for patterns and templates in short stories that make them successful or not. There will be public speaking components as well as writing assessments throughout this semester course.

Crime and Media Studies *Not Offered 2020-2021

Crime and Media Studies surveys the relationship between crime and the mass media. The course explores how crime, criminals and the criminal justice system are portrayed in the news media and entertainment. Crime is a central cultural focus; people in general are fascinated by movies and television shows focused on criminals and law enforcement. Students will engage in conversations with consideration of criminal behavior and criminal offenders focused on by the media. This course will survey how various media institutions and communicative technologies (television, magazines, newspapers, podcasts, etc.) shape the representation and public perception of criminology and police activity.

Social Studies Department

Honors World History

The World History course begins with the emergence of human civilization in Mesopotamia and traces its development through the Middle Ages. The study of the past exposes students to the central themes of society, such as government, culture and religion. Through an intensive exploration of the Greco-Roman world, students become firmly rooted in the classical foundations of Western Civilization. The investigation of the development of the Arab World and the Middle Ages of Europe allows students to analyze roots of problems that may still exist in the world today. Throughout the course, the importance of writing and research skills is emphasized, as students learn to formulate their own questions and arguments about the past. The use of primary sources and geography is an essential element of the course. By the conclusion of the course, students should be able to make their own judgments about historical evidence and realize history is not just memorization, but an analysis and interpretation of past events.

In the honors level course, students are expected to show interest, ability and motivation in order to meet the challenges of the coursework. In Honors World History, the content provides enrichment not acceleration. Classroom activities and assessments require students to take greater responsibility for their work. The course provides the opportunity for in-depth analysis of primary and secondary sources. Attention is given to understanding one event from multiple viewpoints to make a valid historical argument. Students are encouraged to become independent thinkers and writers throughout the course.

European History

This course will explore the history of Europe from the Renaissance to the present time period. We will explore politics, social changes, religion, economics and inventions, art and architecture, and the impact of influential individuals and groups. We will see how Europeans interacted with each other and the rest of the world. Finally, we will examine the ways in which history can be subjective by exploring different viewpoints. Through the exploration of geography, economics, war, technology, and social themes, we will note how nations are able to both keep tradition and embrace change. Students will learn how to: develop their own ideas and opinions on different historical topics and support these ideas by providing evidence; improve their reading, writing, and questioning skills; clearly express themselves both in class and in their writing; work together in groups to effectively communicate, argue, and problem solve. Some topics covered include: Renaissance, The Reformation, Enlightenment, The French Revolution, Industrial Revolution, new political ideas, the World Wars, and the rise of dictators.

AP European History

This class reflects a college-level survey course to help prepare students for the Advanced Placement exam that is administered nationwide each May by the College Board. It will also help students to strengthen their skills in reading, writing, and analysis that will help prepare them for the work they will encounter in college and elsewhere. This course explores the history of Europe from the late Middle Ages to the present. Students will examine geography, political and social systems, religion, economics and technology, art and literature, and the important growing theme of global interaction. We will see how Europeans interacted with each other and the rest of the world. Much of our focus will be on Spain, England, France, Germany, and Russia. Additionally, we will look at the many "isms" including: Nationalism, Liberalism, Socialism, Industrialism, Capitalism, Anarchism, Marxism, Conservatism, Absolutism, and others. A solid foundation in European history will provide students with the context for understanding the development of contemporary institutions and the role of continuity and change in present-day society and politics.

American History

In American history, students will explore the people, ideas, movements, and events that have helped shape American culture. Through politics, economics, technology, war, civil rights, and other themes, we will see how American culture has evolved while maintaining tradition and embracing change. Additionally, we will examine popular culture through music, film, fashion, and counterculture trends, which frequently reflect culture in fresh and insightful ways. To extend students' frame of reference beyond a national context, local and global connections to U.S. events and phenomena are integrated appropriately throughout the course. Students are expected to develop their own ideas and opinions on different historical topics and provide support for their ideas, clearly and persuasively express themselves in oral and written form, and develop problem solving, research, and reading and writing skills. Finally, students will work

with primary and secondary sources to support opinions and develop positions, learn to access the significance or overall importance of an action, and view historical events and situations in ways that are fair and accurate to all cultural groups affected.

AP United States History

AP U.S. History is a survey course covering American history from the Pre-Columbian period to the present. Emphasis is placed on critical and evaluative thinking skills, essay writing, interpretation of original documents, and historiography. The class is taught in accordance with the revised *AP U.S. History Curriculum Framework* and is designed to prepare students for the AP U.S. History Exam in May. New emphasis has been added to understanding and applying historical thinking skills. Students will identify different schools of historiography and the historians associated with each. Sources such as "Reading like a Historian," "What is History?" and "Historical Thinking Skills" are used to teach contextualization, evaluating sources, and corroboration. The revised AP format is broken into seven broad themes: (1) Belief Systems; (2) America in the World; (3) Geography and Environment; (4) Peopling; (5) Identity; (6) Politics and Power; and (7) Economics— Exchange, Work, and Technology.

AP Comparative Government

This course will introduce students to the study of comparative government, and the theoretical framework necessary to compare political systems throughout the world, including power, political institutions, and the role of the citizen, economic change, and public policies. In order to better understand these theoretical concepts, students engage with in-depth country studies to illustrate major themes and ideas. The six countries this course focuses on are Great Britain, Russia, China, Iran, Nigeria, and Mexico. In each unit, students research current events, political parties, and major public policy issues of the countries studied. These countries provide an excellent opportunity to note both similarities and differences amongst political systems in the modern world. It is hoped that at the conclusion of this course students will leave not only with a better understanding of the world but also an appreciation for the opportunities afforded by the political system of the United States.

U.S. Civics and Politics: The Election of 2020 (Fall)

In an age where civic knowledge and involvement is declining, this course focuses on the historical foundation of American democracy as well as the current political system including: political institutions, political parties, the electoral process, and citizen participation in government. Students engage in discussion, debates, and projects dealing with our country's current political system and the interesting events and people in politics today. This course studies issues and events related to the current election cycle, as well as examining the civic duty of the everyday citizen and attempting to answer the timeless question: What does it mean to be an American citizen? At the conclusion of this course, students will leave not only with a better understanding of the world in which we live, but also an appreciation for the opportunities afforded by the political system of the United States.

Global Affairs (Spring)

This semester focuses on the major current events and political situations happening in the world today, as well as how the United States fits into the world stage. Topics may include socialism in Latin America, a post-Brexit Europe, and how the Sunni/Shi'a conflict has shaped conflict in the Middle East. Additionally, students examine and discuss the tough issues facing the world today from climate change to refugees. An emphasis on critical thinking and reading through current events is developed. From broad themes facing each continent to learning how countries all over the globe face the same challenges, students observe both similarities and differences amongst political systems in the modern world. Note: You do NOT need to have taken "U.S. Politics" in order to take this class.

Art History (Single Semester)

In 1889, the Irish writer Oscar Wilde famously said "Life imitates Art far more than Art imitates Life." Is this true? Does art reflect the life and culture of the time it was created, or is it the opposite? This course will evaluate this understanding of life through the study of art history, beginning with artistic movements in the ancient world and progressing through the study of modern and contemporary art. We will tackle the history of art in both the western and eastern traditions. Students will study various mediums and artists from across the globe and examine the nuanced relationship between art and the culture in which it was created. The primary mediums that we will study are painting, sculpture, and architecture, and we will do so in an effort to place different pieces, artists, and artistic movements into a greater historical and cultural context. The ultimate goal of the course is, through the study of art, to connect with the people of the past through our shared humanity. Lady Bird Johnson, a former US First Lady, once said that "art is the window into man's soul." This course will give us the opportunity to connect with the souls of the people who came before us, and in doing so, can shed light onto ourselves.

Counterstory: Untold History (Single Semester)

"What is history, but a fable agreed upon?" This quote, attributed to Napoleon, recalls the idea that history is written by and tells the story of the "winners." Many U.S. history classes present mainstream historical narratives that were created by white, Anglo-Saxon men when they "agreed upon" what history was important. This course will take an entirely different approach: in order to broaden our understanding of what history is, this class will study inequity in America through predominantly non-mainstream perspectives. Through the robust use of primary sources, we will study and analyze the experiences of various American individuals through their own eyes, with their own voices telling their stories. We will evaluate how these individual stories intersect with race, class, and gender, how they have shaped American society, and how the complex history of groups like African-Americans, Women, Asian-Americans, Indigenous Peoples, Latin-Americans, etc. inform the way that traditional historical narratives have been

understood. Finally, we will examine the current issues facing these groups in an attempt to prevent minority voices from being lost to modern history.

The American Progressive Era 1900s-WWI *Not offered 2020-2021

The Progressive Era was a time of intense social and political reform that swept America in the wake of the Industrial Revolution. Reformers wanted to create a better society in America by using the government to monitor business, reduce corruption, and fight the negative social impact of industrialization. It was also a time where workers fought for protections and women achieved the right to vote. Students study this time period by learning about the major historical figures who made an impact for women's rights, in pop culture and in politics. From Harry Houdini to anarchist Emma Goldman, these twenty years saw the rise of fascinating leaders. These real characters mingle with fiction in the classic novel *Ragtime* by E.L. Doctrow, which will form the centerpiece of this course. The class will end with a study of 1919, the year of Prohibition, Hollywood's Boom Year and the emergence of Jazz.

Prerequisites for English and Social Studies Course Placement

These three areas will be taken into consideration when making honors or AP placement in the English or Social Studies departments. A student must achieve two of these three requirements to be admitted into an honors or AP course.

TEACHER RECOMMENDATION

The teacher recommendation is the most important aspect of student placement. Teachers consider such elements as student independence, motivation, initiative, responsibility, focus, ability to cope with stress and time management. Performance on the midterm exam is carefully considered as an indication of a student's ability to retain and synthesize information. In addition, the research paper is an indication of a student's ability to craft and support an argument as well as work independently and manage her time. Teachers may wait until the end of the school year to make a decision. Any student who receives a 1 on an AP test will be reevaluated for placement into AP/Honors in the following year.

GRADE REQUIREMENTS FOR HONORS OR AP PLACEMENT

9th Grade:

- Students currently in Honors World History and Honors Literary Genres: B+
- Students currently in College Prep World History and Literary Genres: A

10th Grade:

- Students currently in AP European History and Honors British Literature: B+
- Students currently in College Prep European History and British Literature: A

11th Grade:

- Students currently in AP US History and AP English Language: B
- Students currently in College Prep American History and American Literature: A

PSAT REQUIREMENTS

9th Grade:

Current freshmen must earn in the 75th percentile or above (540+) in the Evidence-Based Reading and Writing section of the PSAT. A score of 26 in Analysis in History/Social Studies is recommended.

10th Grade:

Current sophomores must earn in the 85th percentile or above (570+) in the Evidence-Based Reading and Writing section of the PSAT. A score of 29 in Analysis in History/Social Studies is recommended.

11th Grade:

Current juniors must earn in the 85th percentile or above (580+) in the Evidence-Based Reading and Writing section of the PSAT. A score of 32 in Analysis in History/Social Studies is recommended.

Science Department

Biology

Biology exposes students to a wide range of biological topics, mostly on cellular and molecular levels as well as genetics and evolution. This course also promotes an understanding of the nature and methods of science and involves students in their own learning by using inquiry as the organizing instructional approach. Students will master biological concepts through active learning rather than passive exposure to content. A dynamic and balanced biology program is achieved by integrating the textbook, online activities, animations, video clips and laboratory work. Each chapter is organized into a few key concepts to keep the material manageable. Students will develop skills such as the ability to learn independently, to think critically, and to explain biological phenomena with clarity.

Honors Biology

Honors Biology is a faster-paced and more detailed course than biology and is designed for advanced students. Assessment and teaching strategies are modified for the strongest science students. Honors Biology exposes students to a wide range of biological topics, mostly on cellular and molecular levels as well as genetics and evolution. This course also promotes an understanding of the nature and methods of science and involves students in their own learning by using inquiry as the organizing instructional approach. Students will master biological concepts through active learning rather than passive exposure to content. A dynamic and balanced biology program is achieved by integrating the textbook, the online activities, animations, video clips and laboratory work. Each chapter is organized into a few key concepts to keep the material manageable. Students will develop skills such as the ability to learn independently, to think critically, and to explain biological phenomena with clarity.

Chemistry

Chemistry covers the fundamental principles of chemistry. Chemistry is a graduation requirement and is usually taken during the sophomore year of high school. Students are expected to use problem solving skills and expand their critical thinking skills. The course covers chemical principles such as: measurement in science, atomic theory, the basics of quantum theory, the periodic table, chemical bonds, balancing chemical equations, the mole, molarity, stoichiometry, solutions, properties of solids and gases, acids and bases, rates of reactions, thermodynamics, and electrochemistry. Laboratory work is an important component to the course. Lab experiments coincide with class work and are designed to reinforce concepts as well as explore real life applications. Lab skills include using proper techniques of measurement in data collection, problem solving, inquiry, calculations, and analysis. The course is designed to prepare students for success in college chemistry.

Honors Chemistry

The Honors Chemistry course emphasizes the development of critical thinking skills related to the study of fundamental chemical principles. Chemistry is a graduation requirement and is usually taken during the sophomore year of high school. The same topics will be covered as in College Prep Chemistry except at a greater depth and faster pace. Some additional topics may also be covered such as nuclear chemistry, kinetics, gas laws, etc. Tests and exams will be more comprehensive and challenging than College Prep Chemistry. Analyzing data, organizing information, problem solving, reasoning and synthesizing ideas to make conclusions are all abilities which students must develop and utilize throughout the course. Laboratory work is an important component of the course and coincides with classroom topics. Lab work focuses on proper laboratory techniques, data collection, inquiry, calculations and analysis. Students will work cooperatively in problem solving in both class work and the lab. The course is designed for students interested in pursuing science, medicine or engineering in college.

Prerequisite: A or better in biology and teacher recommendation

Physics

In their junior year at Sacred Heart Academy, all students are required to study Physics. Physics is the study of our physical world. In all physics courses at SHA, there are two components: Acquisition of Knowledge and Skill Development. While studying Physics, our students acquire knowledge about Mechanics including One and Two Directional Motion, Newton's Laws and Forces, Work and Energy, Momentum and Collisions, Rotational Motion, Universal Gravitation and topics in Astronomy. At the same time, our students will develop meaningful skills including the ability to communicate technical concepts, derive relationships between variables of motion, model forces and motion, through diagrams and collaborate with classmates through an active learning environment to develop problem-solving strategies.

Honors Physics

Students in Honors Physics are expected to be comfortable with mathematical tools that are used to quantify concepts in Physics. Honors Physics students will be challenged with higher level problem-solving skills and will learn additional topics to the College Prep curriculum, such as optics, waves or electricity and magnetism.

Prerequisite: Teacher recommendation

Advanced Placement Biology

Advanced Placement Biology is the equivalent of a two-semester introductory college biology course. This rigorous and demanding course is designed around the revised AP Biology curriculum framework and focuses on the big ideas in biology: evolution, cellular processes (energy and communication), genetics, information transfer, ecology, and interactions. The curriculum provides a basis for students to develop strong conceptual understanding in biology

and the opportunity to integrate that knowledge through inquiry-based activities and laboratory investigations rather than through traditional content coverage. This approach allows students to develop the reasoning skills necessary to engage in science practices such as developing and refining testable explanations, collecting and analyzing data, applying mathematics models, and connecting concepts across domains. Participation in the AP Biology Exam is mandatory. *Placement:* Teacher recommendation is required. Students will be notified if they possess the necessary qualifications.

Honors Organic Chemistry and Nanotechnology

This course is a comprehensive introduction to organic chemistry, the study of molecules containing carbon. The course is intended for any student interested in pursuing science or medical fields in college or those with an interest in organic chemistry. The focus of the course will be on molecular structure, nomenclature, physical and chemical properties, stereochemistry, reactions and reaction mechanisms, and synthesis of the major classes of organic compounds including alkanes, alkenes, alkynes, aromatic compounds, alcohols, carboxylic acids, ethers, esters, and amines. Classwork will be comprised of group work, lecture, collaborative problem solving, modeling etc. Laboratory investigations are an important part of the course with a focus on techniques of synthesis and purification. Analysis of purity, yield, physical properties etc. will be performed to introduce students to modern organic chemistry laboratory techniques. During the last quarter, students will investigate the emerging field of nanotechnology. Nanotechnology is a process in which scientists study molecular structures in the range of 1-100 nm (1 m = 1 x10⁹ nm) with the goal to control individual atoms and molecules. Nanotechnology holds huge promise in all fields of science and this course will explore the remarkable properties of nanomaterials as well as the growing applications and scientific breakthroughs that have already been achieved

Placement: Teacher recommendation is required. Students will be notified if they possess the necessary qualifications. *may not run in 2020-2021 depending on enrollment

Environmental Science

The objective of this course is to provide students with an in depth understanding of the environment in which they live, their impact on our environment and multiple important environmental challenges facing our world today. Environmental science is a multidisciplinary subject combining aspects from not only science, but social science as well. Through online and in class simulations, videos, news articles and class discussions, students are asked to question and examine the evidence to educate them. Topics explored in Environmental Science include the basics of ecology, matter cycles and energy flow, biodiversity and species interactions, global climate change, renewable energy sources, pollution and human population. Laboratories and outdoor fieldwork enhance the students' understanding.

Anatomy & Physiology

Anatomy and Physiology is a course that enables students to understand relationships between the structures and functions of the human body. The course builds on the concepts of biochemistry and cell biology studied in introductory biology and progresses to the tissue, organ and organ system level of organization and function. The role of organ systems in maintaining homeostasis will be explored in addition to the study of relevant disease states. The course is especially appropriate for anyone interested in pursuing further study in biology, medicine, or science. The course will involve a variety of learning opportunities including lab work, models, simulations, videos, collaboration, dissections, etc.

Math Department

2020-2021 Math Courses

9 th grade	10 th grade	11 th grade	12 th grade
Algebra I	Alg II/Trig	Analytical Geometry, Probability & Statistics	Statistics Honors Statistics
Honors Algebra I	Honors Alg II/Trig	Honors Analytical Geometry, Probability & Statistics	PreCalculus Honors PreCalculus
Honors Algebra II/Trig	Honors Analytical Geometry, Probability & Statistics	PreCalculus Honors PreCalculus	Honors Calculus
			AP Calculus

Algebra I

Algebra I is a one-year course which covers the study of linear and quadratic functions. Exponents, systems of equations, inequalities and polynomial functions are also integral parts of this course. Graphing is an important skill that is introduced and developed throughout the entire

^{*}may not run in 2020-2021 depending on enrollment

year. Students are taught to graph both linear equations, systems of equations and inequalities in the coordinate plane. Factoring is also an essential skill that involves first and second-degree polynomials.

Honors Algebra I

This course is designed for students who have demonstrated mastery of basic arithmetic skills and have excellent problem-solving ability. Students move at an accelerated pace through the study of expressions, equations and functions to prepare for advanced mathematics courses. Topics include linear, quadratic, exponential, polynomial, radical and rational equations. Graphing of these is an essential part of this course. Students will end the year completing the square and the quadratic formula which completes the process of solving quadratic equations. *Prerequisites:* Placement into this course is determined by the head of the math department and is based on the student's performance on the math section of the HSPT and on past math grades.

Algebra II/Trigonometry

This course expands upon the concepts learned in Algebra I by focusing on the study of functions and an introduction to the study of trigonometry. Topics include the study of linear, quadratic, polynomial and rational algebraic expressions, radicals, irrational and complex numbers, exponents, logarithms and basic trigonometric functions. Probability and data analysis are also topics discussed at this level. The graphing calculator is used extensively throughout this course

Analytical Geometry/Probability & Statistics

This course breaks up the traditional Geometry course into two separate semesters. In the Geometry section, students will study plane and solid geometry topics but will not study concepts that are no longer tested in standardized tests such as the SAT and the ACT. In Math Topics, students will have the opportunity to grasp the concepts of probability, statistics, and conic sections along with standardized test prep.

Honors Analytical Geometry/Probability & Statistics

This course breaks up the traditional Geometry course into two separate semesters. In the Geometry section, students will study plane and solid geometry topics but will not study concepts that are no longer tested in standardized tests such as the SAT and the ACT. In Math Topics, students will have the opportunity to grasp the concepts of probability, statistics, and conic sections along with standardized test prep. Emphasis is placed on problem solving and rigorous logical reasoning at a faster pace than the CP section.

Honors Algebra II/Trigonometry

This course is designed for the student who has demonstrated mastery in Algebra I and has good problem-solving skills. Students move at a fast pace through a variety of concepts and skills. Topics include the study of quadratic functions, matrices, polynomial and rational expressions, radicals, irrational and complex numbers, exponents and logarithms. Probability and statistics are also discussed at this level. Students are introduced to the basics of trigonometry through trigonometric ratios and the unit circle. The graphing calculator is used extensively throughout this course.

Prerequisite: Performance on the HSPT, previous grades and/or department recommendation.

Statistics

The ideas studied in this course represent the statistics that are needed in everyday life. This course is designed with three specific purposes. The first is to provide the student with the understanding of statistics that she will need for college courses, particularly in social sciences such as economics, psychology, sociology, and political science. The second is to help students develop the ability to reason using statistical information-an ability that is crucial to almost any career in the modern world. The third is to provide students with the power to evaluate the many news reports of statistical studies that are encountered in daily life, thereby helping students to form opinions and reach conclusions.

Honors Statistics

Honors Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This course is intended to prepare students for advanced study in statistics or to use statistical analysis in disciplines such as the social sciences. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. Students are expected to be comfortable with the mathematical tools that quantify statistical concepts.

Prerequisite: B+ in Honors Algebra II/Trigonometry and/or teacher recommendation.

PreCalculus

This course focuses on a study of all functions. Students enhance their knowledge of polynomial functions, radical and rational functions as well as exponential and logarithmic functions. Probability, sequences and series are also discussed at this level. The main topic in this course is Trigonometry, which includes the study of the unit circle, trigonometric identities, graphing trigonometric functions, solving trigonometric equations and the Laws of Sine and Cosine. The graphing calculator is used extensively throughout the course to emphasize and excite the student's learning of mathematical concepts.

Honors Pre-Calculus

This course builds upon the skills of Algebra II/Trigonometry and is designed for the student who has good problem-solving abilities. Topics include: sequences and series, probability, logarithmic and exponential functions, vectors, parametric and polar equations and their graphs. Trigonometry is the main focus of this course. During our study of trigonometry, the course will include trigonometric ratios, the unit circle, graphing trigonometric functions and their transformations, solving trigonometric equations using trigonometric identities, inverse functions, and the Laws of Sines and Cosines. At the end of the year, students begin to study limits and continuity as they prepare to take either Honors Calculus or AP Calculus in their senior year. The use of technology is an essential aspect of this course.

Prerequisite: B+ in Honors Algebra II/Trigonometry and/or teacher recommendation.

Honors Calculus

Calculus is a branch of mathematics that studies rates of change of functions. The first semester concentrates on pre-calculus skills as well as finding limits of functions. As the semester progresses, differential calculus is introduced. Students compute derivatives and study their various applications including the slope of the tangent line and velocity/acceleration problems. In the second semester, integral calculus is studied. Students will again compute many integration problems and will apply their skills by solving real-life word problems. Although the students at this level do not take the AP Calculus exam they are still responsible for learning the three main components of Calculus: Limits and Continuity, Derivatives and Integration. The use of technology is an important part of this course.

Prerequisite: B or better in Honors Algebra II/Trigonometry, Pre-Calculus and/or teacher recommendation.

AP Calculus AB

AP Calculus is a rigorous course which is based on the AB Advanced Placement syllabus as outlined by the College Board. This course emphasizes a multi-representational approach to learning: 1) graphically 2) numerically 3) analytically and 4) verbally. Topics include: Limits and Continuity, Differential Calculus and Integral Calculus. Application of the derivative and the integral are studied throughout the year. The use of technology is an essential part of this course. Students are required to sit for the AP Calculus exam in May.

Prerequisites: B+ in Honors Pre-Calculus, PSAT scores and/or teacher recommendation.

World Languages Department

French I

This course introduces students to the vocabulary and the basic structures of the French language. The goal of the course is to help students develop the essential language skills of speaking, listening, reading and writing. This is achieved through the use and study of various and level appropriate texts, audio, visual, and authentic resources. Students are afforded the opportunity to practice their language skills through dialogues, collaborative work and the use of appropriate educational technology. Level appropriate readings, videos and class activities enhance the students' knowledge and appreciation of French and Francophone cultures.

French II

This course continues to build upon the language skills developed in the French I. More complex structures and diverse vocabulary lessons are presented in thematic units. The focus continues to be placed upon the use of various authentic materials to improve students' proficiency and fluency in the language. Students are afforded the opportunity to practice their language skills through dialogues, collaborative work and the use of appropriate educational technology. Level appropriate readings, videos and class activities enhance the students' knowledge and appreciation of French and Francophone cultures.

Honors French II * Not offered in 2020-2021

This course is intended for motivated learners who are interested in a more in-depth study of the French language. Students will continue to build upon the language skills developed in French I. More complex structures and diverse vocabulary lessons are presented in thematic units. The focus continues to be placed upon the use of various materials to improve the students' proficiency and fluency in the language. Students are afforded the opportunity to practice their language skills through the use of a language lab program and varied in class activities. Advanced readings, authentic videos and class activities further the students' knowledge and appreciation of French and Francophone cultures.

Prerequisite: Students must achieve a B+ or better and receive the permission of the instructor.

French III *Not offered in 2020-2021

This course continues to introduce students to complex language structures and real world thematic vocabulary through the study and use of various level appropriate texts, audio, visual and authentic resources. Multimedia resources will aid students as they acquire further cultural awareness and improve upon their aural and oral proficiency. Students will have added

concentration on their reading and written comprehension through the study of selected readings of poems, fables, fairy tales and short stories.

Honors French III

This course is intended for motivated learners to continue an in depth and comprehensive study of the French language. Students are introduced to complex language structures such as the subjunctive and the perfect tenses. Relevant and thematic vocabulary is introduced through the study and use of various level appropriate texts, audio, visual and authentic resources. Multimedia resources will aid students as they acquire further cultural awareness and improve upon their aural and oral proficiency. Students will have added concentration on their reading and written comprehension through the study of selected readings of poems, fables, fairy tales and short stories.

Honors French IV

This challenging course affords students the opportunity to use the language skills they've developed to discuss and analyze various topics dealing with the Francophone culture. An extensive review of advanced grammar and vocabulary is included. The focus of the course is placed upon readings of several French literary works and the viewing of classic and contemporary French films. The historical, societal and religious influences surrounding the literature and films will be explored and discussed in the target language.

Prerequisite: Students must achieve a B or better and the recommendation of the instructor.

Latin I

This course introduces students to the basic grammar and vocabulary of the Latin language. Through daily practice of vocabulary and grammar, students develop new skills for translating sentences and simple stories. In this way, students gain a strong command of English grammar, as well as vocabulary through the study of derivatives from Latin. This is enhanced through the study of Latin roots, prefixes, and suffixes. The concentration on vocabulary, structure, and syntax helps the development of systematic and logical thinking. Time will also be spent introducing the culture, mythology, archaeology, and significance of the Roman world.

Latin II

This course first reviews the material learned in Latin I, as new grammar is presented sequentially to build on the fundamental concepts and structures of the Latin language. After progressing through the translation of "made-up" Latin, students begin to read original Latin selections from Caesar and/or Livy. Using these translations, a cultural emphasis is placed upon Greco-Roman mythology along with Roman history.

Honors Latin III & Latin III

This course offers students the opportunity to read extensively from Roman authors. The first semester is devoted to the study of Latin prose, typically reading historical selections from the works of Cicero and Pliny. The second semester is devoted to the study of Latin poetry. Students begin reading selections from Ovid, and explore the mythological stories which he recounts. Time permitting, poets such as Catullus and Vergil will be examined. Throughout the year, relevant historical and cultural topics are addressed, as are features of literary style. Prerequisite: Students wishing to enroll in Honors Latin III must achieve a B+ or better and the recommendation of the instructor.

Honors Latin IV **Not offered in 2020-2021**

This course, like Latin III, offers students the opportunity to read Latin authors in the original. By reviewing grammar and aspects of language such as morphology and syntax, students are able to read and appreciate the literary style of Roman authors. Latin IV will focus on the poetry of Catullus, Horace, Propertius, Ovid, Vergil, and Tibullus, as dictated by student interest. Other authors of the late Republic and Empire may also be examined. Relevant historical and cultural topics are addressed and discussed.

Prerequisite: Students must achieve a B or better and the recommendation of the instructor.

Spanish I

This course is for both the student who has never had Spanish and those who have had some prior exposure. Students are introduced to Spanish vocabulary and grammar structures such as present tense verb conjugations, appropriate sentence syntax and noun-adjective agreement. Vocabulary will be introduced in thematic units. Students will be global-minded speakers of Spanish who are able to listen, speak, read and write in the target language. Cultural competency will also be developed and explored.

Spanish II

This course is designed for students who have successfully completed Spanish I. Students are introduced to the past tenses in Spanish as well as other advanced grammar structures. Vocabulary will continue to be introduced in relevant thematic units through the use of level appropriate texts, authentic resources and stories. Cultural competency will continue to be refined and explored. Students will have additional opportunities to role play and present dialogues in order to increase fluency and proficiency.

Honors Spanish II * Not offered in 2020-2021

This course is for the motivated student who has proven she can work both independently and at a faster pace. Honors Spanish II continues to build on the foundation of Spanish I. All material

presented in the first year is reviewed and expanded upon. The course integrates the following components: vocabulary, grammar structures, reading and comprehension exercises, writing skills, oral communication and culture. Class participation and nightly drills of both new and old vocabulary and verbs are imperative in order to be successful. It is expected that the student will speak exclusively in the target language. Students have many opportunities to role-play and write and present dialogues.

Prerequisite: a B+ and the teacher's recommendation

Spanish III

Spanish III continues to build on the material presented in Spanish I and II. All topics are reviewed and expanded upon. Students are introduced to complex grammar structures such as the subjunctive mood; other key concepts include passive voice and hypothetical clauses. Additional vocabulary will be introduced and previous vocabulary will be utilized. Students will have added concentration on reading and writing through current events, poems and short stories.

Honors Spanish III

Spanish III Honors is designed for the motivated student who has proven she can work both independently and at a faster pace. This course continues to build upon the material presented in the first two levels. Students are introduced to complex grammar structures such as the subjunctive mood. Students will have many opportunities to role play and give oral presentations. Students will also read and analyze advanced poems and authentic texts. *Prerequisite: Students must achieve a B+ or better and the recommendation of the teacher*.

Honors Spanish IV

The fourth year focuses on mastering the grammar learned in the first three years. All the material presented in the first three years is reviewed and expanded upon. Class participation is imperative in order to be successful. There is a strong emphasis placed on writing essays and papers. Students are required to do oral presentations. The student is required to read short stories, poems, and excerpts from novels and interpret on her own. There will be an emphasis on Hispanic Cultures and history as well as literature and film, which will be discussed in the target language.

Prerequisite: Students must achieve a B or better and the recommendation of the instructor.

Theology Department

Sacred Scripture

The fall semester of this course will introduce students to the content of the Hebrew Bible or Old Testament - the Torah, the Prophetic Books, the Historical Books, and Wisdom Literature. By exploring the historical, literary, cultural and theological heritage in ancient Israel, students will develop a stronger understanding of and appreciation for the Old Testament, both textually and spiritually. By the end of the course, students will have learned about: creation and fall, faith and story, Exodus and freedom, power and violence, love and covenant, prophecy and kingship, etc. The Hebrew Scriptures have influenced people for centuries. An awareness of their content and lessons can assist in a fuller understanding not only of Judaism but also of Christianity.

In the spring semester of this course, students will be introduced to the texts of the New Testament. We will review the books and writings of the New Testament, focusing especially on the four Gospels – Mark, Matthew, Luke and John. Time will be devoted to learning how to read and analyze the gospels and their portrayal of Jesus. Through this course, students will expand their understanding of both the Historical Jesus and the Christ of Faith. In doing so, each student should also expand her understanding of how she relates to the stories of Jesus and, most importantly, how she can best imitate Jesus in the events and decisions of everyday life.

Church History

This course focuses on the pivotal moments and people in the history of the Catholic Church. The students will delve into Pentecost, the early church councils, the great schism of 1054, the Protestant Reformation, the Council of Trent, Vatican I and Vatican II. In addition, they will explore the people who have shaped the Church, including St. Peter & St. Paul, St. Augustine, St. Teresa of Avila, St. Thomas Aquinas, St. Ignatius of Loyola, St. Madeleine Sophie & St. Philippine Duchesne. During this course, the students will read at least one papal encyclical and study primary sources.

World Religions (Semester)

In an ever-shrinking world, we encounter people with a greater diversity of opinions and beliefs. One of the best ways to build a culture of respect and peace is to engage and learn from those who differ from ourselves. Since Vatican II, the Catholic Church has called for a greater sense of empathy and awareness for all religions. In this course, the students will learn about the other major world religions, namely Hinduism, Judaism, Buddhism and Islam. By the end of this course, the students will have a better understanding of our global community and a deeper respect for those of other faith traditions.

Morality (Semester)

This course deals with human morality, the web of our human relationships and how we handle them in an attempt to help students understand that morality is neither a Christian invention nor a Catholic one, but rather a necessity of our humanity. The course proposes that once we decide to live a moral life in the even flow of our relationships with others, we can then begin to see what our Christianity and, specifically, what both our Catholic faith and our Creator want us to do with our lives and with all of the riches with which we've been blessed.

Catholic Social Justice (Semester)

In this semester-long religion course, students have the opportunity to study Catholic Social Teaching. By using Church documents including papal encyclicals and bishop's statements, students learn about the Catholic Church's role in the modern world. The themes of Catholic Social Teaching frame discussions on contemporary topics such as domestic poverty, global poverty, migration, the environment, war and peace and the right to life. Students engage with these topics and learn about ways that progress is being achieved throughout the world and where work remains. The course is designed to reflect current events and topics, but always remains centered on the Church's commitment to justice.

Discovering Women of Faith (Semester)

This semester-long course explores the virtue of faith and how various women, particularly in the Christian tradition, have lived out their faith throughout history. Students will discuss the vital question: "What does it mean to be a woman of faith in our modern world?" by exploring the writings, mystical experiences, theological developments, and witnesses of faithful women including but not limited to: Hildegard of Bingen, Julian of Norwich, Harriet Tubman, Madeleine Sophie Barat, Edith Stein, Dorothy Day, Simone Weil, Mahalia Jackson and Fannie Lou Hamer and Flannery O'Connor.

Instructional Technology Department

Computer Science and Coding I (Semester Independent Study)

Students will be introduced to the field of computer science and the fundamentals of computer programming with an emphasis on problem solving and logical thinking. Topics that will be covered include: animation, graphics, games and data structures. It is a beginner programming course and students will move at their own pace. No background in computer science is needed to succeed in this course.

Coding and Computer Science II (Semester Independent Study)

Students will learn the languages HTML and CSS, and will create their own live homepages to serve as portfolios of their creations. This is a project-based learning course. Not only will students learn how to structure, style and create their own website, they will also develop animated and interactive web pages. This is a faster paced course.

*Prerequisite: Successful completion of Computer Science and Coding I and teacher recommendation.

Digital Photography: (Semester Independent Study)

Students will learn about digital photography by understanding the functions of the parts of the camera and how to manage aperture, composition, depth of field, lighting, shutter speeds, and different lenses. Students will learn about several different photo editing software options on different devices and green screen photography. Students will be required to complete a portfolio of 10 photographs from Abstract, Aerial, Architecture, Baby, Candid, Documentary, Event, Family, Fashion, Food, Landscape, Macro, Mobile, Night, Photojournalism, Portrait, Sports, and Wildlife that exhibit a clear understanding of the elements learned and express their creativity. *This course will be offered as an independent study for students who have a DSLR or mirrorless camera with a sensor that has at least 16 or more megapixels. Previous teacher(s) will be asked to confirm a student's ability to work independently and to meet deadlines.

Digital Moviemaking: Ready, Set, Action (Semester)

Students will learn about digital moviemaking by exploring the different genres of movies including action, comedy, drama, history, horror, instructional, musicals/dance and science fiction. Students will learn how to record, import, edit, and narrate in iMovie and use Garageband to import, edit, and lay tracks for adding sound to their movies on an iMac. Students will express their creativity and personal interests through their movies and learn to collaborate with their classmates on several small group projects as well as completing 4 individual movies of varying focus and length and a commercial for the school.

Digital Broadcasting (Semester) *Not offered in 2020-2021

In this course, students will work in a project based environment to produce a broadcast that will be a source of information on the school's social media pages. Various roles will need to be fulfilled, as each broadcast will include elements of Public Speaking, Digital Video Production, Digital Media Production, Research and Project Management. Students with prior knowledge of Adobe Photoshop, Public Speaking, and Video editing skills will work together each month to create a broadcast, and fulfill a different role for each broadcast.

Arts Department

Visual Arts 1: Fundamentals of the Creative Process (Semester)

The goals of VA1 are to add observational aptitude to the students' learning skills, address the influential nature of art, present the interdisciplinary creative impulse and thinking process as instinctive and historically universal, and introduce the basic art language used to initiate and critique visual art. The elements of art (line, shape, texture, color, form, value, and space) are the foundation of the curriculum at this level. The individual and integrated use of the elements of art will be investigated using both two and three-dimensional applications. Fundamentals of drawing, color theory, bas-relief, functional art, and printmaking will allow the students to develop personal themes and compositions during their exploration of technique.

Visual Arts 2: Process Thinking and Application (Semester)

The goals of VA2 are to have the students be more personally engaged in the "step by step" nature of the creative process by learning to use observation and research skills to inspire ideas, to develop a singular concept into a related series, to solve technical problems by experimentation, and to fully implement the basic art principles used to organize and compose visual art. The Principles of Art (emphasis, balance, movement, contrast, unity, rhythm, and pattern) are the foundation of the curriculum at this level. The integrated use of the Principles of Art is investigated using both two and three-dimensional applications. With an emphasis on composition and original concept development, both Fine Arts and Commercial Art themes are addressed. Breadth in drawing, collage, sculpting, and printmaking skills are developed to inspire original solutions to projects. Fashion and graphic design are introduced at this level.

Visual Arts 3- Enrichment (Semester or Full-Year)

With an emphasis on the development of 2D and 3D composition, this course of study focuses on the students learning to be more inventive in their solutions to project challenges, to selectively use and address the elements and principles of art when composing their work and, to study technique by investigating master works through observation and experimentation. Each student is challenged to learn to utilize history as a personal tool of discovery and inspiration; particular attention is paid to the variety of technical processes of modern artists from circa 1850 to present. The media to be explored will be determined in light of the individual student's goals. *Open to all students*.

Advanced Visual Arts 3: Portfolio (Semester)

This course of study allows the serious art students more independence in their choice of themes, media, and techniques. The <u>art college bound student's</u> creative goals are prioritized in light of their college aspirations in conjunction with an intensive investigation of the elements and

principles of art with an emphasis on drawing skills. The portfolio requirements of a variety of student selected and local colleges are investigated; portfolio projects are developed with the individual student and colleges of choice in mind. At this level, the <u>serious non-portfolio students</u> focus on developing their own artistic voice as well as learning to consider how their visual expressions are perceived by the viewer. Given a series of technique and/or conceptual lessons that include a variety of 2D and 3D media, the students learn to respect the value of the possibilities inherent in specific techniques and to develop original applications. *Art teacher recommendation required*.

Visual Arts IV: Enrichment or Portfolio (Semester or Full-Year)

*Prerequisite: successful completion of Visual Arts III and teacher recommendation.

AP Studio Art

The AP Studio Art experience challenges the students to develop a portfolio of 24 artworks that demonstrates their artistic abilities within a specific area of art: Drawing, 2D Design, or 3D Design. Within the boundaries of the portfolio type selected, the students are required to show proficiency in each of the three AP Art Exam categories of evaluation: Quality- the evaluation of five artworks that physically represent technical skill, Breath- the evaluation of twelve digitally submitted artworks that demonstrate a variety of compositional and technical solutions to required assignments; the mastery of a variety of skills must be demonstrated, and Concentration- the evaluation of a series of twelve digitally submitted artworks that express a significant investigation of a personal and specific theme; technical and visual growth must be clearly demonstrated. With all of the requirements associated with the AP Studio Art exam in mind, the primary goal of the SHA AP Studio Art curriculum is to ensure each student will thoroughly experience lessons and opportunities that challenge her natural artistic aptitude; personalized lessons will necessitate the use critical thinking skills, require research, and advance the technical abilities of each student in light of their individual portfolio objectives. *Art teacher recommendation required*

Introduction to Graphic Design (Semester)

In this course, we will look into the world of design and graphic design. Graphic design is the aesthetic blend of image and text artfully combined to communicate effectively. We will look at design vocabulary, problem-solving, and the use of color as well as the need, use, and basis for graphic design in our world.

Yearbook Design and Publication (Semester or Full-Year)

In this course, students will work on the content and overall development and publication of the school yearbook. Students will gain and practice skills in the areas of page design, photography, copywriting, editing and publishing. Throughout the course of the semester, students will produce yearbook pages that capture school memories. Students may be asked to attend or cover events outside of the school day, but the independent work time is flexible and adaptable. There

will be a strong emphasis on time management and design principles, as students will work independently in order to meet deadlines. Students will need to be responsible, communicative, responsive and collaborative. This could be a semester or year-long course.

*May be offered as an independent study. Previous teacher(s) will be asked to confirm a student's ability to work independently and to meet deadlines.

Pop Piano (Semester)

Learn to play and sing your favorite pop songs, from classic artists like The Beatles to contemporary artists like Shawn Mendes or Arianna Grande. Students in this class will learn to apply concepts of music theory to learn how to apply harmonic structure, articulation and texture to learn the basics of playing the most prominent musical instrument in history. Students will be asked to perform music in both a playing and singing capacity for their section.

Fundamentals of Music Theory (Semester)

This course will introduce students to the fundamentals of music theory, providing them with the skills needed to read and write Western music notation in the common practice period. They will learn to understand, analyze, and listen.. The class will cover material such as pitches and scales, intervals, clefs, rhythm, form, meter, phrases and cadences, and basic harmony.

This course covers the fundamentals of Western music theory, from the absolute basics to some

This course covers the fundamentals of Western music theory, from the absolute basics to some more advanced concepts and, as such, is the perfect course for beginners and more experienced musicians alike. No prerequisite.

History of Music *Not offered in 2020-2021

History of music will discuss the elements of style in accordance with common period practice music from the 18th and early 19th century music. They will learn to critically listen to and analyze music from the Baroque, Classical, and Early Romantic music periods, while discussing the concepts of Melody, Harmony, Rhythm, Dynamics, Form, Timbre and Texture. No prerequisite.

Guitar Ensemble (Semester) *Not offered in 2020-2021

Guitar Ensemble will be a performance based class, in which students will learn to play in the style of classical guitar. Students will learn to play in an ensemble: playing as a solo, duet, trio and as a full group. Play repertoire will include classical, contemporary, and religious material. Students will be expected to perform at the Winter and Spring Concert, as well as perform for select Masses. Prerequisites include: Beginner guitar experience. Students must supply their own guitar.

Health and Wellness

9th and 10th Grade Wellness (Semester)

The goal of the wellness course is to address current topics that influence the overall mental and physical wellbeing of a high school student. Main topics to be covered are time management, mental health awareness, nutrition, appropriate social media usage, vaping and alcohol use, and sex education. Students participate in group discussions, analysis of current events, project based learning, as well as physical activity. Emphasis is placed on leading a well balanced and healthy lifestyle.

CPR & First Aid Certification (11th or 12th Semester)

The American Red Cross First Aid/CPR/AED certification course is a course for the lay responder to gain the knowledge and skills necessary to respond to medical emergencies and injuries to help sustain life while minimizing the consequences of injury or sudden illness until advanced medical help arrives. The class consists of part lecture and part hands on experience to master the necessary skills. Certification is valid for two years after completion. A cost of approximately \$40 is required to cover the cost of the textbook and certification processing fee through the American Red Cross organization.

*May be offered as an independent study or filter through College Counseling. Previous teacher(s) will be asked to confirm a student's ability to work independently and to meet deadlines.

College Counseling (12th Fall Semester; 12th Spring Semester)

During 11th and 12th grade, students have College Counseling classes to support the college search and application process. Guided by Sacred Heart's Five Goals, college counselors help[to empower students to find their best fit for college where they will grow in academics, career planning, and community involvement. In 11th grade, students are encouraged to meet with college representatives during SHA campus visits. Students complete resumes, write two college essays, review test scores, undertake a college admissions case study, meet with their college counselors for one-on-one planning, and begin to develop their college choice list. In 12th grade, students actively finalize materials for their application submissions in a workshop style class with three college counselors.

SophieConnect

Full and semester year courses offered online by Sacred Heart Network instructors. This program is administered by Sacred Heart Greenwich. The tuition for a full-year course is \$675; semester courses cost \$450. For more information, see the course descriptions below as well as the Sophie Connect website.

A separate registration form is required for SophieConnect courses. Please contact the Director of Academics with any questions.

Full-year courses

AP Art History

AP Computer Science A

AP Computer Science Principles

AP Environmental Science

AP Human Geography

Latin I/II

Latin III/IV

AP Macroeconomics

AP Microeconomics

AP Music Theory

AP Psychology

AP Statistics

Biblical Hebrew

Semester courses

Financial Literacy (Fall and Spring)

Nutrition & Wellness (Spring)

General Psychology (Fall)

Introduction to Neuroscience (Spring)

Marine Science (Spring)

Women's History in the United States- Honors Seminar (Spring)

Summer 2020 Courses

AP Computer Science: A Jump Start

Financial Literacy

Women's History in the United States- Honors Seminar

Creative Writing -- Tune Up Your Writing (Grades 9-12)

PSAT Prep Course (Grades 10-11)

2020/2021 Course Descriptions

FULL YEAR AP COURSES:

AP Art History - The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making and responses to art. Through investigation of diverse artistic traditions of culture from prehistory to the present, the course fosters an in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply visual, contextual comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history.

This course helps students develop an understanding and knowledge of diverse historical and cultural contexts of architecture, sculpture, painting and other media. Students will examine and critically analyze major forms of artistic expression from the past and the present from a variety of cultures. Art history emphasizes understanding of how and why works of art function in context, considering such issues as patronage, gender, and the functions and effects of works of art.

Instructor: Lizzy Oxler, current Academy of the Sacred Heart (The Rosary, New Orleans) teacher

AP Comparative Government & Politics - This year-long course introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures, policies, and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues.

Students successfully completing this course will:

- Compare and contrast political concepts, themes, and generalizations;
- Describe and explain typical patterns of political processes and behaviors and their consequences;
- Compare and contrast political institutions and processes across countries to derive generalizations; and
- Analyze and interpret basic data relevant to comparative government and politics.

Instructor: Serene Williams, Sacred Heart Preparatory history teacher in Atherton, CA and current SophieConnect faculty member.

AP Computer Science A - AP Computer Science A introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computer science. Students will write, run, test and debug solutions for a number of programs in the Java programming language, utilizing standard Java library classes and interfaces from the AP Java subset. This course has specific hardware requirements so a Mac or PC computer is required. For information on these requirements, please email info@sophieconnect.org

Prerequisites: Algebra; If a student has no experience in Java, Python or Javascript coding, the AP Computer Science Summer Jumpstart is recommended. (see below)

Instructor: Karmen Harden, experienced Computer Science teacher currently at the Independent School District of Plano, TX

AP Computer Science Principles - AP Computer Science Principles introduces students to the central ideas, concepts and practices of computer science, instilling the ideas and practices of computational thinking, and inviting students to understand how computing changes the world. Students develop innovative computational artifacts using the same creative processes artists, writers, computer scientists, and engineers use to bring ideas to life.

This course emphasizes the vital impact advances in computing have on people and society. Going beyond the study of machines and systems, this course gives students the opportunity to investigate computing innovations that are personally meaningful, and discuss the impacts of computing technologies on their community, society, and the world.

Instructor: Karl Haeseler, SophieConnect co-founder, Sacred Heart Greenwich teacher, Director of Academic Technology and co-chair of the Math/Computer Science Department

AP Environmental Science - The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

Prerequisites: Algebra; Lab science experience preferred.

Instructor: TBD

AP Human Geography - The AP Human Geography course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to

examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

By the end of the course, students should have a more geoliterate view, be more engaged in contemporary global issues, and achieve more multicultural viewpoints. In addition, they will have developed skills in approaching problems geographically, using maps and geospatial technologies, thinking critically about texts and graphic images, interpreting cultural landscapes, and applying geographic concepts such as scale, region, diffusion, interdependence, and spatial interaction, among others. Students should see geography as a discipline relevant to the world in which they live; as a source of ideas for identifying, clarifying, and solving problems at various scales; and as a key component of building global citizenship and environmental stewardship.

Instructor: Joseph Valentine, Sacred Heart Greenwich History Teacher and current SophieConnect Human Geography teacher

AP Macroeconomics - The AP Macroeconomics course gives students a thorough understanding of the principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination, and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics.

By the end of the course, students will understand:

- Basic Economic Concepts such as scarcity and opportunity costs, the functions performed by an economic system, how the tools of supply and demand are used to analyze the workings of a free market economy and an introduction to the concept of the business cycle.
- Measurement of Economic Performance which provides an overview of how the economy works, the circular flow of income and products; how gross domestic product is measured; the nature, causes and costs of unemployment; what inflation is and how it is measured; and more.
- National Income and Price Determination which introduces the aggregate supply and aggregate demand model to explain the determination of equilibrium national output and the general price level, as well as to analyze and evaluate the effect of public policy.
- The Financial Sector including how monetary policy works, the definitions of both the money supply and money demand and the factors that affect each of them, and also topics such as bonds and stocks, the time value of money, measures of the money supply, fractional reserve banking and the Federal Reserve System.

Instructor: Don Charlton, experienced teacher and SophieConnect instructor since 2015

AP Microeconomics - The AP Microeconomics course gives students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature

and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

By the end of the course, students will understand:

- Basic Economic Concepts including opportunity costs, trade-offs, differences between absolute and comparative advantage, the importance of property rights, and the principle of marginal analysis among others.
- The Nature and Function of Product Markets including supply and demand models, consumer choice, production and costs, and the theory of the firm.
- Factor Markets including labor, capital, land and the concept of derived demand.
- Market Failure and the Role of Government which covers marginal social benefit and marginal social cost principle, as well as the effectiveness of government policies such as subsidies, taxes, quantity controls, and public provision of goods and services among other aspects.

Instructor: Don Charlton, experienced teacher and SophieConnect instructor since 2015

AP Music Theory - The AP Music Theory class is designed to prepare students in the areas of music theory, analysis and ear training. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the curriculum through the practice of sight singing. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed, and fluency with basic materials are also emphasized.

The course is ideal for the serious music student who plans to further their musical studies at the postsecondary level or perhaps pursue a career in music, but it is open to any experienced musician who desires to know more about how music is put together. It is the goal for the AP Music Theory student to recognize, understand and describe the basic processes of music that are heard or presented in a score. It is assumed that the student entering this course has some previous musical training and can perform at an intermediate or advanced level and is fluent in reading musical notation.

Instructor: Aran Waldbrook - teacher, choir director and Fine Arts Department Head at The Sacred Heart School of Montreal

AP Psychology - The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology.

Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

Instructor: Mark Arnold, former practicing psychologist and current educator. He has been a SophieConnect instructor since 2015

AP Statistics - The AP Statistics course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students use technology, investigations, problem solving, and writing as they build conceptual understanding of the four themes of the course:

- Exploring Data Describing patterns and departures from patterns using graphical and numerical techniques.
- Sampling and Experimentation Planning and conducting a study using data collected according to a well-developed plan if valid information on a conjecture is to be obtained. This includes clarifying the question and deciding upon a method of data collection and analysis.
- Anticipating Patterns Exploring random phenomena using probability and simulation, and using probability as the tool for anticipating what the distribution of data should look like under a given model.
- Statistical Inference Estimating population parameters and testing hypotheses guided by the selection of appropriate models.

Instructor: Gwen Hooffstetter, a career high school math teacher with 10-years experience teaching math including AP Statistics and Discrete Mathematics

ADDITIONAL FULL-YEAR COURSES:

Biblical Hebrew - Biblical Hebrew provides an introduction to the ancient Hebrew language. The course will begin with a few weeks of introductory work devoted to the ancient Hebrew alphabet and the sounds of the letters. Students will then learn how to pronounce full words and, later on, full sentences. Subsequent grammatical material will focus on the noun, the adjective, the definite article, and simple statements of existence, in addition to the structures and the meanings of the various verbal forms of ancient Hebrew.

Throughout the course, students will have the opportunity not only to pronounce, but to read stories from the Old Testament in the original language of ancient Hebrew. Biblical stories from Genesis regarding the Creation, Adam and Eve, Noah, Abraham, and Joseph with his "coat of many colors" will be the subjects for work in translation and interpretation.

As students will find, reading the texts in the original, ancient language makes possible real insight not only into the stories themselves, but also into the process of close reading and analysis of any written work. Connections will be made, where appropriate, in the course

between the grammatical forms of ancient Hebrew and those of other ancient languages like Aramaic (i.e., the language of Jesus), Ugaritic, ancient Arabic and Akkadian.

Instructor: John Martone, Sacred Heart Greenwich faculty member since 2001 teaching Theology, World Languages and Mathematics

Data Structures in Computer Science - This course builds upon the student's knowledge of algorithm design by expanding on previously introduced concepts in AP Computer Science A or other Java-based programming classes. Big-O notation, creating highly efficient algorithms, and effective use of data structures are skill sets developed throughout the course. The course's primary focus is programming projects that allow students to develop critical thinking skills and enable them to create elegant algorithms. By the end of the course, students will gain an appreciation for the limitations of the processing power in today's computers and will learn to think critically to solve problems using code. *Prerequisite: Some JAVA programming experience; AP Computer Science A preferred*

Instructor: Poonam Gupta, highly-experienced Computer Science instructor for over 31 years; Faculty member of The Brunswick School (Greenwich, CT) and former Global Online Academy instructor in Computer Science.

Honors Discrete Mathematics - Discrete mathematics may be described as the study of mathematical properties of sets and systems that have a countable (discrete) number of elements. With the advent of modern technology, discrete (discontinuous) models have become as important as continuous models. This course expands upon the topics of matrices, combinational reasoning, counting techniques, algorithms, sequences, series, and their applications. Techniques that are not considered in the current traditional courses of algebra, geometry, and calculus will be utilized and connections will be made to other disciplines including the influence of discrete math in computer programming.

Upon successful completion of the Discrete Mathematics Course, students will

- Be able to use matrices to model and solve problems, including display and interpret data and write/evaluate matrix expressions to solve problems.
- Be able to use graph theory to model relationships.
- Describe data to solve problems, including applying data collection methods, interpreting graphical displays, use the normal distribution, etc.
- Be able to use theoretical and experimental probability to model and solve problems, including expected values, discrete and random variables, etc.
- Be able to model and solve problems involving fair outcomes, including apportionment, election theory, fair division, voting patterns, etc.

• Be able to use recursion to model and solve problems, including finding sums of finite and infinite

Prerequisite: successful completion of Honors Algebra II

Instructor: Gwen Hooffstetter, a career high school math teacher with 10-years experience teaching math including AP Statistics and Discrete Mathematics

Latin I/II - The study of ancient Latin has witnessed a resurgence in recent years at both the Middle and the Upper School levels throughout the country -- and with good reason. Knowledge of the vocabulary of Latin is enormously helpful in deciphering the meanings and nuances of tens of thousands of words in English. Perhaps even more importantly, knowledge of the structure of the Latin language in terms of its grammar and syntax provides special insight into the (far simpler) structure of the English language, the mastery of which leads to an almost immediate improvement in the English writing skills of the student.

The Latin I course begins with an overview of the basic elements of English grammar and then proceeds to the systems of declensions and conjugations that are fundamental to Latin. Special attention will be paid to the developed case system for nouns and adjectives in Latin and to the various tenses of the Latin verb. Students will also work with Latin adjectives, adverbs, prepositions, pronouns and the passive voice. Daily exercises in Latin will reinforce what the students have learned, as will brief reading selections of modified ancient stories in Latin. Throughout the course, students will have the opportunity to learn about the culture and achievements of the ancient Romans. No prerequisites are required. The material in the course will be taught through a combination of video lectures and online tutorials designed to be used in conjunction with the textbook.

Instructor: John Martone, Sacred Heart Greenwich faculty member since 2001 teaching Theology, World Languages and Mathematics

Latin III/IV - Latin III/IV is a continuation of the Latin I/II course and consists of three main components: (1) a review and acquisition of grammar and syntax, (2) the translation and close reading of texts written in the original Latin and (3) a study of the culture and history of the ancient Romans.

The course will begin with a thorough overview of the basic Latin grammar and syntax learned in previous years of Latin (e.g., the declensions, conjugations, adjectives, adverbs, pronouns, etc). Students will then proceed to items relating to the more advanced Latin grammar and syntax, including the various participial formations, the ablative absolute, the gerund and gerundive constructions and the forms and syntax of the subjunctives. As students work through the grammar and syntax, they will also be reading and analyzing texts of various lengths written by Caesar, Cicero, Ovid, Catullus, Vergil and other ancient writers not only so that they can

practice and apply their understanding of the mechanics of the language, but also so that they can gain a further appreciation of the richness and power of the Latin language.

Instructor: John Martone, Sacred Heart Greenwich faculty member since 2001 teaching Theology, World Languages and Mathematics

SEMESTER COURSES

Financial Literacy - Fall 2020 & Spring 2021- This course covers topics such as savings and budgeting; managing credit cards; understanding a credit score and its implications; student loans for higher education; taxes and insurance; and how banks, the Federal Reserve and the Stock Exchange work. The goal of the course is to have the students develop a fundamental knowledge of concepts and vocabulary, which will become a foundation for sound financial decision-making in the future.

Instructor: Karen Panarella, Sacred Heart Greenwich faculty member since 2006, Upper School math teacher and Dean of Students and SophieConnect instructor since 2018.

General Psychology - Fall 2020 (note this is a change in semester from previous years) - General Psychology introduces students to the major paradigms and systems in Psychology today. Students will be asked to treat Psychology like any other science, and use the scientific method to help them solve problems and gain a better understanding of themselves and others. As an introduction to the field of Psychology, this class covers some of the most important as well as the most interesting fields within Psychology today including; Sensation and Perception, Consciousness and Dreams, Social Psychology, Personality Theories, and Abnormal Psychology. At the end of this class students will better understand all of the areas in their lives which are affected by Psychology everyday and be able to apply what they have learned to their own lives.

Instructor: Mark Arnold, former practicing psychologist and current educator. He has been a SophieConnect instructor since 2015

Marine Science - Spring 2020 Marine Science introduces students to oceanography through a review of earth science concepts, an investigation of physical and chemical ocean systems, the exploration of marine organisms and ecology, and the role of climate change in both marine and global systems. Students read and dissect scientific literature; integrate their knowledge of marine ecological systems into practical applications of science; and bridge connections between science, society and political interests. Perhaps most importantly, students foster critical thinking skills and a keen understanding of the scientific process necessary to become well-informed and scientifically aware citizens, whether students' futures directly involve marine science or not. Students learn through virtual and at-home laboratory exercises, scientific literature analysis, reading and video assignments, and research using online journals and current oceanographic data. This work is largely collaborative as students engage with the teacher and

with their classmates on projects and labs. There is a significant emphasis on the application of creativity and innovation in dealing with environmental challenges.

Instructor: TBD

Introduction to Neuroscience - Spring 2020 (Prerequisite: Biology and Chemistry) This course is designed to provide an introduction to the science and practice of neuropsychology, including the anatomical, functional, and cognitive concepts underlying human behavior. Upon successful completion of the course, students will have acquired an understanding of the terminology and concepts essential to the field of clinical neuropsychology, including:

- The role of neuropsychology in the interdisciplinary study and treatment of clinical disorders of higher cognitive function
- The historical origins, current concepts, and future research of neuropsychology
- Functionally relevant neuroanatomy and neurophysiology
- Primary cognitive domains related to neuropsychological disorders, and current assessment procedure
- Lifespan issues in neuropsychology, including pediatric and geriatric disorders, and the role of neuroplasticity in the brain's response to injury and interventions
- Professional considerations, including ethical guidelines, training requirements, and career options

Instructor: Mark Arnold, former practicing psychologist and current educator. He has been a SophieConnect instructor since 2015

Nutrition & Wellness - Fall 2020 - In the Nutrition and Wellness course, students look at current nutritional trends, current food guides, food labels, and the many steps required to get food from the farm to the table. Students will delve into human digestion and be introduced to the basic macro and micro nutrients (fats, proteins, carbohydrates, vitamins, minerals). This knowledge will then be applied to a variety of topics, including food allergies/sensitivities, fuel for learning, and the effects of malnutrition. Students will research and discuss the most common diets and their advantages and disadvantages. This will lead into a discussion regarding healthy weight management and disordered eating. This course will also offer a basic introduction to sports nutrition, and nutrition throughout the stages of life (pregnancy, baby, child, adolescent, and adult).

Instructor: TBD

Honors Seminar**: Women's History in the United States (Grades 11-12) is a semester-long course designed to introduce students to the history of the women's movement and women in religious life in the United States and abroad. This interdisciplinary course will cover detailed historical and theological information about life for women in America since the 18th century. Special emphasis will be placed on primary sources and original interviews through an oral history research paper. Topics of the course will include the following:

• Contributions of religious women to the American women's experience

- Ways in which religious women used their faith to empower other women
- Introduction to women's history, feminism and feminist theory
- Detailed history of the women's movement in the United States
- Transnational feminism to place U.S. feminism in context
- Feminist movements in American religious institutions
- Women's health and public policies governing women's health
- Institutions and their impact on women's lives

**This course has been offered at Sacred Heart Preparatory, Atherton as either a History or Religion course for the past number of years. Partner schools will each determine the assigned area and amount of credit for their own enrolled students.

Instructor: Serene Williams and Kristin Kelly of Sacred Heart Preparatory, Atherton will bring their popular course to SophieConnect for the first time. THIS COURSE MAY BE OFFERED IN A 4-WEEK INTENSIVE SUMMER COURSE.

SUMMER 2020 COURSES

AP Computer Science A Jumpstart (for students interested or planning to take AP Computer Science A) - This will be a 2-week skills "refresh" course to help position students for success in AP Computer Science A. Topics may include Algebra, initial coding instruction and others. *Topic being fully developed by CSA instructor*.

Run date: July 6-17, 2020

Fee: \$500

Instructor: Karmen Harden, experienced AP Computer Science A instructor and SophieConnect faculty

Financial Literacy - (Grades 10-12) This 4-week, for-credit intensive covers topics such as savings and budgeting; managing credit cards; understanding a credit score and its implications; student loans for higher education; taxes and insurance; and how banks, the Federal Reserve and the Stock Exchange work. The goal of the course is to have the students develop a fundamental knowledge of concepts and vocabulary, which will become a foundation for sound financial decision-making in the future.

Run dates: July 6-July 31

Fee: \$675

Instructor: Karen Panarella, Sacred Heart Greenwich faculty member since 2006, Upper School math teacher and Dean of Students and SophieConnect instructor since 2018.

Honors Seminar**: Women's History in the United States (Grades 11-12) is a 4-week, for-credit, intensive course designed to introduce students to the history of the women's movement and women in religious life in the United States and abroad. This interdisciplinary

course will cover detailed historical and theological information about life for women in America since the 18th century. Special emphasis will be placed on primary sources and original interviews through an oral history research paper. Topics of the course will include the following:

- Contributions of religious women to the American women's experience
- Ways in which religious women used their faith to empower other women
- Introduction to women's history, feminism and feminist theory
- Detailed history of the women's movement in the United States
- Transnational feminism to place U.S. feminism in context
- Feminist movements in American religious institutions
- Women's health and public policies governing women's health
- Institutions and their impact on women's lives

****This course has been offered at Sacred Heart Preparatory, Atherton as either a History or Religion course for the past number of years. Partner schools will each determine the assigned subject area and amount of credit for their own enrolled students.

Run date: July 6 - July 31

Fee: \$675

Instructors: Serene Williams and Kristin Kelly of Sacred Heart Preparatory, Atherton will bring their popular course to SophieConnect for the first time.

Tune Up Your Writing (grades 9-12) - Get a jump on the school year and build your writing skills and confidence. This course is designed to restart and refresh the students' knowledge of writing fundamentals and reboot and revitalize their ability to produce well-structured and interesting essays, papers and any other school-related (or life-related) writing. Students will participate in various writing assignments and receive instructor feedback. Topics include: Essential Grammar; Vocabulary Building; Sentence Structure; Paragraph Structure; Thesis Development; Essay Planning and Execution.

Run dates: Early August

Fee: \$500

Instructor: Matilde Larson, Sacred Heart Greenwich Upper School English and Journalism teacher and SophieConnect Co-Director

PSAT Prep Course (grades 10-11) - This course is designed to help students develop the necessary skills to achieve their highest potential on standardized tests such as the PSAT. The course will focus on determining a student's strengths and weaknesses in both verbal and mathematical concepts as well as building strategies to maximize points on multiple choice exams. Students will be answering questions through a series of online assessments reflective of actual PSAT exams.

The following skill sets will be improved:

- Reasoning
- Educated elimination
- Understanding common pitfalls

Additionally the necessary basic knowledge of math and verbal concepts will be refreshed and strengthened:

Math:

- Numbers and Operation
- Algebra and Functions
- Geometry and Measurement
- Data Analysis, Statistics and Probability
- Problem solving and math applications in Science and History/Social Studies

Verbal:

- Vocabulary building
- Grammar
- Reading Comprehension

Run date: Early August

Fee: \$500

Instructor: Matilde Larson, Sacred Heart Greenwich Upper School English and Journalism teacher and SophieConnect Co-Director & Math Instructor to be determined