PVCICS High School Curriculum Guide 2021-2022 As of August 2021

- All High School core courses are college preparatory
- All High School students take a double period of Chinese
 - All grade 9 and grade 10 core courses are comparable to HONORS level to prepare students for the rigors of the IB Program

Subject/Grade	9	10	11	12
English IB Group 1 Language A	English 9	English 10	IB English SL1 IB English HL1 IB Eng Lang & Lit SL1 IB Eng Lang & Lit HL1	IB English SL2 IB English HL2 IB Eng Lang & Lit SL2 IB Eng Lang & Lit HL2
*(2019-20 & after)				
*Chinese (legend below) IB Group 2 Language B	Chinese I1 Chin Nov. Chinese P1 Chin Int. Chinese 1 Chin. Adv	Chinese P2	IB Chinese SL1 IB Chinese HL1	IB Chinese SL2 IB Chinese HL2
Social Studies IB Group 3 Individuals & Society	History 9	History 10	IB History SL1 IB History HL1 IB Psychology SL1 IB Psychology HL1 IB Business/Mgmt SL 1 IB Business/Mgmt HL 1	IB History SL2 IB History HL2 IB Psychology SL2 IB Psychology HL2 IB Business/Mgmt SL 2 IB Business/Mgmt HL 2
Natural Science IB Group 4	Biology	Chemistry/Physics	IB Chemistry SL1 IB Biology SL1 IB Biology HL1 IB Physics SL1 IB Physics HL1	IB Chemistry SL2 IB Biology SL2 IB Biology HL2 IB Physics SL2 IB Physics HL2
Mathematics IB Group 5	Algebra 1 Geometry	Geometry Algebra II	IB Math App& Inter HL IB Math Ana.& App.SL1	IB Math App&Inter.SL2 I IB Math App & Inter HL2 IB Math Ana.&App SL2 IB Math Ana.&App HL2
Arts IB Group 6	Music 9 (1/2 cr) Art 9 (1/2 cr)	Music 10 (1/2 cr) Art 10 (1/2 cr)	IB Theater SL1 IB Theater HL1 -or- one IB course from 0	IB Theater SL2 IB Theater HL2 Group 3 or 4 above
Electives	4 Electives (1/4 cr ea.)	4 Electives (1/4 cr ea.)	N/A	N/A
Physical Education/ Health	PE	PE/Health	N/A	N/A
IB Requirements All Students	N/A	N/A	Creativity, Activity Service (CAS)	Creativity, Activity Service (CAS)
	N/A	N/A	Extended Essay (EE) (starts junior yr)	Extended Essay (EE) (due senior yr)
IB Diploma Candidates only	N/A	N/A	Theory of Knowledge 1 TOK (spring jr yr)	Theory of Knowledge 2 TOK (fall sr yr)

For IB courses, HL = IB Higher Level; SL = IB Standard Level

**Chinese Course Name Legend

9th & 10th grade Chinese courses

Prior to 2019-2020 2019-2020 and after

9CHIN1 9CHINNOV 9CHINP1 9CHININT 9CHINI1 9CHINADV 10CHIN2 10CHINNOV 10CHINP2 10CHININT 10CHINI2 10CHINADV

4 credits of Social Studies/History

Minimum Graduation Requirements: All students in high school are required to meet the Massachusetts State				
requirements, as well as Pioneer Valley Chinese Immersion Charter Schools' graduation requirements (total of 28 credits) and IB				
requirements. PVCICS Graduation requirements exceed Massachusetts State requirements. <i>Grade below 60 is failing</i> .				
4 credits of English	8 credits of Foreign Language/Chinese			
4 credits of Mathematics	1 credit of Art appreciation			
4 credits of Science	1 credit of Music appreciation			

2 credits of PE (Health included in PE)

IB Creativity, Activity, Service (CAS)

IB Extended essay (4000 words)
IB Theory of Knowledge Course (IB Diploma Candidates)

MCAS: All Massachusetts students must pass the 10th grade English and Math MCAS tests, and a Science MCAS. PVCICS administers the MCAS Science/Biology test in 9th grade.

High School Course Guide 2021-2022 IB Courses HL= Higher Level SL= Standard Level

ENGLISH

English 9 Grade 9 1 Credit

English 9 is designed to deepen students' capacities to respond to works of literature, to analyze the ways in which writers have fulfilled their artistic intentions, and to express their responses in carefully crafted oral and written presentations. As they read a variety of genres, students will expand their awareness of literary style and will learn approaches that will make them more discerning readers and writers. As a stepping-stone to the IB program, students will develop analytical skills as they view traditional novels, short stories, poetry, podcasts, video essays, and more with an awareness of literary elements such as theme, narrative technique, structure, and language. Students will also study vocabulary and grammar as well as paragraph structure and the essay writing process. Students will write a comparative essay in preparation for the IB Paper 2; create a 2-3 page persuasive essay working from a prompt; identify, recognize and apply basic literary terms to a seen work, and make a 3-5 minute persuasive oral presentation to their classmates. Works studied may include *Romeo and Juliet, American Born Chinese, Fahrenheit 451, I Know Why the Caged Bird Sings, To Be Taught if Fortunate* as well as a collection of short stories, poetry, and essays.

English 10 Grade 10 1 Credit

English 10 builds on the skills begun in English 9 and works to ready students for the IB program. This course will develop skills in close reading, analysis, and composition. Through a study of a range of genres and authors, students will begin to move toward a greater awareness of writers' choices while embracing the habits of mind necessary to be a true "IB Learner." Students will increase their comprehension of genre and style as they analyze, interpret, and compare and contrast literature from different cultural and historical contexts. They will develop their critical thinking skills, write with growing proficiency, and speak with escalating confidence as they make individual as well as group presentations. In preparation for the International Baccalaureate course work, each student will prepare at least one ten minute oral presentation, as well as several written literary commentaries throughout the year. In addition, students will hone critical essay writing skills throughout the year. Students will also engage in outside reading and formal vocabulary and grammar study. Texts studied may include *Macbeth*, *Purple Hibiscus*, *Persepolis*, *The Odyssey*, and short stories and poetry by a variety of authors.

IB English Literature Grade 11 1 Credit

In Year One of IB Literature, students will begin a critical study of English language texts. The text types studied will include prose fiction, prose nonfiction, poetry, and drama. Students will be taught to address the literary elements of works, to write and speak fluently, coherently, and knowledgeably, and to make personal and insightful connections with literature.

This course is offered at both Standard and Higher levels. At the Standard level, students will read five works of literary merit, four of which will be originally written in English and one of which will be in translation.

At the Higher level, students will read seven works of literary merit, five of which will be originally written in English and two of which will be in translation. In addition, Higher Level students will author a work of critical textual analysis, based on the works read up to that point in the course. This essay will be submitted to the IB as an artifact of the coursework.

IB English Literature

Grade 11 1 Credit

In Year Two of IB Literature, students will complete their critical study of English language texts. The text types studied will include prose fiction, prose nonfiction, poetry, and drama. Students will demonstrate their ability to address the literary elements of works, to write and speak fluently, coherently, and knowledgeably, and to make personal and insightful connections with literature.

This course is offered at both Standard and Higher levels. At the Standard level, students will read five works of literary merit, four of which will be originally written in English and one of which will be in translation.

At the Higher level, students will read six works of literary merit, four of which will be originally written in English and two of which will be in translation.

At both Standard and Higher Levels, students will deliver an oral response to literature, in which they will examine an issue of global significance across two texts, one originally written in English and one in translation. Students will prepare for IB exams in May.

IB English Language & Literature 1 Grade 11

1 Credit

In IB Lang & Lit 1 students will begin their critical study of English language texts. This course differs from IB Literature in that while IB Lit focuses only on literary works (such as poetry, fiction, etc), Lang & Lit requires the study of both literary forms and non-literary text types. Students are encouraged to embrace the ambiguity of language in any form, and consider how any text communicates.

In the first year of this study, the goal is to establish an approach to the insightful analysis of any English-language work, whether written, spoken, or otherwise performed. By developing critical literacy skills, students are called upon to write, speak, and articulate their ideas clearly.

This course is offered at both Standard and Higher levels. At the Standard level, students will read two works of literary merit (such as novels, plays, nonfiction texts, etc) set into the context of other "nonliterary" works (such as film, documentary, advertisement, propaganda, etc).

At the Higher level, students will read three works of literary merit. In addition, students will author a work of critical textual analysis, based on the works read up to that point in the course. This essay will be submitted to the IB as an artifact of the coursework.

IB English Language & Literature 2

Grade 12

1 Credit

In IB Lang & Lit 2 students will complete their critical study of English language texts. In the second and final year of this study, students will demonstrate their developed skills with interpretation and critical analysis. Additionally, they will demonstrate their insights by articulating their ideas in writing, in presentation, and in class discussions.

This course is offered at both Standard and Higher levels. At the Standard level, students will read two more works of literary merit (such as novels, plays, nonfiction texts, etc) set into the context of other "nonliterary" works (such as film, documentary, advertisement, propaganda, etc).

At the Higher level, students will read three more works of literary merit.

At both levels, students will deliver an Oral response in the spring. This presentation is designed to give each student the chance to demonstrate insight and capability with critical analysis. After this, the year will end with the IB exam. Students will be given texts not studied in the class and asked to write in response to these texts. These responses will be scored by the IB, and applied to each student's overall course score.

MATHEMATICS: Note: course selection in 9th and 10th grade may depend on a placement test.

Algebra I Grade 9 1 Credit

This course provides a strong foundation for all further mathematical studies. Topics include operations with real numbers; solving linear, absolute value, quadratic and polynomial equations, linear inequalities and systems of 2 linear equations; graphing linear, quadratic, absolute value, exponential, and simple rational functions and systems of 2 linear equations; operations with polynomials including factoring; laws of exponents and scientific notation; radical expressions; and introductions to statistics and probability. Practical applications, patterns, estimation and appropriate use of the calculator will be integrated into all units. A scientific calculator is required; a TI-84 graphing calculator is suggested, and TI-84 calculators will be available for students in 9th and 10th grade to use in school.

Geometry Grade 9 or 10 1 Credit

This course covers a thorough survey of 2-D and 3-D geometry includes angles, triangles, other polygons, circles, area and surface area, volume, congruence, and similarity. The course will emphasize logic, focusing on constructions and proofs; and students will practice writing proofs throughout the course. A scientific calculator is required; a TI-84 graphing calculator is suggested, although calculators will be available for students in 9th and 10th grade to use in school. Prerequisite: Algebra 1

Algebra II Grade 10 1 Credit

This course will extend the skills and knowledge from Algebra I and is a prerequisite for the higher level (HL) IB Math. Topics will include the study of matrices; conic sections; functions; complex numbers; polynomial functions, equations and inequalities; radical equations; rational functions, equations and inequalities; exponential and logarithmic functions and equations; sequences and

series; and introductory trigonometry. Practical applications, patterns, and appropriate use of the graphing calculator will be integrated throughout the course. A TI-84 graphing calculator is suggested, although calculators will be available for students in 9th and 10th grade to use in school. Prerequisite: Algebra 1

IB Mathematics Applications and Interpretations 1 Grade 11 1 Credit

IB Math Applications and Interpretations 1 is the first course of the two-year IB sequence. This course is designed for students who require a basic college preparatory course in mathematics. Coursework will build on and extend skills and knowledge from Algebra I and Geometry. Specific topics will include scientific notation, arithmetic and geometric sequence, exponents and logarithms, function notation, modeling, trigonometry of right and non-right triangles, and an introduction to statistics, measures of central tendency. Practical applications, projects, and appropriate use of the graphing calculator will be integrated throughout the course. A TI-84 graphing calculator is required. This course is appropriate for students who wish to study social sciences and humanities.

IB Mathematics Applications and Interpretations 2 Grade 12 1 Credit

IB Math Applications and Interpretations 2 will extend the topics studied in Math Applications and Interpretations 1. New topics include trigonometry of three-dimensional shapes, further topics in statistics (correlation, regression formula, binomial distribution, chi-squared test), a brief introduction to differential calculus and topics from financial mathematics. An important part of Math Applications and Interpretations 2 is the internal assessment. Practical applications, projects, and appropriate use of the graphing calculator will be integrated throughout the course. A TI-84 graphing calculator is required. Prerequisite: Math Applications and Interpretations 1

IB Mathematics Analysis and Approaches SL 1 Grade 11 1 Credit

This is the first year of the two year sequence. This course is designed for students who have both an interest and ability in mathematics. This is the recommended level for students planning to study science, economics, business and/or psychology. Over the two years this course is comparable to a pre-calculus and introductory calculus course and thus reviews and extends the concepts studied in Algebra II and Geometry, especially polynomial, exponential and logarithmic functions, sequences and series, and probability and descriptive statistics. New concepts include transforming functions and the binomial expansion. Practical applications and appropriate use of the graphing calculator and other technology will be integrated throughout the course. A TI-84 graphing calculator is required. Prerequisite: Geometry

IB Mathematics Analysis and Approaches SL 2 Grade 12 1 Credit

This course reviews and extends the topics studied in Mathematics Analysis and Approaches SL1. It is comparable to a calculus course. New topics include trigonometry, further work with statistics including the normal and binomial distributions, differential and integral calculus and the applications such as graphing, optimization, velocity and acceleration, graphical behavior of functions, and areas under curves. Practical applications and appropriate use of the graphing calculator and other technology will be integrated throughout the course. A TI-84 graphing calculator is required. Prerequisite: IB Mathematics Analysis and Approaches SL 1

Prerequisite: Grade of A in Algebra II and Geometry

This is the first year of the two year sequence. This sequence is designed for students who have both a strong interest and ability in mathematics. During this first year the course goes into great depth in the following topics: quadratics, including complex numbers; polynomial functions; exponentials and logarithms; transforming functions; sequences and series; trigonometry; introductory differential and integral calculus; and mathematical proofs, including mathematical induction. Practical applications and appropriate use of the graphing calculator will be integrated throughout the course. A TI-84 graphing calculator is required. Prerequisite: A minimum grade of A- in both Geometry and Algebra II and teacher recommendation. It is recommended that students have a very strong interest in math and are able to earn high grades in Algebra II with relative ease.

IB Mathematics Analysis and Approaches HL 2 Grade 12 1 Credit

This course reviews and expands the topics studied in Mathematics Analysis and Approaches HL 1. Core topics include vectors; polar coordinates and complex numbers; statistics and probability; random variables, including the binomial and normal distributions; Maclaurin series; and differential equations. Practical applications and appropriate use of technology will be integrated throughout the course. A TI-84 graphing calculator is required. Prerequisite: IB Mathematics Analysis and Approaches HL 1

SCIENCE

Biology Grade 9 1 Credit

Biology for Grade 9 is a 1 year course based on the curriculum stated in the Massachusetts Frameworks for Biology. The course is presented in two semesters: 1st semester will provide students with a basic understanding of the structure and function of cells, the basic biochemistry that makes cells work, and genetics. The 2nd semester will focus on evolution, ecology, and human anatomy and physiology. Labs are integral parts of the curriculum, used to explain complex concepts while allowing for a hands-on experience of science. Some labs will provide an introduction to the IB method of lab assessment, laying the groundwork for students' success in their future IB science courses.

Chemistry and Physics

Grade 10 1/2 Credit each

Chemistry and Physics for Grade 10 are two one-semester courses that provide an introduction to the knowledge and skills of physics and chemistry. The courses meet the requirements of the Massachusetts Curriculum Frameworks Learning Standards.

In both Chemistry AND Physics, the course will feature topics that apply to both chemistry and physics core concepts: measuring physical quantities, collecting & analyzing data, significant figures, unit conversions, dimensional analysis and using lab equipment. Students will also create a practice internal assessment to better prepare them for IB.

In the chemistry only section, students will gain foundations in chemical concepts, problem solving skills and laboratory skills. Students will also gain an appreciation for the organization of chemical knowledge and efforts of scientists to extend it. Topics to be studied include atomic theory,

periodicity, bonding, balancing equations, types of chemical reactions and an introduction to stoichiometry.

In the physics-only semester, students will learn the fundamental concepts of motion (displacement, velocity, and acceleration), forces (including Newton's Laws of Motion and free body diagrams), and energy (kinetic and potential energy and energy conservation). The physics semester will include multiple experiments and in the spring a practice Internal Assessment to prepare students for IB science. This is probably the first science class students will take that involves significant mathematics (especially equation manipulation and graphing); TI-84 calculators will be provided.

IB Biology SL 1 Grade 11 1 Credit

The Standard Level IB Biology course content is spread over two years, including a 20% practical component and completion of a group research project. Through IB Biology, students apply their problem solving and critical thinking skills to study the relationship between structure and function, patterns and trends, and the worldwide implications of scientific knowledge. We will be studying the following topics; Evolution, Biochemistry, Nucleic Acids, Ecology, Cell Biology, and Genetics. Students will hone their technical and analytical lab skills, culminating in the conduction of their Internal Assessment lab reports. IB assessment criteria will be used to evaluate student work. At the end of the two year course the students will take the Standard Level IB Biology exam.

IB Biology SL 2 Grade 12 1 Credit

The second year of Standard Level IB Biology builds on the skills and understandings of year 1 and covers Meiosis and Inheritance, Intro to Human Physiology, The Blood and Immunity, Plant Biology, and Option A: Neurobiology. At the end of the two-year course students take the Standard Level IB Biology exam. IB Biology SL 1 is a prerequisite for this course.

IB Biology HL 1 Grade 11 1 Credit

The Higher Level IB Biology course content is spread over two years, including a 20% practical component and completion of a group research project. Through IB Biology, students apply their problem solving and critical thinking skills to study the relationship between structure and function, patterns and trends, and the worldwide implications of scientific knowledge. We will be studying the following topics; Evolution, Biochemistry, Nucleic Acids, Ecology, Cell Biology, and Genetics. Standard and Higher Level material is taught in parallel, with Higher Level students going into more depth in the same topics. Students will hone their technical and analytical lab skills, culminating in the conduction of their Internal Assessment lab reports. IB assessment criteria will be used to evaluate student work. At the end of the two year course the students will take the Higher Level IB Biology exam.

IB Biology HL 2 Grade 12 1 Credit

The second year of Higher Level IB Biology builds on the skills and understandings of year 1 and covers Meiosis and Inheritance, Intro to Human Physiology, The Blood and Immunity, Plant Biology, and Option A: Neurobiology. Standard and Higher Level material is taught in parallel, with Higher Level students going into more depth in the same topics. At the end of the two-year

course students take the Higher Level IB Biology exam. IB Biology HL 1 is a prerequisite for this course.

IB Physics SL 1/HL 1

Grade 11

1 Credit

HL Prerequisites: Minimum grade of B in Algebra I and II

SL Prerequisites: Minimum grade of B+ in Algebra I and Geometry

IB Physics Standard Level (SL) and Higher Level (HL) are two-year courses in which the students will obtain a broad knowledge of the principles, techniques, and laws of physics, and of the investigatory skills and tools required to study the nature of physical phenomena using scientific methods. The first year covers content common to both the SL and HL curriculum. It develops the foundation knowledge and skills needed by students to: a) score well on the IB Physics exam papers at the end of the second year course, b) provide college-bound students with a strong foundation for college physics courses and c) understand and use physics principles effectively in their careers. The first year of Physics SL/HL will cover the following subjects: measurement and uncertainty, classical mechanics, circular motion and gravitation, thermal physics, waves, and electricity and magnetism. A TI-84 graphing calculator and a laptop computer are required.

IB Physics SL 2 Grade 12 1 Credit

The second year of Physics SL will extend student understanding of: mechanics, thermal physics, and electricity and magnetism. New topics include atomic, nuclear, and particle physics, energy production, and one option (special relativity, astrophysics, engineering physics, or imaging). It will also review the principles and skills covered in the first year to assist students taking the IB Physics SL exam. Time will be allocated to address ethical considerations associated with the role of physicists in assisting in the development of industrial and military technology, and the responsibility scientists of all disciplines have in addressing the environmental impact of human society. A student must have taken the first year of IB Physics SL as a prerequisite for taking this second year course.

IB Physics HL 2 Grade 12 1 Credit

The second year of Physics HL will cover the subjects of: atomic, nuclear, and particle physics, energy production, wave phenomena, fields, electromagnetic induction, quantum and nuclear physics, and one option (relativity, astrophysics, engineering physics, or imaging). It will also review the principles and skills covered in the first year to assist students taking the IB Physics HL exam. Time will be allocated to address ethical considerations associated with the role of physicists in assisting in the development of industrial and military technology, and the responsibility scientists of all disciplines have in addressing the environmental impact of human society. A student must have taken the first year of IB Physics HL as a prerequisite for taking this second year course.

IB Chemistry SL 1 Grade 11 1 Credit

This first year course is suitable for students who have ability in science and math. Students in the first year course will study the following core topics: stoichiometry, molarity, gas laws, atomic theory, periodicity, chemical bonding and structure, energetics, kinetics and equilibrium. In addition, students will perform 20+ hours of practical work closely related to the core topics, and a 10 hour Group 4 interdisciplinary project.

IB Chemistry SL 2 Grade 12 1 Credit

This second year course is suitable for students who have ability in science and math; IB Chemistry SL1 is a prerequisite. Students in the second year course will study the following core topics: organic chemistry, acids and bases, oxidation and reduction, and medicinal chemistry. In addition, students will perform 10+ hours of practical work closely related to the core topics and create a 10+ hour independent laboratory investigation called the internal assessment.

SOCIAL STUDIES

History 9 Grade 9 1 Credit

This is an introductory course in U.S. history that will cover the early presidents and foundations of our nation through the Progressive Era/1920's. Major topics covered include: impacts of the early presidents upon the new nation, Native American history, resistance to slavery, reform movements prior to the Civil War; the Civil War and its impact on the development of the country; Reconstruction and its importance today, westward expansion, the Industrial Age, Imperialism, and the effects of the Progressive Era. Students will develop skills necessary for success later in the IB: note-taking, organization; keeping a notebook; reading for comprehension; writing a thesis essay; learning research techniques, and interpreting primary documents.

History 10 Grade 10 1 Credit

This is an introductory course in U.S. History from after Reconstruction in the 1870s to the present time. Topics covered include: the Progressive Era and American Expansionism, World War I, the Great Depression, the New Deal, World War II, Civil Rights and the Vietnam War. Special emphasis will be given to the Cold War and the causes, practices, and effects of war to prepare students for the IB History courses they will take in their Junior year. Students will develop skills necessary for success later in the IB: note-taking; organization; keeping a notebook; reading for comprehension; writing a thesis essay; learning research techniques, and interpreting and evaluating primary and secondary documents. In the second half of semester 2, units on Modern World History will be incorporated into the course.

IB History HL 1 Grade 11 1 Credit

This is the first year of a two-year course designed for students who plan on taking the Higher Level IB Exam. Regions studied in this course include Europe, Asia and the Americas. The course begins with a broad overview of the second half of the 19th Century, focusing on major trends such as industrialization, imperialism, urbanization, social reform and the birth of Marxism. Students will study the evolution of warfare up to 1919, including technological advances, recurring causes and the myriad of effects. Special attention will be paid to the political realignment of Europe and Asia after 1919, including the evolution of Japan as it moves toward Global War and the rise of single party states in Italy & Germany. Students will begin an historical investigation of up to 2200 words, which will be completed in the early fall of their Senior year.

IB History HL 2 Grade 12 1 Credit

This is the second and final year of a two-year course for students who plan to take the Higher Level IB exam in the spring of their Senior year. Regions studied in this course include Europe, Asia and the Americas. The grade 12 year begins with the Spanish Civil War and the rise of an authoritarian state in Spain and will be followed by an extensive study of the rise and rule of Mao.

Next, we will begin an exploration of Tsarist Russia and the movement toward Civil War. The rise and rule of Stalin will then be extensively explored. These authoritarian states, including the ones studied in Grade 11, will be compared and contrasted and will be followed by an extensive study of WWII. Students will be prepared to answer IB exam Paper 1, which is a document-based exam on the Movement to Global War. They will also be prepared to answer IB exam Paper 2, which is a comparative examination of Authoritarian States and the Causes and effects of 20th Century Wars, Students will also answer IB exam Paper 3, which assesses Europe and the First World War [1871-1918], European States in Inter-War Years (an intensive study of Europe from 1918-1939), Imperial Russia, revolution and the establishment of the Soviet Union (1855-1924)], and Versailles to Berlin: Diplomacy in Europe (1919–1945). Students will complete an historical investigation of up to 2200 words in the fall of their Senior year.

IB History SL1 Grade 11 & SL2 Grade 12

1 Credit

This is a two-year course designed for students who plan to take the Standard Level exam in IB History at the end of grade 12. IB History SL will begin with a survey of developments in the 19th Century. The grade 11 year will conclude with World War I and the causes leading up to World War II, including the evolution of Japan as it moves toward Global War and the rise of authoritarian states in Italy and Germany. The grade 12 year will be an intensive study of various elements of 20th Century Europe and Asia, beginning with an exploration of the factors leading to the Spanish Civil War, the rise and rule of two authoritarian rulers - Mao and Stalin - and culminating in an in-depth view of World War II as a total war. Students will be prepared to answer IB exam Paper 1, which is a document-based exam on the Movement to Global War. They will also be prepared to answer IB exam Paper 2, which is a comparative examination of Authoritarian States and the Causes and effects of 20th Century Wars. Finally, students will complete an historical investigation of up to 2200 words in the fall of their Senior year on a topic of their choice.

IB Psychology SL1 Grade 11 & SL2 Grade 12

1 Credit

Students will be introduced to the history of the development of Psychology and three theoretical models found in the field, the Biological, Learning, and Cognitive perspectives. Students will develop scientific literacy and learn to understand and critically evaluate scientific research in the subject. They will also study research methods and the ethics of research. Finally, students will design and conduct a partial replication of a published psychological experiment. Students will also study the optional area of abnormal behavior.

IB Psychology HL1 Grade 11 & HL2 Grade 12

1 Credit

Students will be introduced to the history of the development of Psychology and three theoretical models found in the field, the Biological, Learning, and Cognitive perspectives. Students will develop scientific literacy and learn to understand and critically evaluate scientific research in the subject. They will also study research methods and the ethics of research. Finally, students will design and conduct a partial replication of a published psychological experiment. Students will also study the optional area of abnormal behavior and developmental psychology as well as qualitative research methods.

IB Business and Management SL1 Grade 11 & SL 2 Grade 12

1 Credit Each

Students are introduced to the fundamentals of running and managing a business through 5 major units to include business organization, human resources, finance, marketing, and operations management. Through comprehensive case studies and creating a startup business, students apply their knowledge to describe and evaluate business models and decisions made by real corporations. Students will complete an internal assessment examining a particular local business.

IB Business and Management HL1 Grade 11 & HL2 Grade 12 1 Credit Each

Students are introduced to the fundamentals of running and managing a business through 5 major units to include business organization, human resources, finance, marketing, and operations management. HL students will study additional content to include organizational tools, organizational culture, budgets, sales forecasting, and production planning to name a few. Through comprehensive case studies and creating a startup business, students apply their knowledge to describe and evaluate business models and decisions made by real corporations. Students will complete an internal assessment examining a particular local business. HL students will need to interview someone in that business.

CHINESE: Note: course selection in 9th and 10th grade may depend on a placement test.

Chinese I1: Advanced Early Immersion Thread Grade 9

2 Credit

Chinese I1 is designed for students who entered PVCICS in Kindergarten. Chinese is used exclusively in the classroom. It will enable students to attain upper intermediate to advanced levels in speaking, listening, reading, and writing on the ACTFL proficiency guidelines. Chinese I1 will provide students with the appropriate language skills and cultural knowledge to use the Chinese language in their everyday lives and in specific content areas. Topics such as the impact of technology on Chinese culture and society, the internet, individualism and social networks as means of communications in contemporary life may be covered. Students will be exposed to increasingly challenging authentic material. Students will engage in meaningful real-world tasks, including reading and discussing current news events in Chinese, corresponding with e-pals in China, and debating issues about contemporary China through student developed blogs. Chinese I1 will develop students' Chinese computer skills to develop critical thinking skills needed in upper level courses. The course will give a deeper appreciation for Chinese language and culture.

Chinese I2: Advanced Early Immersion Thread Grade 10

2 Credits

Chinese I2 is designed for students who have completed Chinese I1. Chinese is used exclusively in the classroom and students will use challenging authentic materials. It will enable students to develop advanced levels in speaking, listening, reading, and writing on the ACTFL proficiency guidelines. Chinese I2 will provide students with the appropriate language skills and cultural knowledge to use the Chinese language naturally in daily conversations and in specific content areas. Topics such as modernization, consumerism and the environment may be covered. These topics will stimulate discussion on the impact of development on the natural environment in China by comparing and contrasting alternative energy solutions in China, analyzing the changes and trends of energy use in China and the impact of rising consumerism on China's environment. Chinese I2 will develop critical thinking and a deeper appreciation for Chinese language and culture

Chinese P1: Intermediate Middle Immersion Thread Grade 9

2 Credits

Chinese P1 is a continuation of the partial immersion thread for students who entered PVCICS in 6th grade. Chinese is used exclusively in the classroom. This course continues to explore the communicative language functions in more depth and width. Topics include leisure time activities, families, generation gap, diet and health, transportation and geography. Chinese idioms, songs and history are introduced in this course. Chinese P1 will develop students' Chinese computer skills and develop language skills in content areas so they can advance their language skills.

Chinese P2: Intermediate Middle Immersion Thread Grade 10

2 Credits

Chinese P2 is for students who have completed Chinese P1. Chinese is used exclusively in the classroom. Students continue to build on their skills in reading, writing, speaking and listening. All language skills will be studied through a range of texts and materials and enable an awareness of Chinese culture. Competence in each of the primary language skills will involve an understanding of language, cultural interaction and message. The course will cover a variety of topics such as business, economics, science and engineering. Authentic Chinese materials in digital and traditional forms will be used extensively. Chinese P1 requires students to use their Chinese computer skills in content areas to research a topic demonstrating research and critical thinking skills.

Chinese 1: Novice Immersion Language and Culture Discovery Grade 9 2 Credits Chinese 1 is designed for absolute beginners or those who may have had an introductory Chinese course but do not qualify for advanced standing on the basis of the school's placement test. As a modern language course, five proficiencies begin development here: Speaking, Listening, Reading, Writing and knowledge of the cultures where the language is spoken. Chinese is the primary language of classroom instruction and of class participation. By the end of Chinese 1, students will be able to understand, speak, and write in a number of tenses: present, future and past. Assessments are varied to accommodate various learner strengths and include written and oral exams.

Chinese 2: Novice Immersion Language and Culture Exploration Grade 10 2 Credits Chinese 2 systematically continues the development of the student's ability to understand spoken Chinese as well as use it as a meaningful tool of written and spoken communication. The acquisition of vocabulary is essential along with grammatical knowledge and is largely achieved through substantially increased reading. Students gain additional insights into Chinese culture. Written and oral expressions are repeatedly assessed throughout the year. By the end of Chinese 2, the student should be able to confidently use Chinese in spoken and written speech in a variety of situations.

IB Chinese SL1: Year 1 of Standard Level Grade 11

2 Credits

Chinese 3, IB Standard Level 1, prepares students to fulfill their IB Language B requirement. Students continue to develop competency in the skills of listening, speaking, reading, and writing through extensive creation and practice. The culture of the countries where the language is spoken continues to be stressed. Chinese is used exclusively as the vehicle for communication. The course will allow students to read and speak Chinese with an increased sense of enjoyment, to write with

greater clarity, precision and style accuracy and to understand spoken Chinese with greater facility. Contemporary and historical Chinese texts are used, as well as authentic texts such as current news articles, e-media sources and other authentic sources serve as a resource for gaining knowledge and language skills. All written and oral assessments will be composed and analyzed using IB models.

IB Chinese SL2: Year 2 of Standard Level Grade 12 2 Credits

Chinese 4, IB SL2, prepares students to fulfill their IB Language B requirement at the Standard Level. Students will employ their skills of listening, speaking, reading, and writing in an appropriate variety of culturally and linguistically sophisticated formats. Students will use their acquired skills to analyze the grammar, vocabulary and content of a wide variety of sources of information dealing with Chinese culture and society. All written and oral assessments will be composed and analyzed using IB models and assessment criteria. The material resources for this course will come from a variety of original documents thematically organized and as well as digital media such as that available on the web and other sources. Seniors in this course can sit for the Standard Level International Baccalaureate Language B exam in the spring.

IB Chinese HL 1: Year 1 of Higher Level Advanced Grade 11 2 Credits

Chinese 4, IB HL1, prepares students to fulfill their IB Language B requirement at the Higher Level. Students will employ their skills of listening, speaking, reading, and writing in an advanced level of culturally and linguistically sophisticated formats. Students in Higher Level will study Chinese Literature from the modern period in the early 20th century in various genres. Students will use their acquired skills to analyze the grammar, vocabulary and content of a wide variety of sources of information dealing with Chinese culture and society. All written and oral assessments will be composed and analyzed using IB models and assessment criteria. The material resources for this course will come from a variety of original documents thematically organized and as well as digital media such as that available on the web and other sources.

IB Chinese HL 2: Year 2 of Higher Level Advanced Grade 12 2 Credits

Chinese HL 2 prepares students to fulfill their IB Language B Higher Level requirements. The course involves intensive study of numerous Chinese original documents. Extensive composition and discussion require students to demonstrate their sensitivity to the language and structure of writing as well as their own power and precision in organizing and expressing thoughts. Students will be able to communicate efficiently and articulately in academic, social, and professional settings. All written and oral assessments will be composed and analyzed using IB models and assessment criteria. Students in this course will be able to sit for the Higher Level International Baccalaureate Language B exam in the spring.

The goal of this course is for students to learn the elements of music such as beat, rhythm, pitch, and melody, in order to understand how they combine to form a means of expression that is valued in societies around the world. An exploration of current music and music from other cultures will expose students to new ways of thinking about and appreciating music. Students will participate in activities that will fully engage them in their study of music such as playing hand-held percussion instruments; reading and writing music; and analyzing, listening to, and responding to music.

Music 10 Grade 10 1/2 Credit

This course builds off of the knowledge and skills learned in Music 1 while adding new elements of music such as form, instrumentation, and style. An exploration of current music and music from other time periods will expose students to new ways of thinking about and appreciating music. Students are expected to already know how to sing/play an instrument or learn how to play basic piano or recorder. As in Music 1, students will participate in activities that will fully engage them in their study of music such as making music; reading and writing music; and analyzing, listening to, and responding to music.

Art 9 Grade 9 1/2 Credit

In this introductory Art course, students are exposed to the elements of design: Line, Shape, Forms, Space, Color, Texture, and Value. This class involves observational drawing, painting, and a variety of other exercises that enhances student understanding of artistic foundation. Students also maintain a sketchbook that involves equal amounts of visual and written research. This course is designed to give students a taste of artistic endeavor with the understanding that these foundations will be used regularly in the I.B. courses in Junior and Senior year.

Art 10 Grade 10 1/2 Credit

This course builds upon the previous foundational course with a greater emphasis on versatility within media and honing of skills. This class is designed to encourage artistic production and is a studio environment. Students will use the Elements of Design and apply them to the assigned in-class projects. In addition, students continue to work in a sketchbook, with more emphasis on written and visual investigation. Students will begin to learn the nature of an art critique and be introduced to art historical moments. This course is designed to help students be introduced to the idea of guided independent working and time management, two skills necessary for success in IB Art.

IB Theatre SL1 / HL 1 Grade 11

1 Credit

In this class students will embody the perspectives of theatre creator, designer, director, performer, and spectator as they work across three categories, each of which are represented in the major assessments and projects the course entails. These three categories are: theatre in context, theatre processes, and presenting theatre. Students will expand and build a repertoire of theatre knowledge, including theorists, playwrights, practitioners, performance and production elements, and the plays themselves. Students will research and explore a world theatre tradition, understand its cultural and historical background and modern application and culminate in a 15 minute presentation. Throughout the course, students will work collaboratively and individually to put in practice the various components and perspectives of theatre that they've studied.

IB Theatre SL2 / HL 2 Grade 12

1 Credit

Students will build on the skills and knowledge of theatre creators, designers, directors, performers, and spectators that they originated in year one. Using the abilities and aptitudes they have honed, they will take the place of each of these categories in conceptualizing and pitching a production of an existing play. Furthermore, they will work collaboratively to research, practice, and apply a theatrical approach to create a production piece. HL students will similarly research a theatre theorist and apply their theory to a production piece. All students will think critically about their creation and production of theatre, asking themselves and their peers whether or not they met their intentions and exploring audience reactions.

PHYSICAL EDUCATION/HEALTH

PE 9 & 10 Grades 9 & 10

1 Credit each year

Students will participate in a variety of individual and team activities. This curriculum will provide students with the opportunity to practice and develop the skills necessary to maintain a healthy lifestyle. Some of the units during the semester may include but are not limited to: badminton, basketball, flag football, soccer, team handball, tennis, pickleball and ultimate frisbee. Also the students participate in Unit Choice and get to pick what they would rather participate in. Once a unit is done, the students cannot pick that unit again.

HEALTH 9 (is part of PE 9, no additional credits earned)

Health Education is a required part of PVCICS school graduation requirements. Health Education is a comprehensive health education class that promotes healthy students through interactive lesson plans, role playing, using National Health standards. The involvement of school staff, community agencies, and parents are incorporated to help students achieve a high level of wellness. The department is committed to help all students gain an appreciation of the lifetime benefits of pursuing healthy living through activity, wellness appreciation, and social interaction.

IB THEORY OF KNOWLEDGE

Theory of Knowledge (TOK1 Grade 11 spring/TOK2 Grade 12 fall)

1 Credit

(½ credit per yr)

Theory of Knowledge is a philosophical and practical exploration of to what extent we can be certain about the things we know. The course takes time to ask questions about how knowledge is gained in all the areas of knowledge and what obstacles lay in the way of that knowledge in each of the subject areas that form the IB curriculum. Course assessment tasks prepare students to fulfill their IB diploma requirements. These tasks include writing a number of TOK essays that explore the scope and depths of our understanding across areas of knowledge, creating an exhibition that reflects their comprehension of how knowledge impacts our understanding of the world, and keeping a journal of critical reflections regarding topics addressed in class.

Approaches to Learning

Grade 9 (Fall only)

.25 Credits

The goal of this course is to help students develop their organizational, study, and research skills, which are necessary for success in high school and beyond. Furthermore, students will consider their own academic needs, and experience the benefits of self-advocacy. The skills developed in this course will be practiced through class projects, small group work, and independent study, as well as in their other courses. This class is a non-homework course, and grades are pass/fail.

HIGH SCHOOL ADVISORY

Grades 9 - 12

1/2 Credit per year

Advisory class meets once per week. Students are placed in advisories consisting of 10 to 15 students in their grade. One or two staff members are assigned to each advisory.

The purpose of Advisory is for students to engage and build community with a teacher and group of peers on a weekly basis and where students learn and develop the skills necessary for academic monitoring, social-emotional wellbeing, and career- and college-readiness. Studies have shown that students with strong connections to school staff, show greater interest and performance in school.

The advisory curriculum includes Naviance lessons and teacher designed activities and discussions that cover various topics such as goal setting, resume building, researching colleges and careers, completing and presenting personal projects, IB CAS work, and current events to name a few.

STUDY HALL Grade 9-12

.25 Credits per semester/1/2 Credits Full Year

ELECTIVES

Grades 9 and 10

.25 Credits

Elective classes provide enrichment opportunities beyond the core academic curriculum. The electives offered are based on teacher interest and availability. Electives are semester long and are pass/fail. A sampling of electives are listed below.

Creative Writing
Produce 101
Data Analysis
Chinese Karaoke
Tai Ji
Practical Musicianship
Model UN
Today's World

Film

Theater

Playback Theater

Yoga

Fiber Arts

Experimental Energy Anatomy and Physiology

Business