

## PVCICS High School Subject/Grade Plan for 2017-2018

*As of February 27, 2018*

Subject/Grade	9	10	11	12
English IB Group 1 Language A	English 9	English 10	IB English SL1 IB English HL1	IB English SL2 IB English HL2
Chinese IB Group 2 Language B	Chinese I1 Chinese P1 Chinese 1	Chinese I2 Chinese P2 Chinese 2	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 Studies 1 IB Math SL1 IB Math HL1	IB Math Studies 2 IB Math SL2 IB Math 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 Music SL1 -or- one course from Group 3 or 4 above	IB Music SL2
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
<b>IB Requirements All Students</b>	N/A	N/A	Creativity, Activity Service CAS (90 hrs)	CAS (60 hrs)
	N/A	N/A	Extended Essay (starts junior yr)	Extended Essay (due senior yr)
<b>IB Diploma Candidates only</b>	N/A	N/A	<b>Theory of Knowledge 1 (starts spring jr yr)</b>	<b>Theory of Knowledge 2 (finish fall sr yr)</b>

### Notes on Course Numbering:

For Chinese: I = continuation of early immersion thread, entry was in Kindergarten and P = continuation of partial immersion thread, entry was in 6<sup>th</sup> grade. For IB courses, the standard IB notation is HL = IB Higher Level and SL = IB Standard Level.

**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.

*Grade below 60 is failing.*

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
4 credits of Social Studies/History	2 credits of PE (Health included in PE)
IB Extended essay (4000 words)	IB Creativity, Activity, Service (CAS)
IB Theory of Knowledge Course ( <b>IB Diploma Candidates</b> )	
<b>MCAS:</b> 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 9 <sup>th</sup> grade.	

## High School Course Catalog

### 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 literature 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*, *Black Ice*, *Fahrenheit 451*, *Of Mice and Men*, and poetry and short stories by a variety of authors.

#### **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*, *The Crucible*, *Night*, *The Odyssey*, *The Namesake*, and short stories and poetry by a variety of authors.

#### **IB English SL1**

#### **Grade 11**

#### **1 Credit**

In IB English SL1 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. Students will read the Part IV works (School's Free Choice), which may include *The Great Gatsby* and *Persepolis*, or other texts selected by the teacher. These works will be linked with their film adaptations so students can compare and contrast the written work with a visual counterpart and further discuss appreciation of writer's choices. Each student will give a 10-15 minute oral presentation on a topic of his or her choice based on one of the Part IV works. This presentation will be graded internally using an IB rubric and it will count toward the student's overall IB score. Students will also read the Part I works (Works in Translation) which may include *Broken April* and *Farewell My Concubine* or other texts selected by the teacher. Standard Level students will write a 1200-1500 word analysis based on one of these works in translation that explores a literary aspect of one work informed by some understanding of the cultural underpinnings of that work. The essay will be externally assessed as part of the student's overall IB score. In addition to the core curriculum, students will study literary criticism and approaches to critical reading, will do extensive formal and informal writing, and will have exposure to a variety of works that are related to those in the core curriculum. This course continues as IB English Standard Level 2 in the senior year.

#### **IB English HL1**

#### **Grade 11**

#### **1 Credit**

In IB English HL1 much emphasis is placed on the student's ability to independently address the literary elements of works, to write and speak fluently, coherently, and knowledgeably, and to make personal and insightful connections with literature. Students will be expected to respond to literature orally and in writing on a personal

and analytical level. Students will read the Part IV works (School's Free Choice), which may include *The Great Gatsby*, *Persepolis*, *A Doll's House* or other works selected by the teacher. Each student will give a 10-15 minute oral presentation on a topic of his or her choice based on one of the Part IV works. This presentation will be graded internally using an IB rubric, and will count toward the student's overall IB score. Students will also read the Part I works (Works in Translation) which may include *Chronicle of a Death Foretold*, *The Unbearable Lightness of Being*, *Farewell My Concubine*, or other works selected by the teacher. Higher Level students will write a 1200-1500 word literary analysis based on a work in translation that explores a literary aspect of one work, informed by some understanding of the cultural underpinnings of that work. In addition to the core curriculum, students will study literary criticism and approaches to critical reading, will do extensive formal and informal writing and journaling, and will have exposure to a variety of works that are related to those in the core curriculum. Higher Level students will be expected to respond to literature more independently and in greater depth and breadth than those in Standard Level. This course continues as IB English Higher Level 2 in the senior year.

### **IB English SL2**

### **Grade 12**

### **1 Credit**

This course will continue the work begun in Standard Level 1. Work in this course will continue to emphasize careful, close reading and a studied critical response to literature. Students will explore various modes of composition and oral presentation, and will hone skills in those areas. Students will read the Part II works (Detailed Study), which is a study of two works of different genres and may include *Hamlet*, and other works selected by the teacher. Each Standard Level student will complete an Individual Oral Commentary, a 10-minute oral commentary based on an extract from one of the works studied in Part II. The commentaries are graded internally and moderated by IBO. Finally, students will read the Part III works (Literary Genres), which are three works within the same genre. Those works may include *The Namesake*, *Americanah*, *Handmaid's Tale*, or other texts selected by the teacher. Students will be assessed with a written exam consisting of two parts: Paper 1, a guided literary analysis in response to two questions on either prose or poetry and Paper 2, an essay written in response to a question based on at least two works studied in part III. These assessments are given late in the second semester and constitutes 50% of the student's IB grade. At the Standard Level the exam periods are 1 ½ hours long.

### **IB English HL2**

### **Grade 12**

### **1 Credit**

This course will build upon the work begun in Higher Level 1. Work in this course will continue to emphasize independent, careful, close reading and a studied critical response to literature. Students will explore various modes of composition and oral presentation and will hone skills in those areas. Discussion, formal and informal writing, journaling, and presentation will be employed. Building upon essential skills developed in the first year of the program, students will read the Part II works (Detailed Study), which is a study of three works of a different genres including poetry. These may include *Hamlet*, poetry by Seamus Heaney, and other works selected by the teacher. Each Higher Level student will complete an Individual Oral Commentary, a 10-minute oral commentary on poetry studied in Part II, followed by a discussion based on one of the other two works studied in this part. The commentaries are graded internally and moderated by IBO. Finally, students will read the Part III works (Literary Genres), which are four works within the same genre. Those works may include *The Namesake*, *Americanah*, *Handmaid's Tale*, *Song of Solomon*, or other texts selected by the teacher. Students will be assessed with a written exam consisting of two parts: Paper 1, a literary commentary on a previously unseen passage of prose or poetry that requires students to show how they, as readers, have made their own meaning from the text and Paper 2, an essay on at least two works from Part III that requires students to show understanding of the works and the way in which meaning is conveyed through literary conventions through a choice of questions on the works studied in Part III. This assessment is given late in the second semester and constitutes 50% of the student's IB grade. The student is given two hours to complete each part of the exam.

## **MATHEMATICS**

### **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, although 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 IB Math HL. Topics will include the study of matrices; 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 Math Studies 1**

**Grade 11**

**1 Credit**

IB Math Studies 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 linear, quadratic, exponential and trigonometric functions and equations; inequalities; operations with polynomials; sequences and series; operations with functions including inverse and composition of functions; an introduction to probability and statistics; and triangle trigonometry. 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.

\*The IB Mathematics curriculum is changing for the class of 2021. Two new courses will be introduced and they will both have an SL/HL option and will include Calculus.

### **IB Math Studies 2**

**Grade 12**

**1 Credit**

IB Math Studies 2 will extend the topics studied in Math Studies 1. New topics include trigonometry of three-dimensional shapes, further topics in statistics (correlation, regression formula, chi-squared test), logic and truth tables, a brief introduction to differential calculus and topics from financial mathematics. An important part of Math Studies 2 is the independent project. 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 Studies 1

### **IB Mathematics SL 1**

**Grade 11**

**1 Credit**

**Prerequisites: Grade of B or higher in Algebra and Geometry**

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. This course is comparable to a pre-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 SL 2**

**Grade 12**

**1 Credit**

This course reviews and extends the topics studied in Mathematics SL1. It is comparable to a calculus course. New topics include vector algebra in two and three dimensions and vector equations of lines, 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, areas under curves and volumes of revolution. 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 SL 1

**IB Mathematics HL1**

**Grade 11**

**1 Credit**

**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. 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; statistics and probability; vectors; and 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 HL 2**

**Grade 12**

**1 Credit**

This course reviews and expands the topics studied in mathematics HL 1. Core topics include introductory differential and integral calculus; and continuous random variables, including the normal distribution. The optional topic of calculus includes limits and differentiation; additional integration, and applications of integration; sequences and 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 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/Physics**

**Grade 10**

**1 Credit**

Chemistry/Physics for Grade 10 is a two semester course that provides an introduction to the knowledge and skills of physics and chemistry. This course meets the requirements of the Massachusetts Curriculum Frameworks Learning Standards.

*In the chemistry AND physics introduction section*, the course will feature topics that apply to both chemistry and physics core concepts: measuring physical quantities, analyzing data, significant figures, unit conversions, dimensional analysis, states of matter and energy transfers.

*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: acceleration, velocity, free body diagrams, momentum, energy of matter, work and power. The physics semester will help to apply experimental methods to investigate practical, every-day phenomena and do a practice Internal Assessment to prepare students for IB science. This section also practices core physics math skills, such as unit conversions, equation manipulations and using multiple equations to solve for variables.

### **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 skills to study the relationship between structure and function, patterns and trends, and the worldwide implications of scientific knowledge. The topics of the first year are in order: Evolution, Biochemistry, Nucleic Acids, Ecology, Cell Biology, and Genetics. Students build on their prior experience conducting and analyzing lab experiments to complete 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 skills to study the relationship between structure and function, patterns and trends, and the worldwide implications of scientific knowledge. The topics of the first year are in order: 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 build on their prior experience conducting and analyzing lab experiments to complete 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 laws and principles 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 adult careers. This first year of Physics SL/HL will cover the following subjects: measurement and uncertainty, classical mechanics, rotational motion and gravitation, thermal physics, waves, electricity and magnetism, and atomic, nuclear, and particle physics.

**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 energy production and special relativity or astrophysics. 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. A TI-84 graphing calculator and a laptop computer are required.

**IB Physics HL 2****Grade 12****1 Credit**

The second year of Physics HL will generally cover the subjects of: wave phenomena, fields, electromagnetic induction, quantum and nuclear physics, and special and general relativity or astrophysics. 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. A TI-84 graphing calculator and a laptop computer are required.

**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.

**SOCIAL STUDIES****History 9****Grade 9****1 Credit**

This is an introductory course in US History from the 1760s through Reconstruction in the 1870s. Topics covered include: the influences of the American War of Independence on American government; the development and role

of the Constitution and Bill of Rights in American democracy; America before the Civil War; the Civil War and its impact on the development of the country; Reconstruction, and westward expansion. 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 19<sup>th</sup> 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 myriad 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 20<sup>th</sup> 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), 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 SL 1 & 2**

**Grades 11 & 12**

**2 Credits**

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 19<sup>th</sup> 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 20<sup>th</sup> 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 WW 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 20<sup>th</sup> 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 SL 1 & 2**

**Grade 11 and 12**

**2 Credits**

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 HL 1 & 2**

**Grade 11 and 12**

**2 Credits**

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 SL 1 & 2**

Students are introduced to the fundamentals of running and managing a business, including finance, organizational behavior, accounting and price setting and fluctuation. Through comprehensive case studies, students apply their knowledge to describe and evaluate business models and decisions made by real corporations.

## **CHINESE**

### **Chinese I1: Early Immersion Thread**

**Grade 9**

**2 Credits**

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: Early Immersion Thread**

**Grade 10**

**2 Credits**

Chinese I2 is designed for students will 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: Middle Immersion Thread      Grade 9      2 Credits**

Chinese P1 is a continuation of the partial immersion thread for students who entered PVCICS in 6<sup>th</sup> 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: 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 the 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 require students to use their Chinese computer skills in content areas to research a topic demonstrating research and critical thinking skills.

**Chinese 1: Introduction & 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: Intermediate      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 20<sup>th</sup> 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.

**ARTS**

**Music 9    Grade 9    1/2 Credit**

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.

**IB Music SL1    Grade 11    1 Credit**  
**SL2    Grade 12    1 Credit**

This is a 2-year course for students with a good background in music who are serious about studying music in depth. The course focuses on many different aspects of music including performance, listening analysis, music theory, composition, music history, cultural music, and the role of music and musicians in society. Students will focus on preparing for assessments in the second year in each of **three** areas: choice of solo performance, group performance, or composition; research paper; and a listening analysis exam. It is **strongly** recommended that students take private lessons in an instrument of their choice outside of school and participate in a musical ensemble for successful growth and understanding.

