# HIGH SCHOOL PROGRAM OF STUDY

# 2024-2025





清華大学 H 属中學 国际部 Tsinghua International School

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#### **MISSION STATEMENT**

Tsinghua International School fosters creative critical thinkers who have roots in China and are prepared to lead in the global community.

#### **VISION STATEMENT**

Tsinghua International School will be the model international school harmonizing the best of Western and Chinese education and culture. The school will develop the whole child, nurturing individuals of exceptional character who will make positive contributions to the world.

### **CORE VALUES**

With the motto of 'Self-Discipline and Social Commitment' and the spirit of 'Actions Speak Louder than Words,' Tsinghua University and its affiliate schools have a moral responsibility for self-improvement in service of the well-being of Chinese society and for world development. Tsinghua Spirit directs and guides the THIS community of joyful learners—students, parents, teachers and staff--as we cultivate our core values:



**Wellbeing** — Building healthy bodies and minds through habits that lead to a positive self-image and an active, productive life.

**Integrity** — Nurturing a strong moral character and social responsibility by adhering to the highest standards of conduct in public and private life.

**Respect** — Cultivating a global awareness and an open mind by honoring ourselves and others through welcoming differences while embracing the richness of Chinese culture.

**Leadership** — Developing and enacting a vision that makes positive contributions in service to our school, local, and global communities

**Collaboration** — Working with people with diverse identities to solve problems and achieve goals through sharing our gifts, strengths, and perspectives.

**Innovation** — Seeking out meaningful learning experiences that spark our curiosity to develop creative responses to challenges and opportunities.

### **GRADUATION REQUIREMENTS**

To graduate, a student must complete an accepted program of study including courses in each content area and required electives. In addition, a student must attend THIS for his or her entire senior year, meet the class attendance requirements, and carry a full load of courses each semester.

#### Graduating with Honors

Students who graduate with a cumulative GPA of 4.0 or higher will be designated as "High Honor Graduates." Students who graduate with a cumulative GPA of 3.5–3.99 will be designated as "Honor Graduates". To qualify for the above designations, students must also meet disciplinary and attendance standards. THIS does not rank students. The Program of Study graduation requirements that follow are meant to serve only as a minimum standard. College-bound students should strive to meet the credit requirements in the right-hand column and should take a challenging set of courses.

Department/Subject	Minimum Requirements	Recommended for University
English	4.0	4.0
Chinese	4.0	4.0
Mathematics	4.0	4.0
Science	4.0	4.0
Social Studies	3.0	4.0
Fine Arts	1.0	1.0
Performing Arts (Music and Theater)	1.0	1.0
Computer Studies	1.0	1.0
Physical Education	2.0	2.0
Health Education	.5	.5
Electives	.5	2.5
Minimum Credit Totals	25	28

**Graduation Requirements** 

#### **PROMOTION POLICY**

A high school student may not fail two or more year-long core courses in a respective year. Students needing to make up four or more semesters of core courses will be retained in the same grade as the previous year. Core classes include Math, Science, English, Chinese, and Social Studies. If a student fails a core course, it must be made up in one of the following ways:

- Students should make up the course(s) through the approved institute: Universal Education. Parents must pay for the course(s). Students should work with the Curriculum Director and the Secondary Director to register for the course.
- Students must make up Science and Chinese courses at THIS during the regular school year.

### **ADVANCED PLACEMENT (AP) PROGRAM**

Advanced Placement courses are developed by the College Board and provide students with exposure to both the level and quality of work expected at the collegiate level. Students are instructed at a freshman college level, so AP Courses require a substantial commitment of time and effort by the student. It is not uncommon for students to spend an average of 1-2 hours per night on homework for an AP course. They also prepare students to take the AP examinations in May for potential college credit. Students and families are encouraged to consult their college counselor on whether Advanced Placement courses are awarded college credits by specific colleges/universities and at what level of performance. Many college websites post this information.

The following information pertains to enrollment in AP courses.

- 1) Students must demonstrate a high level of English and academic proficiency for all courses
- 2) Students wishing to enroll in AP courses must show an aptitude and interest in that subject. Specific prerequisites for each course, as set out in the Course Catalogue, must be fulfilled.
- 3) In G10 students may take up to 2 APs, 4 APs in G11 and 4 APs in G12.
- 4) To take an AP exam at THIS, students must be enrolled in an AP course at THIS. THIS does not allow students to take an AP test without taking the course at THIS. Exception is allowed in the following instances:
  - Students can take the tests for AP Physics C Mechanical and AP Physics C EM without taking the courses if they have already taken AP Physics I and/or AP Physics II and AP Calculus BC.
  - Students can take the test for AP Microeconomics without taking a course if they have taken AP Macroeconomics and an advanced Math course.
  - In certain cases, exceptions may be considered for seniors depending on their college needs, but only if the respective senior, a returning high school student, meets the needed academic proficiency:
    - 3.5 GPA in grades 9, 10 and 11
    - must not have previous records of credit recovery
    - Takes the course through the school recommended outsourced remote educational institution.
  - If students disregard the rule and take AP courses outside the school at an institution of their own choice, the course grades will not be included in the transcript or reflected in the GPA. Only AP courses taken at THIS and the outsourced institution with approval will be included in the transcript and reflected in the GPA. If the senior takes an approved additional AP course, the grade will be included in the transcript and be reflected in the GPA.
- 5) Students enrolled in AP courses must take the AP exam in May.
- 6) Students must pay the complete exam fee during the first quarter of the school year in which they are enrolled in the course. This amount is paid to the AP Coordinator.
- 7) The exam score is not part of the final grade for the course. Final course assessments may include teacher-made examinations, portfolios, and/or projects.
- 8) Chinese Language and Culture does not count towards the overall AP load.
- 9) AP Art and Design is often completed over two years and counts towards the overall AP load in the first year that the student takes the course.
- 10) Linear Algebra is not a College Board AP course but is a college-level course that counts towards the annual AP load limits.

### AP Courses Offered\*:

\*For Further information about AP courses, including course descriptions, please go to http://apcentral.collegeboard.org

REQUIRED COURSES AT EACH GRADE LEVEL			
GRADE 9	GRADE 11		
<ul> <li>Chinese A or B</li> <li>English Language Arts 9</li> <li>Geometry or Advanced Geometry</li> <li>Humanities</li> <li>Biology</li> <li>Physical Education/Health</li> <li>High School Enrichment</li> <li>Chinese History 9</li> </ul>	<ul> <li>Chinese A or AP Chinese (non-native speakers only.)</li> <li>English Language Arts 11 or AP Language and Composition</li> <li>Pre-Calculus, Calculus, AP Calculus AB or AP Calculus BC</li> <li>US History, AP Macroeconomics, AP Human Geography or AP Psychology</li> <li>Physics, AP Physics 1, or AP Physics 2</li> </ul>		
GRADE 10	GRADE 12		
<ul> <li>Chinese A or B</li> <li>English/Language Arts 10</li> <li>Algebra II, Advanced Algebra II, or Algebra II/Trigonometry</li> <li>World History or AP World History</li> <li>Chemistry</li> </ul>	<ul> <li>Chinese A or B</li> <li>English Language Arts 12, AP Language and Composition, or AP Literature and Composition</li> <li>Statistics, AP Statistics, Liner Algebra, Calculus, AP Calculus AB, or AP Calculus BC</li> </ul>		

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#### **REQUIRED SCIENCE ELECTIVES**

Students must complete one additional science credit through electives classes. This credit may be completed in grade 10, 11 or 12.

Students may choose from the following AP science courses:

- AP Biology
- AP Chemistry
- AP Physics 2
- AP Environmental Science

or choose any two of the following 0.5 credit courses or 1.0 credit course:

Environmental Science (1 credit – 2 semesters)

- Human Anatomy & Physiology (1 credit 2 semesters)
- Astronomy and Cosmology (0.5 credit 1 semester)
- Geology, Meteorology, and Oceanography (0.5 credit 1 semester)

#### **REQUIRED ELECTIVES**

Students must complete one credit in each of the following content areas between grade 9 and 12 to graduate:

- Visual or Digital Arts (can be a combination of both)
- Performing Arts Theatre or Music (can be a combination of both)
- Technology Computer Science or Digital Arts (can be a combination of both)
- Physical Education (1 credit after grade 9)

One credit is equal to two semesters of one course or one semester each of two different courses. Courses may be offered or cancelled each year based on student need, interest, and teacher qualifications. Some digital arts courses can count for art or technology credit, but not for both.

ART	TECHNOLOGY
- AP Art and Design I & II (two-year course)	- AP Computer Science A
- Ceramics I-II	- Foundation of AI and ML
- Digital Animation	- Digital Animation
- Digital Photography	- Digital Photography
- Digital Video I or II	- Digital Video I or II
- Drawing	- Foundations of Digital Art (perquisite for
- Eastern Art I	digital arts courses.)
- Eastern Art II	- Introduction to Computer Science
- Foundations of Art I (prerequisite for visual	(prerequisite for computer science courses)
arts courses except Ceramics & Eastern Art)	- Introduction to Game Development
- Foundations of Art II	- Robotics
- Foundations of Digital Art (prerequisite for	
digital arts courses.)	
- Painting I- II	
PERFORMING ARTS	PHYSICAL EDUCATION
- Advanced Acting	- Advanced Martial Arts
- Band	- Advanced Fitness
- Choir	- Creative Games
- Improv Theatre (perquisite for Advanced	- Fitness I (prerequisite for Advanced Fitness.)
Acting)	- International Sports
- Piano I-IV	- Martial Arts (prerequisite for Advanced
- Playwriting	Martial Arts)
- Movement and Dance	- Net Sports
	- Ultimate Sports
STEAM	
- Beyond New Media	
- Digital Design and Fabrication	
- STEAM I & II	

#### **ELECTIVE CHOICES BY CONTENT AREA**

### **ENGLISH LANGUAGE ARTS**

### **ENGLISH LANGUAGE ARTS** (1 credit per year)

### GRADE LEVEL: 9, 10, 11

NUMBER OF SEMESTERS: 2 each year

# COURSE DESCRIPTION: <u>REQUIRED</u> (IN GRADE 11, AP ENGLISH LANGUAGE AND COMPOSITION ALSO FULFILLS ENGLISH 11 REQUIREMENT)

English Language Arts provides a focus on strategies for close, strategic reading and purposeful writing, as well as providing students with ample opportunities to practice their speaking and listening skills. Students will immerse themselves in new novels and literary nonfiction while having meaningful discussions about these books with peers. They will continue the journey of becoming a writer by analyzing the tools writers use to make their work compelling and powerful and then work to master these moves in order to elevate their various genres of writing.

### ENGLISH 12 (1 credit)

### GRADE LEVEL: 12

### NUMBER OF SEMESTERS: 2

# COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING AP ENGLISH LANGUAGE AND COMPOSITION or AP ENGLISH LITERATURE AND COMPOSITION

Grade 12 English Language Arts is taught through the lens of independence-building workshop model. You will have the opportunity to immerse yourself in new novels while having meaningful discussions about these books with peers. You will continue the journey of becoming a writer. You will analyze the tools writers use to make their work compelling and powerful and then you will work to master these moves to bring your writing to a new level. You will also perfect your skills as a confident speaker and a sharp listener, to have success in your coming college years.

### AP ENGLISH LANGUAGE AND COMPOSITION (1 credit)

### GRADE LEVELS: 11, 12

PREREQUISITES: A- average in the previous English course and teacher recommendation from English language and Social Studies

NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: FULFILLS THE ENGLISH 11 OR ENGLISH 12 REQUIREMENT

In this introductory, college-level English course, students will learn to analyze and employ rhetoric the art of persuasive speaking and writing. Course readings will feature expository, analytical, personal and argumentative texts from a variety of authors, over a range of centuries. The focus of the course is non-fiction texts. Students will learn to identify various literary and stylistic devices used in classical western texts. Students will also learn to read a range of non-fiction genres, including essays, letters, speeches, news articles, and philosophical texts. Graphics, such as political cartoons, illustrations and charts, as well as photographic images, will be studied in conjunction with the written word. This is a college-level course that requires an average of 60 minutes of homework per night.

### AP ENGLISH LITERATURE AND COMPOSITION (1 credit)

### GRADE LEVEL: 12

PREREQUISITES: A- average in AP English Language and Composition, and teacher recommendation.

### NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: FULFILLS THE ENGLISH 12 REQUIREMENT

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

scale elements as the use of figurative language, imagery, symbolism, and tone. Although critical analysis makes up the bulk of student writing for the course, well-constructed creative writing assignments may help students see from the inside how literature is written. Such experiences sharpen their understanding of what writers have accomplished and deepen their appreciation of literary artistry. The goal of both types of writing assignments is to increase students' ability to explain clearly, cogently, even elegantly, what they understand about literary works and why they interpret them as they do.

### **SCIENCE**

### <u>BIOLOGY</u> (1 credit) GRADE LEVEL: 9 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>REQUIRED</u>

Biology is the study of life and of all the processes occurring inside living organisms. Through learning biology, students identify patterns in nature and understand that all living organisms carry out similar processes to form the structures that make up their bodies. They also consider the impact of human activities, both on the organisms and ecosystems that constitute the biosphere and on individual human beings and human society in the world. Applying an understanding of biology helps students to appreciate health issues, ethics, economics, power relationships and other factors that influence the pursuit of science and have significant impacts on the way people live. The study of biology enables students to make informed decisions about modifying and interacting with nature.

### AP BIOLOGY (1 credit)

GRADE LEVELS: 11, 12

PREREQUISITES: A- average in grade 9 Biology course and teacher recommendations from Biology or Chemistry and English language.

### NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: FULFILLS THE SCIENCE ELECTIVE REQUIREMENT

AP Biology is a rigorous and demanding course designed to challenge and inspire students who have a strong interest in biological sciences. This course provides a comprehensive overview of essential biological concepts, mechanisms, and processes, mirroring the intensity and breadth of an introductory college biology course to which is equivalent. Content will be covered in more depth and greater expectations will be placed on interpretation and analysis of information than previous biology courses. It demands a high level of critical thinking, analytical skills, and a willingness to engage in extensive self-study to master the challenging topics. In addition, statistical analysis of data and modeling of concepts will be expected. A significant amount of studying must be completed at home to allow time for discussion, labs, and inquiry during class time. The AP Biology curriculum encompasses four 'big ideas" that include evolution, cellular processes, genetics and information transfer and interactions.

### HUMAN ANATOMY & PHYSIOLOGY (1 credit)

### GRADE LEVELS: 11, 12

NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: FULFILLS THE SCIENCE ELECTIVE REQUIREMENT

This year-long course in human anatomy will give you an introduction to the study of anatomy, including learning about body cells, tissues, organs, and organ systems, along with the terms that we use to describe direction and location in the body in the first semester. It will then move into a deeper study of the following systems: nervous, endocrine, immune, integumentary, and lymphatic. You will learn about the structure and function of these systems, how they work together with other systems in the body, and what can happen if the systems do not function correctly. In the second semester, the course will continue to look at how our bodies function. It is a deeper study of the following systems: skeletal, muscular, respiratory, circulatory, excretory, digestive, and reproductive. You will learn about the structure and function of these systems, how they work together with other systems in the body, and what can happen if the systems do not function.

ENVIRONMENTAL SCIENCE (1 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 2

#### PREREQUISITE: BIOLOGY

### COURSE DESCRIPTION: FULFILLS THE SCIENCE ELECTIVE REQUIREMENT

Environmental science is a multi-disciplinary approach that studies and focuses on the complex relationships between our environment, humans, and their impact on it. It is a project-based and case-based approach to science education. The students will apply investigating methods to identify and describe different environmental issues and then using the scientific method will address problem situations. Through informative background readings and case studies and innovative activities, the course introduces high school students to issues of the global environment and society, while challenging them to evaluate these issues critically and motivating them to develop solutions. Environmental science aims not only to enlighten students but also to build skills, concern, and commitment to effective global and local citizenship.

### <u>CHEMISTRY</u> (1 credit) GRADE LEVEL: 10 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>REQUIRED</u>

Chemistry is a science that looks at the structure and composition of matter and how it can change. In this introductory general chemistry course, students will study many phenomena related to the experiences encountered in their daily lives, providing them with the tools and skills to better understand the world around them. Students will study topics such as the basic structure of matter and atoms, chemical bonding, chemical reactions, and kinetics/equilibrium, while continuously asking the question: "How can we explain observable characteristics of matter in terms of the arrangement and properties of their particles?"

#### AP CHEMISTRY (1 credit)

GRADE LEVELS: 11, 12 PREREQUISITES: A- average in previous Chemistry course and teacher recommendation. NUMBER OF SEMESTERS: 2

#### COURSE DESCRIPTION: FULFILLS THE SCIENCE REQUIREMENT

AP Chemistry is an academically challenging course that is designed to cover the equivalent of a general chemistry course usually taken during the first year of college. Students will gain a deep understanding of fundamentals and build on their abilities to deal with chemical in this course including the structure of matter and bonding, moles and stoichiometry, analytical chemistry techniques, solutions, equilibria, thermochemistry, kinetics, acids/bases, and electrochemistry. There will be frequent problem solving, data analysis, and laboratory work.

### <u>PHYSICS</u> (1 credit) GRADE LEVEL: 11 NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: REQUIRED UNLESS TAKING AP PHYSICS 1 or AP PHYSICS 2

Physics is the study of the relationship between energy and matter. In this introductory Physics course, students will learn about the fundamental physics principles that govern our universe and relate these principles to everyday interactions. Students will study topics such as kinematic motion, Newton's Laws, work and energy, impulse and momentum, waves, and simple DC circuits. Students will focus on investigative work to analyze and interpret experimental observations to answer questions such as "How are physical quantities related to each other?" and "Where and how do we apply these relationships in real life?"

<u>AP PHYSICS 1 and 2</u> (1 credit each year) GRADE LEVELS: 10, 11,12 NUMBER OF SEMESTERS: 4

#### **PREREQUISITES:**

AP Physics 1: A- in previous science course and teacher recommendation. A- and above in geometry and should be concurrently taking Advanced Algebra 2 or higher math course. A- and above in previous English course with demonstrated strong literacy proficiency. Grade 10 students are required to take a diagnostic test.

AP Physics 2: must pass the AP Physics 1 exam or display strong basic concepts covered in a normal physics course and demonstrate outstanding skills in math and science.

COURSE DESCRIPTION: FULFILLS THE PHYSICS AND SCIENCE ELECTIVE REQUIREMENTS

As the first component of a two full year AP Physics curriculum, AP Physics 1 is equivalent to a firstsemester college course in algebra-based physics. This course is organized around seven foundational big ideas in physics and focuses on the development of essential scientific practices through authentic inquiry-based experiments and projects. This course aims to cultivate a deep understanding of key classical physics topics such as Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound; and static electricity along with an introduction to electric circuits. Students enrolling in this course will be rewarded with a rich conceptual and mathematical understanding of our physical universe and will be able to apply their knowledge to critically observe, analyze, and predict natural phenomena.

As the second component of a two-year AP Physics curriculum, AP Physics 2 is equivalent to a secondsemester college course in algebra-based physics. This course is organized around seven foundational big ideas in physics and focuses on the development of essential scientific practices through authentic inquiry-based experiments and projects. This course aims to cultivate a deep understanding of key classical and modern physics topics such as thermodynamics; fluid mechanics; electrostatics; DC and RC circuits; magnetism and electromagnetic induction; geometric and physical optics; quantum physics; and nuclear physics. Students enrolling in this course will be rewarded with a rich conceptual and mathematical understanding of our physical universe and will be able to apply their knowledge to critically observe, analyze and predict natural phenomena.

### ASTRONOMY AND COSMOLOGY (.5 credit)

GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITE: BIOLOGY

#### COURSE DESCRIPTION: FULFILLS .5 OF THE SCIENCE ELECTIVE REQUIREMENTS

Astronomy and Cosmology is a one-semester course that uses labs, hands-on activities, and other resources to help you discover what the universe is and the Earth's place in the universe. You will examine the processes governing the formation and evolution of the universe from the Big Bang until now, along with the life cycle of stars, galaxies, nebulae, and how stellar evolution creates the elements that form matter. You will discover how the sun, planets, moons, and other objects in our solar systems formed, evolved, and orbit. You will also find out how the Earth formed and how it has changed over time to support life. You will also find out how scientists believe life began on Earth, and how they are looking for life in other parts of the solar system. You will learn about the tools, technology, and engineering of space exploration, and the history of rocketry. In addition, you will discover the constellations and the mythology from diverse cultures that give us the stories of the constellations and the zodiac. In this class, you will analyze data, make models, use technology, participate in simulations, engage in argumentation, communicate information, and construct explanations of the major topics of astronomy, cosmology, and astrophysics. This course can be paired with Geology, Meteorology, and Oceanography, as a full year of Earth and Space Science.

<u>GEOLOGY, METEOROLOGY, AND OCEANOGRAPHY</u> (.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1

#### **PREREQUISITE: BIOLOGY**

#### COURSE DESCRIPTION: FULFILLS .5 OF THE SCIENCE ELECTIVE REQUIREMENTS

Geology, Meteorology, and Oceanography is a one-semester course that uses labs, hands-on activities, and other resources to discover how and why the Earth is constantly changing, to understand how the Earth formed and changed over geologic time, to identify the properties of the layers of the Earth, ocean, and atmosphere, and common rocks and minerals. Students will also understand how water changes the Earth's surface through weathering and erosion, lakes and rivers, groundwater, caves, and glaciers. You will also identify how water and the atmosphere interact to create weather, as well as how scientists predict the weather, study severe storms, and understand how climate affects the living systems of the Earth. Students will also understand how human activities affect other systems through pollution and climate change, and how Earth systems affect humans through natural disasters and the distribution of natural resources. In this class, students will analyze data, make models, use technology, participate in simulations, engage in argumentation, communicate information, and construct explanations of the major topics of geology, paleontology, oceanography, and meteorology. This course can be paired with Astronomy and Cosmology, as a full year of Earth and Space Science.

### **SOCIAL STUDIES**

### HUMANITIES (1 credit) GRADE LEVEL: 9 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: REQUIRED

Humanities at THIS takes an interdisciplinary approach to studying Social Sciences in Grade 9. This means that Humanities will be very different from any social studies class you have taken before. It approaches social studies through the lens of sociology, philosophy, religion, and history, to achieve an in-depth understanding of human behaviors and their impact on humanity. The first semester begins with an examination of how we form our own identities and those of others in the unit on *Decision Making in Times of Injustice*. Our understanding of the core concepts around identities, their social construction, their impact on human civilization is strengthened with a thorough study of the Holocaust and boosted with the acquisition of skills such as critical thinking, reading, and writing, argumentative analysis and in-depth research. The course also involves two research projects – a historical research project in the first semester and an ethnographic research project including a fieldtrip in the second semester.

### **MODERN WORLD HISTORY** (1 credit)

GRADE LEVEL: 10

NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: REQUIRED, UNLESS TAKING AP WORLD HISTORY

Modern World History spans the major events, movements, themes, advances, and other human history of the globe over several centuries. As such, it requires a significant amount of reading outside of class time as the background for class work. In class, students will engage in problem solving group work, writing exercises, experiential activities, role-playing, interactive lectures, debates, and discussions. Connections to current events will be emphasized throughout. Students will complete at least two major research projects during the year, mostly completed outside of class.

### AP WORLD HISTORY (1 credit)

GRADE LEVELS: 10, 11, 12

#### NUMBER OF SEMESTERS: 2

PREREQUISITES: Recommendation of the Grade 9 English and Humanities teachers. Due to the amount and complexity of the reading, English language and written composition levels must be proficient.

### COURSE DESCRIPTION: FULFILLS THE WORLD HISTORY REQUIREMENT

AP World History is a rigorous, college-level course designed to explore human history from 1250 C.E. to the present, emphasizing the development of analytical and writing skills necessary for success on a collegiate level. To this end, the course devotes considerable time to the critical evaluation of primary and secondary sources, analysis of historiography (the principles, theories, or methodology of scholarly historical research and presentation), and inquiry into global connections that have shaped our present world. This course requires a significant amount of reading, writing, and researching outside of class and demands a high level of rigor throughout the year. A special emphasis will be given to preparation for the AP Exam, including historical writing through comparative essays of continuity and change over time, as well as document-based questions (DBQ) and objective evaluations.

<u>AP HUMAN GEOGRAPHY</u> (1 credit) GRADE LEVEL: 10, 11, 12 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>FULFILLS THE SOCIAL STUDIES OR ELECTIVE REQUIREMENT</u>

AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. This course covers a wide range of topics including population and migration, cultural patterns and process, political patterns and process, agriculture and rural land-use patterns, cities and urban land-use patterns, and industrial and economic development patterns. This course requires a significant amount of college-level reading, evaluation and interpretation of maps, graphs, and quantitative data.

### AP PSYCHOLOGY (1 credit)

GRADE LEVEL: 11, 12

NUMBER OF SEMESTERS: 2

PREREQUISITES: PREREQUISITES: Recommendation from current English and Social Studies teachers. Due to the amount and complexity of the reading, English language and written composition levels must be proficient (at least A- in English).

### COURSE DESCRIPTION: FULFILLS THE SOCIAL STUDIES OR ELECTIVE REQUIREMENT

This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas.

### <u>AP MACROECONOMICS</u> (1 credit) GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: FULFILLS THE SOCIAL STUDIES REQUIREMENT

AP Macroeconomics emphasizes economic principles as applied to the economy as a whole. Topics discussed will reflect the material included in the booklet AP Economics Course Description from the College Board. Lessons include an analysis of national income and its components, economic indicators, inflation and unemployment, money and banking, stabilization policies, and the United States and world trade. The course requires a significant amount of conceptual analysis, computation, textbook reading, and problem sets. Students will learn through a variety of collaborative activities to lead them to a larger understanding of macroeconomic principles. Students will devote many hours each week outside of class to this course for reading the challenging textbook.

### **UNITED STATES HISTORY** (1 credit)

### GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: WORLD HISTORY OR AP WORLD HISTORY COURSE DESCRIPTION: <u>FULFILLS THE SOCIAL STUDIES REQUIREMENT</u>

This course takes a skills-based approach to the study of history. U.S. History examines key themes, movements, and eras in America's long and vibrant history, beginning in pre-Columbian times and stretching to the Industrialization and Imperialism of the late 1800s. Throughout the year, we will explore the varying extent to which that United States has lived up to the five fundamental promises of the Declaration of Independence: equality, rights, liberty, opportunity, democracy. Readings are assigned outside of class each week as the background for in-class activities, group projects, debates, and discussions. Students will be required to complete two semester-long projects during the year.

### ECONOMICS (1 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>ELECTIVE</u>

Economics introduces students to the fundamentals of both microeconomics and macroeconomics. Through interactive role-playing, case studies, group projects, some lectures, and examination of current events, students come to understand the world of money, banking, global trade, personal financial choices, investments, and more. Some research and preparation for activities and/or cumulative projects will be required, but the textbook is very manageable and most of the work will be completed in class.

### FOUNDATIONS OF MODERN CHINA (1 credit) GRADE LEVEL: 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: WORLD HISTORY OR AP WORLD HISTORY COURSE DESCRIPTION: ELECTIVE

Foundations of Modern China will take a thematic approach to examine topics surrounding the world's oldest superpower's emergence into the modern era. From the late 18<sup>th</sup> century to the present day, China has grappled with a host of issues ranging from industrialization, urbanization, changing demographics, 20<sup>th</sup> century globalization, McDonalds, and rock and roll. Through understanding these issues, we will set out to answer the question, "has modernity really changed China, or has China changed modernity?"

### **MATHEMATICS**

Students are placed in appropriate math courses based on need, interest, skills, grades, test scores, and teacher recommendation.

### <u>GEOMETRY</u> (1 credit) GRADE LEVEL: 9 NUMBER OF SEMESTERS: 2 PREREQUISITES: ALGEBRA 1 COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING ADVANCED GEOMETRY

In Geometry, students will understand lines, triangles, quadrilaterals, polygons, circles, and other geometrical concepts such as congruence, similarity, area, and volume. The connection of algebra and geometry through coordinates will also be explored. The role of proofs in mathematics will be noted. Some of the most important skills this course has to offer include formulating a logical and clear argument, thinking visually or pictorially, seeing mathematical problems from various perspectives and applying geometry to real world problems.

### **ADVANCED GEOMETRY** (1 credit)

### GRADE LEVEL: 9 NUMBER OF SEMESTERS: 2 PREREQUISITES: ALGEBRA 1 with a minimum of an A- and teacher recommendation. A diagnostic test may also be used. New students are required to take a diagnostic test. COURSE DESCRIPTION: <u>REQUIRED</u>

In Advanced Geometry, students will understand lines, triangles, quadrilaterals, polygons, circles, and other geometrical concepts such as congruence, similarity, area, and volume. Students will undertake an introduction to trigonometry. The connection of algebra and geometry through coordinates will also be explored. The role of proofs in mathematics will be emphasized. Some of the most important skills this course has to offer you include formulating a logical and clear argument, thinking visually or pictorially and seeing mathematical problems from various perspectives.

### ALGEBRA 2 (1 credit) GRADE LEVEL: 10 NUMBER OF SEMESTERS: 2 PREREQUISITES: ALGEBRA 1 AND GEOMETRY COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING ADVANCED ALGEBRA 2 OR ADVANCED ALGEBRA 2/TRIGONOMETRY

This course aims to apply and extend what students have learned in previous mathematics courses. Included in this course is the study of functions (quadratic, exponential, inverse, rational, absolute and polynomial), a brief look at non-functional graphs and probability. Students will learn how to write, solve, and graph all of the functions and represent them in multiple representations of graphs, tables, equations, and contexts. Students will develop the ability to explore and solve mathematical problems, think critically, work cooperatively with others, and communicate mathematical ideas clearly. This course is usually a college requirement, but also leads to awareness of mathematics in our society.

#### <u>ADVANCED ALGEBRA 2</u> (1 credit) GRADE LEVEL: 10

NUMBER OF SEMESTERS: 2

PREREQUISITES: ALGEBRA 1 and GEOMETRY and recommendation of the previous math teacher COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING ALGEBRA 2 OR ADVANCED ALGEBRA 2/ TRIGONOMETRY

This course aims to apply and extend what students have learned in previous mathematics courses. This course includes the study of functions (linear, quadratic, exponential, inverse, logarithmic, trigonometric, and polynomial) and a brief discussion of sequences/series, and probability as time allows. Students will learn how to write, solve, and graph all the functions and represent them in multiple representations of graphs, tables, equations, and contexts. Students will develop the ability to explore and solve mathematical problems, think critically, and communicate mathematical ideas clearly. Usually a college requirement, this course leads to awareness of mathematics in our society.

### ADVANCED ALGEBRA 2/TRIGONOMETRY (1 credit)

#### **GRADE LEVEL: 10**

#### NUMBER OF SEMESTERS: 2

# PREREQUISITIES: Minimum of an A- in ALGEBRA 1 and Geometry teacher's recommendation; diagnostic test for new students or when necessary.

### COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING ALGEBRA 2 OR ADVANCED ALGEBRA 2

Advanced Algebra 2/Trigonometry course is an accelerated course to prepare more advanced students for taking AP Calculus. Topics covered include equations, inequalities, and mathematical modeling; functions and their graphs; polynomial functions; rational functions and conics; trigonometry, systems of equations and inequalities, matrices, etc. We emphasize conceptual understanding and problem solving throughout the course. Approximately an hour per night is required to review the content and finish homework.

### PRE-CALCULUS (1 credit) GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: ALGEBRA 2 COURSE DESCRIPTION: REQUIRED.

# COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING CALCULUS, AP CALCULUS AB, OR AP CALCULUS BC

Pre-calculus prepares you to take Calculus. Topics include finding the area under a curve, exponentials and logarithms, trigonometry, limits, and other advanced algebraic topics. We emphasize conceptual understanding, classroom discussion, and problem solving in this course. Students are encouraged to construct their own knowledge through study teams and activities. This course will be organized as an investigative and assisted discovery learning course.

### CALCULUS (1 credit) GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: ALGEBRA 2 or PRE-CALCULUS with a minimum score of a B and teacher recommendation. New students will take a diagnostic test. COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING PRE-CALCULUS, AP CALCULUS AB, OR AP CALCULUS BC

Calculus is offered to students in grades 11 and 12 who meet the prerequisite requirements. In this course, we study the most important ideas in Calculus, including limits, functions, derivatives, and integrals. Students find derivatives algebraically and numerically, represent derivatives graphically, and interpret the meaning of a derivative in applications. Previously studied functions will be analyzed using calculus concepts. The relationship between the derivative and the definite integral is developed as well. Applications of Calculus in economics, ecology, physics, and other fields will be explored.

<u>AP CALCULUS AB</u> (1 credit) GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: ADVANCED ALGEBRA 2/TRIGONOMETRY, CALCULUS, or PRE-CALCULUS with a minimum of an A-, teacher recommendation, and diagnostic test. New students are required to take a diagnostic test.

# COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING PRE-CALCULUS, CALCULUS, OR AP CALCULUS BC

AP Calculus AB is limited to students in grades 11 and 12 who meet the prerequisite requirements. This is a rigorous college level course (equivalent to ¾ of a year of college-level Calculus) that will require a minimum of 90 minutes of work time per night including weekends. In our AP Calculus AB course, we study every topic area included in the College Board AP Calculus AB course description including limits, functions, derivatives, integrals, etc. Class time will emphasize conceptual understanding, discussion, and problem-solving while review of the concepts and additional problem-solving will be done for homework.

### AP CALCULUS BC (1 credit)

### GRADE LEVELS: 11, 12

### NUMBER OF SEMESTERS: 2

PREREQUISITES: ADVANCED ALGEBRA 2/TRIGONOMETRY, CALCULUS, or PRE-CALCULUS with a minimum of an A-, teacher recommendation, and diagnostic test. New students are required to take a diagnostic test. Students who have completed AP Calculus AB with a minimum of a B can also enroll in this course.

# COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING PRE-CALCULUS, CALCULUS, OR AP CALCULUS AB, OR CALCULUS C

AP Calculus BC is limited to students in grades 11 and 12 who meet the prerequisite requirements. In AP Calculus BC course, we study every topic area mentioned in the College Board AP Calculus BC Course Description, including limits, functions, derivatives, integrals, and infinite series. We will put emphasis on both conceptual understanding and problem solving. This is a rigorous college level course (equivalent to a year of college level calculus). A strong math background and willingness to work hard is essential for success in this course.

### <u>STATISTICS (1 credit)</u> GRADE LEVEL: 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: PRECALCULUS COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING AP STATISTICS, INTRO TO LINEAR ALGEBRA, AP CALCULUS AB, OR AP CALCULUS BC

Statistics is limited to students in grade 12. In this statistics course, students are introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will apply their knowledge about data and modeling to real world applications and problems. Because of the practical nature of statistics, students are encouraged to construct their own knowledge through group work and activities.

### <u>AP STATISTICS (1 credit)</u>

### GRADE LEVELS: 12

### NUMBER OF SEMESTERS: 2

PREREQUISITES: ALGEBRA 2 and teacher recommendation. Proficiency in reading and writing English is required (at least A-).

# COURSE DESCRIPTION: <u>REQUIRED</u>, UNLESS TAKING STATISTICS, INTRO TO LINEAR ALGEBRA, AP CALCULUS AB, OR AP CALCULUS BC

AP Statistics is limited to students in grade 12 who meet the prerequisite requirements. This is a rigorous college-level course requiring at least 90 minutes of work time per night including weekends. Students are introduced to the major concepts and tools for collecting, analyzing, and drawing

conclusions from data. Because of the practical nature of the AP Statistics course, students are encouraged to construct their own knowledge through group work and activities.

### INTRODUCTION TO LINEAR ALGEBRA (1 credit) GRADE LEVEL: 12 NUMBER OF SEMESTERS: 2 PREREQUISITE: AP CALCULUS AB OR BC COURSE DESCRIPTION: <u>ELECTIVE EQUAL TO AN AP COURSE</u>

In this course we will start from the topics we learned in Algebra 2 such as linear systems, and matrices, and bring them to a new height with abstraction of mathematical notation and concepts. The operations of matrices, the concepts of vector space, linear independence, linear transformations, and eigenvalue problems will be carefully studied. Applications of linear algebra in other fields will be an integral part of the course. Math software will be used extensively.

### CHINESE, LANGUAGE, CULTURE & HISTORY

Students are placed at the appropriate level based on skills, test scores, fluency, and teacher recommendation.

### <u>CHINESE 9A (</u>1 credit) | <u>中文 9A</u>(1 学分) GRADE LEVEL: 9 | 适用年级: 9 NUMBER OF SEMESTERS: 2 | 学期数: 2 COURSE DESCRIPTION: REQUIRED | 课程描述: 必修

The main objectives of this class are to lay a foundation of literacy and prepare students to analyze and deeply understand Chinese literature as well as evaluate their aesthetic qualities. Students will develop skills including: research skills, text analysis, public speaking, and literary writing. This class is divided into 8 units according to theme, such as modern poetry, Chinese classic narrative prose, modern narrative prose, news and reports, Chinese and foreign lyrical prose, and more. We will gauge student's understanding using a range of methods, including classroom instruction, group discussion and collaboration, creative writing, and activities organized around Chinese traditional festivals. Students will delve into major works of Chinese literature including: *Rain Alley, Farewell to Cambridge Again, The Emperor and The Assassin, Little Dog Called Baodi, The Lotus Pool by Moonlight, Lisao*, and *Orchid Pavilion*. Students will also read a variety of literary works related to the respective themes, including two masterpieces: *Poems for Children* and *A New Account of Tales of The World*.

本课程的主要目标是要初步奠定学生的文学基础,为提高学生的文学修养和审美能力做好准备。学生将会提升搜集整理资料能力、文本分析能力、演讲能力和写作能力。本课程依据不同 主题分为八个单元:情感与意象(现代诗歌),提要钩玄(古代叙事散文),品人与品文(记 叙散文),博观约取(新闻、报告文学),情趣与理趣(中外抒情散文),含英咀华(诗经、 楚辞、汉魏六朝诗歌)、情景交融(古代抒情散文),对话与交流(演讲辞)。课程学习主要 通过课堂教学、小组讨论与合作、创意写作及与中国传统节日的互动进行。主要涉及的文学作 品包括:《雨巷》、《再别康桥》、《荆轲刺秦王》、《小狗包弟》、《荷塘月色》、《离 骚》、《兰亭集序》等。本课程也会补充阅读大量与课程主题相关的作家作品,并进行《给孩 子的诗》和《世说新语》的名著导读。

### <u>CHINESE 9B (1 credit) | 中文 9B</u>(1 学分)

GRADE LEVEL: 9 | 适用年级: 9

#### NUMBER OF SEMESTERS: 2 | 学期数: 2

### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

This course is designed in thematic units, such as sports and fitness, food and fashion, school and family, festivals and customs, travel and transportation, man and nature, people and society, Chinese language and characters, famous people and history, literature and arts. Students will learn the linguistic skills in listening, speaking, reading and writing. The writing component will emphasize practical writing in school and social life, like letters, announcements, and posters. The course also provides an introduction to literary Chinese and ancient Chinese literature. Besides lectures, group work, including discussion, student presentations, peer critiques, video projects, cultural projects, debates, and writing composition are used.

本课程将学习运动与健身,食品与时尚,学校与家庭,节庆与风俗,旅游与交通,人与自然, 人与社会,汉语言与文字,名人与历史,文学与艺术等主题单元。学生将掌握听、说、读、写 的语言技巧;写作课则着重于学校和社会生活中的应用写作,如邮件、公告和海报等。本课程 还将对中国语言和古典文学做初步的介绍。授课方式有老师讲授,小组活动,包括一对一分 享、小组讨论、学生展示、同伴评价、视频展示、文化项目展示、辩论、写作等。

### <u>CHINESE 10A (</u>1 credit) | <u>中文 10A</u>(1 学分)

### GRADE LEVEL: 9 | 适用年级: 10

NUMBER OF SEMESTERS: 2 | 学期数:2

### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

The main objectives of this course are to let students experience the express power of different literary forms, to cultivate their analytical ability and appreciation for different literary forms, and to improve their aesthetic temperament and interest, through reading traditional and modern classic articles. The teaching objectives will be implemented through readings, discussions, poems with music, performances, posters, poetry with painting, thematic composition, and free writing. The class is student-centered, and emphasizes group cooperation and critical thinking. Students will be given process evaluation from different aspects: class activities, quizzes, homework, midterms, and final exams. This course consists of distinct topic units, such as Chinese and foreign novels, Chinese and foreign dramas, argumentation, Tang poetry and Song-Ci, ancient biography, ancient argumentation, and natural science essays. In addition, we will provide supplemental works which are related to the topics or writers in the textbook, and guide students to read the Chinese literature classic *Romance of the Three Kingdoms* to expand their reading horizons.

本课程主要通过阅读鉴赏传统及现代的经典篇目,让学生体会不同文体语言的表达效果,培养 文体分析和鉴赏的能力,提高审美情趣。课程将通过阅读、讨论、配乐诗朗诵、表演、海报、 诗配画、专题作文和自由创作等方式实现教学目标。课堂以学生为中心,强调小组合作和批判 性思维。课程将从课堂活动、课堂作业、课堂测试、家庭作业、期中期末考试等方面对学生进 行过程性评价。课程以中外小说、中外戏剧、随笔杂文、唐诗宋词、古代人物传记、古代议论 性散文、自然科学小论文分单元,展开专题教学。此外,本课程将补充与课程主题和作家相关 的作品,并进行中国古典名著《三国演义》的导读,以拓展学生的阅读视野。

### <u>CHINESE 10B (1 credit) | 中文 10B</u>(1 学分)

#### GRADE LEVEL:9 | 适用年级:10

#### NUMBER OF SEMESTERS: 2 | 学期数:2

#### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

The curriculum of Grade 10 Chinese class B is student-centered, focusing on the cultivation of students' comprehensive ability of listening, speaking, reading, and writing, integrating the core concepts of Communicative approach and Task-based Language Teaching. We practice Thematic Teaching in class. Each unit will have a common theme, and there will be four lessons under each theme. The themes include humanities, society, science and technology, nature, culture, characters, economy, history, geography, sports, life, art, military, and life philosophy. The selection of the content focuses on practicality, fun, standardization, authenticity and timeliness. The length of the text is also presented in a stepped growth, we want the students to improve gradually step by step. We hope to help students achieve their learning goals smoothly, easily and efficiently with a scientific and rigorous attitude, and eventually improve their Chinese language level and the better understanding of Chinese culture.

10 年级中文 B 班的课程以学生为中心,注重培养学生的听说读写的综合能力,融入交际法和 任务型语言教学的核心理念,进行主题式教学。每一个单元会有一个共同主题,每个主题下有 四课。涵盖了人文、社会、科技、自然、文化、人物、经济、历史、地理、体育、生活、艺术、 军事以及人生哲理等内容。语料的选取注重实用性、趣味性、规范性、真实性以及时效性。课 文的长度也是呈现阶梯式的增长,做到循序渐进,逐渐提高。希望能够科学严谨,有针对性地 帮助学生顺利、轻松、高效地达成学习目标,提高中文的语言水平,了解更多的中国文化。

<u>CHINESE 11A (</u>1 credit) | <u>中文 11A</u>(1 学分) GRADE LEVEL: 9 | 适用年级: 11 NUMBER OF SEMESTERS: 2 | 学期数: 2 COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

The main objective of this class is for students to enhance the appreciation and understanding of ancient lyric prose, poems, classic novels, literary criticisms, and scientific essays. Students are supposed to know some history and cultural background of the literary works, to understand the inner emotions of the authors, to grasp main skills of literary writing, and to learn Chinese history and culture. We will do this through reading books, discussions, watching documentaries, public speaking, projects, compositions, and creative writing. The students will be asked to work together in groups to create our classroom community. We will gauge students' understanding by class activities, guizzes, homework, reading, writing, projects, a mid-team test, and a final test. Chinese 11 focuses on these literary works: Border Town by Shen Congwen, ancient Chinese poetry, prose and articles written by Tao Yuanming, Wang Bo, Bai Juyi, Zhu Guangqian, Qian Zhongshu, Liang Sicheng, Lin Geng, etc. Moreover, we will provide students with reading guidance about Water Margin in the class. 本课程主要目标是增强学生对古代抒情散文、诗歌、经典名著、文学评论、科学小论文和中国 现代小说的鉴赏与理解能力。学生须了解文学作品背后的历史文化背景,体会作者内心情感, 掌握主要的写作技能,学习中国历史和文化。我们将通过阅读、讨论、观看纪录片、演讲、海 报、创意写作等方式达成以上目标。学生将被要求共同合作,以形成稳固的课堂团队。学生成 绩测评以课堂活动、课堂作业和测验、家庭作业、阅读与写作、海报、期中考试、期末考试等 形式为主。11年级学习的文学作品有:沈从文的《边城》,陶渊明、王勃、白居易、朱光 潜、钱钟书、梁思成、林庚等人的诗歌或散文。同时,我们也将在课内对四大名著之一的《水 浒传》进行导读。

### <u>AP CHINESE (</u>1 credit) | <u>AP 中文</u>(1 学分)

### GRADE LEVELS: 11 | 适用年级: 11

### PREREQUISITES: CHINESE 10B (<u>native speakers of Chinese are not eligible for this course</u>) 先修要求: <u>中文 10B(本课程不适用于母语是中文的学生)</u>

### NUMBER OF SEMESTERS: 2 | 学期数: 2

### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

This is a full-year intermediate level Chinese course, instructed entirely in Chinese. The course will help with the language skills and culture. Students will develop Chinese proficiency through exposure to a broad range of Chinese resources which are authentic and carefully adapted, including menus, recipes, notices, signs, newspapers and magazine articles, interview transcripts, letters, and essays. There will be an emphasis on traditional culture and research. You will have a chance to get to know China, which is rich in traditions and culture thousands of years old!

全中文授课,适用于中文达到中级水平的学生。课程目的是帮助学生学习中文语言和汉语文 化。通过精心甄选一系列中文素材,如菜单、食谱、通知、标识牌、报纸刊物文章、访谈语 录、通信文书、散文等,培养学生的中文熟练程度。课程将着重于传统文化探索与学习,带领 学生了解中国,感受几千年来中国积累的深厚文化传统。

### <u>CHINESE 12A (1 credit) | 中文 12A</u>(1 学分)

#### GRADE LEVEL: 9 | 适用年级: 12

### NUMBER OF SEMESTERS: 2 | 学期数:2 COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述:<u>必修</u>

The main objective of this class is for students to learn the articles of Tsinghua ancestors, be inspired by the great spirits, and know the essence of Chinese traditional culture. In addition, this course will focus on works of writing produced by and biographies on overseas Chinese, and cultural celebrities from Hong Kong, Macau, and Taiwan, to understand their livelihoods and sensations. On this basis, the course will include a "Famous Works" section where students will read Qian Zhongshu's masterpiece *Fortress Besieged* and Lin Yutang's classic *Moment in Peking*. This course will also include a list of recommendations by Tsinghua and non-Chinese mainland authors. The course will mainly be based in multiple instructional techniques including classroom lectures, group work, shared reading, thesis-writing, and explorations in Chinese culture, to improve the practical literary, research, and innovative skills of students.

本课程将系统研读近代清华学人的代表作品及传记文章,感受清华学人崇高的人格魅力和精神 追求,在中文课堂上传承清华精神。此外,还将关注海外华人以及港澳台文化名人的文章及传 记,感受域外中国人以及港澳台文化人的生活和情感。在此基础上,本课程还将增加课内"名 著导读"环节,上学期导读钱钟书先生的经典之作《围城》,下学期导读林语堂先生的经典作 品《京华烟云》。此外,本课程还将推荐学生阅读大量清华、海外学人以及港澳台知名作家的 作品。在阅读与鉴赏活动中,让学生不断充实精神生活,完善自我人格,提升人生境界;让学 生能据不同的目的和要求,陈述自己的看法,表达真情实感;让学生能够通过批判性阅读,发 现问题并进行探究式学习,撰写毕业论文,并通过小组合作完成近代清华与近代中国关系研究 的图文长卷。课程学习主要通过课堂教学、小组合作、读书分享、论文撰写,以及中国文化主 题活动等多种方式进行,以提高学生的综合实践能力,探究能力以及创新能力。

### <u>CHINESE 12B (</u>1 credit) | <u>中文 12B</u>(1 学分)

GRADE LEVEL: 9 | 适用年级: 12

### NUMBER OF SEMESTERS: 2 | 学期数:2

### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

The 12B Chinese course aims to develop student's language skills and intercultural understanding through the study of a range of written and spoken language materials. We prepare three core areas for the course study: social relationships, communication, and media global issues and five options: cultural diversity customs and traditions health leisure science and technology. These topics are designed for students who have some previous learning of Chinese.

12 年级中文 B 班的课程目标是通过大量的读写材料提高学生的语言能力和跨文化理解能力。 课程包括三个核心主题:社会关系、交流与媒体和全球化议题,以及五个选修主题:文化多样 性、风俗与传统、健康、休闲和科学与技术。这些话题专门为已经有了一定中文学习基础的同 学设计的。

### <u>CHINESE HISTORY 9A</u> (.5 credit) | <u>中国历史 9 A</u>(.5 学分)

#### GRADE LEVEL: 9 | 适用年级: 9

### NUMBER OF SEMESTERS: 2 | 学期数: 2

### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

After the May Fourth movement, China experienced military disorder, the Sino-Japanese war, the Chinese civil war. Afterwards, in 1949 China achieved a unified independence. How could a fractured China regain development to improve its citizens' quality of life? How would China's history impact its future development? In ninth grade, we will learn about China's history--from 1919 to today. We will engage in deep discussions about China's rich history and society.

五四运动之后的中国经历了军阀混战、抗日战争、解放战争,最终在 1949 年实现了国家的独立统一。百废待兴的新中国要走怎样的发展之路才能实现民族复兴?已经走过的路对未来中国的发展有什么启示?九年级我们将学习从 1919 年到今天的历史,深入探讨中国的历史与社会。

<u>CHINESE HISTORY 9B</u> (.5 credit) | <u>中国历史 9 B</u>(.5 学分) GRADE LEVEL: 9 | 适用年级: 9 NUMBER OF SEMESTERS: 2 | 学期数: 2

### COURSE DESCRIPTION: <u>REQUIRED</u> | 课程描述: <u>必修</u>

Do you want to know the very beginning of 5000-year Chinese civilization? Do you want to explore the time of Confucius? Do you want to know why the Great Wall is built? Do you want to know how the Silk Road, which connected China and Europe, started? Do you want to know the stories of the Three Kingdoms period? ... In Grade 9 Chinese History class B, we use *A Chinese History Reader* as our textbook. You will explore the Chinese history from the legends of Huang Di and Yan Di, to the Three

Kingdoms period. You will have a preliminary understanding of the glorious and resplendent Chinese civilization.

你想知道五千年的中华文明是如何起源的吗?想了解孔子这位大思想家生活在怎样的时代吗? 想知道巍峨的长城是在怎样的环境下建造起来的吗?想知道沟通中外的丝绸之路是怎样兴起的 吗?想知道最真实的三国故事吗?……九年级 B 班的中国历史课将以 A Chinese History Reader 为教材,与你一起探索浩瀚的中国历史知识。我们将学习从传说中的黄帝炎帝时期到三国时期 的历史知识,了解中国先民的伟大创造,初步认识灿烂辉煌的中华文明。

### <u>CHINESE HISTORY I & II</u> (.5 credit each) | <u>中国历史 I & II</u> (.5 学分 每学期)

#### GRADE LEVELS: 10, 11, 12 | 适用年级: 10、11、12

### NUMBER OF SEMESTERS: 1 or 2 学期数: 1 或 2

### COURSE DESCRIPTION: <u>ELECTIVE</u> | 课程描述: <u>选修</u>

The main objectives of this class are for students to understand important processes within Chinese history, and each specific historical development, in order to understand trends, continuities, and changes within Chinese history. Students will develop their skills of critical thinking, historical analysis, and writing. In semester one, the units are based upon the following themes: territorial expansion and change, important social, economic, and structural reforms, modern archaeological discoveries, abnormal inheritances of the throne, and changes within the Keju and Chinese meritocracy (the examination system that had defined Chinese government for over a millennium). The second semester is based on the reading of notable academic works about modern Chinese history. Students' understanding will be gauged though a range of assessments including: essays, group discussions, class presentations, and projects. Our recommended book titles include: *The Rise of Modern China, The Collapse of Qing Dynasty, Yuan Shikai Owns China.* 

本课程主要目的是使同学们在了解中国历史重大进程的基础上理解中国历史的发展趋势与发展 连续性。同学们在课程中将锻炼他们的批判思维能力,历史分析能力和写作能力。第一学期, 我们将根据主题分成以下单元:中国历史疆域的变化,重大社会改革,现代考古发现,选拔人 才制度的变化。第二学期将阅读关于近现代中国的著作。我们的成绩测评方式包括:论文、小 组讨论、课堂报告等形式。本课程的推荐书目包括《中国近代史》,《袁氏当国》,《天朝的 崩溃》等。

### <u>HISTORICAL GEOGRAPHY OF CHINA (</u>.5 credit) | <u>历史的变量:中国历史地理探究</u>(.5 学分) GRADE LEVELS: 10, 11, 12 | 适用年级: 10、11、12

NUMBER OF SEMESTERS: 1 学期数: 1

### COURSE DESCRIPTION: <u>ELECTIVE</u> | 课程描述: <u>选修</u>

This course examines geographical changes across historical periods that are primarily caused or influenced by human activities. It will lead to an exploration of frontiers, phenology, transportation, urban geography, and geographical situations and strategies of history. Like the flapping of a butterfly's wings, a single change can have historical ripple effect. In addition to honing skills in reading and analyzing historical data and images, this course will also strengthen your basics of historical geography.

本课程研究历史时期主要由人的活动而产生或影响的一切地理变化,将带领大家探索中国历史的疆域、物候、交通、城市地理、地理形势与战略等方面。如蝴蝶振翅一般,一个不起眼的变化也许就将对历史进行改写。我们既是史料的阅读者,也是数据图像的分析者。在本课上,你将学到历史地理的基础知识,并可以熟练运用它,为我们拨开时间的迷雾,多角度观察还原历史。

<u>DEBATE AND CRITICAL WRITING</u> (.5 credit) | <u>辩论与批判性写作</u>(.5 学分) GRADE LEVEL: 9, 10, 11, 12 | 适用年级: 9、10、11、12 NUMBER OF SEMESTERS: 1 | 学期数: 1 COURSE DESCRIPTION: <u>ELECTIVE</u> | 课程描述:选修

Critical thinking is a tool of inquiry requiring reflective and constructive thought. In the modern world, critical thinking has become one of the most fundamental qualities required in students. This course aims to cultivate your critical thinking skills, aiding you in developing your character and perspective by investigating concepts including individualism versus collectivism, conformity versus sovereignty, doubt versus belief, and justice versus equality. This will include topics such as the death penalty and other controversial issues that will guide you to reflect and think critically about modern society. This course focuses on providing procedural writing guidance, developing critical thinking and perspective, and improving your logical reasoning. The practice of debate aims to shape your "independent spirit and free thought".

批判性思维是一种反思性和建构性思维。在当今世界,批判性思维逐渐成为学生的核心素养之 一。本课程旨在培养你的批判性思维,提升你的思维品质。在教学中主要以主题探究的方式进 行教学,将会涉及到个人与国家,容忍与自由,怀疑与信仰,公平与公正、死刑存废等经典议 题,也会引导学生对当前的社会热点问题进行批判性反思。本课程侧重于写作的过程化指导, 侧重你的思维训练,侧重于你思维质量的提升和健全人格的培养,并在辩论的实操中,使你逐 渐拥有"独立之精神,自由之思想"。

### INTRODUCTION TO ZHOUYI (.5 credit) | <u>《周易》导读</u>(.5 学分)

GRADE LEVEL: 9, 10, 11, 12 | 适用年级: 9、10、11、12

NUMBER OF SEMESTERS: 1 | 学期数: 1

### COURSE DESCRIPTION: <u>ELECTIVE</u> | 课程描述: <u>选修</u>

Zhouyi is one of the most influential classics in Chinese culture. Since the beginning of Han dynasty, Zhouyi has been recognized as the pinnacle among Confucian classics. It serves not only as the source of Confucianism and Taosim, but also the foundation of academic theories regarding traditional Chinese culture. This course will introduce the basic concepts of Zhouyi and help you understand the basic interpretation of Tai chi, the Eight-diagrams, and the Sixty-four hexagrams. You will read Yijing to understand the mathematical and imaginative thinking of Zhouyi and try to master its traditional ideology. You will also learn to practice divination in accordance with Zhouyi. To conclude, it aims to improve your comprehension and perception of traditional Chinese culture.

《周易》是影响中国文化最为深远的经典之一。自汉代以来,《周易》便被尊为群经之首,它 既是儒、道两家哲学之源,也是中国传统文化各门学术基本理论的依据。本课程将会介绍《周 易》的基本概念,带你了解太极、八卦、六十四卦的基本内涵,并在阅读《易经》与《易传》 的过程中了解《周易》的数理思维和形象思维,把握其中蕴含着的传统的哲学思想。本课程亦 会进行《周易》占筮方法的实操演练和卦象的释读。通过上述教学,以期提升你对于中国传统 文化的理解与认知。

### **PHYSICAL EDUCATION & HEALTH**

### PHYSICAL & HEALTH EDUCATION (1 credit)

#### GRADE LEVEL: 9 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: REQUIRED

Physical Education is an energetic, enthusiastic, and active class aiming to promote your fundamental movement skills in a variety of game settings and sports. Students will grow in proficiency in individual and team activities and sports that incorporate principles of movement, teamwork and communication and be active learners to engage and enjoy sports and life-long healthy habits. Grades will be calculated based on class participation, as well as performance, skills, attitudes, and knowledge in sports and activities. The goal of the physical education program is for you to develop your physical skills, knowledge, and motivation to ensure that active students transition into healthy adults. Combined with Health Education, our focus will be to deliver valuable information to promote healthy living through practical situations that students will encounter as they move into adulthood. Topics include physical health, psychological wellbeing, nutrition & exercise, drug & alcohol abuse, and other health topics.

### CREATIVE GAMES (.5 credit)

#### GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

Creative games is a dynamic elective that encourages high school students to stretch their imagination and fitness boundaries. This course is designed for those who have a passion for physical activity and an interest in game development and leadership. By participating in this program, students will not only engage in physical activity but will also dive into the creative process of designing and implementing their physical games and activities. These student-created games will aim to be inclusive, and fun, and promote physical health, inspiring younger students to keep moving.

### <u>FITNESS I</u> (.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

This is an introductory course for students to develop a foundation in both aerobic and anaerobic fitness geared towards long-term health and wellbeing. Emphasis will be placed on the importance of how to build a suitable program for your own individual needs. Students will spend class time focusing on a variety of training methodologies such as maximum oxygen consumption test and how to analyze the information, core training, functional training, adequate physical conditioning, and introduction to weightlifting. Time outside of class will be spent creating personalized workout plans, progress methodologies, and anatomically & physiologically correct vocabulary and the use of this.

### **ADVANCED FITNESS (.5 credit)**

GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITE: FITNESS 1

### COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

This is a physically intensive course focused on both aerobic and anaerobic fitness geared towards sports/athletic performance. You will learn about current training methodologies and concepts, the positive effects of high-level fitness training, and how to personalize a workout to fit your athletic/sporting needs. Class time will focus on a variety of training methodologies and, field test application, correct use of information, and the video-analysis of human body movement patterns.

Time outside of class will be spent producing personalized workout plans and following progress made throughout the course.

### INTERNATIONAL SPORTS (.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

Students will follow a learner-centered model, which aims to provide you with an understanding of the fundamental technical and tactical skills necessary to be proficient in a wide variety of team sports. In this course you will practice sports where teams score when they move an implement into the opposing team's zone and successfully attack that team's goal or target area. Tactical problems related to games include maintaining possession, attacking and/or defending a goal, winning the ball, etc. Examples of sports plated include soccer, basketball, flag-football, tag-rugby, handball and hockey.

### MARTIAL ARTS (.5 credit)

GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

Martial Arts is a traditional Chinese sport that focuses on both internal and external training, mainly using martial arts movements and sequences, routines, and fighting movements. Through this traditional sport, students will enhance their coordination and physical fitness. It can also enhance their willpower and improve their ability to be more active.

### **ADVANCED MARTIAL ARTS** (.5 credit)

### GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: MARTIAL ARTS COURSE DESCRIPTION: <u>FULFILLS THE PE ELECTIVE REQUIREMENT</u>

Martial Arts is a traditional Chinese sport that focuses on both internal and external training, mainly using martial arts movements and sequences, routines, and body movements. Through the advanced Martial Arts class, students will enhance their coordination, physical fitness, and psychological quality. It can also enhance their willpower. Students will be proficient in the use of basic martial arts skills, improve defense skills, tactics, and the use of traditional Martial Arts equipment, etc.

### <u>NET SPORTS (</u>.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

You will follow a learner-centered model which aims to provide you an understanding of the fundamental technical and tactical skills necessary to be proficient in a wide variety of net sports where players or teams score by hitting an object into a court space in such a way that the opposing players or team cannot hit it back within the allowed number of bounces. Tactical problems related to net games include setting up an attack, creating space on offense, reducing space on defense, etc. Examples of net and wall sports include table tennis, volleyball, and badminton.

### ULTIMATE SPORTS (.5 credit)

### GRADE LEVELS: 10, 11, 12

### NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: FULFILLS THE PE ELECTIVE REQUIREMENT

You will follow a learner-centered model which aims to provide you with an understanding of the fundamental technical and tactical skills necessary to be proficient in a wide variety of

nonconventional sports. The course aims to provide you with the motivation and competence to continue participating in sports throughout your adult life. It will also emphasize the common crossovers of skills and strategies between sports. You will explore how the skills you use and develop in sports (leadership, teamwork, and planning) can be applied to other real-world scenarios. Class time will focus on individual skill development, small lead-up games and large group games aimed at improving understanding.

### **THE ARTS**

### **MUSIC COURSES**

### **BAND 1, 2, 3, and 4** (1 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: At least a year of playing a wind or percussion instrument COURSE DESCRIPTION: <u>ELECTIVE</u>

Students will continue playing their chosen instrument in an ensemble, playing more challenging and fun music. Picking up a secondary instrument is also good for the ensemble (like bass clarinet, baritone sax, piccolo, or tuba). The High School Band will further your abilities in playing ensemble music. Students will also learn accurate playing techniques, dynamics, and articulations for many styles of music. Students will learn proper practice and performance techniques both as soloists and as members of ensembles. Students are required to perform in both the Winter and Arts Festival concerts as well as other assemblies and lunch performances throughout the year.

### CHOIR 1, 2, 3, and 4 (1 credit)

### GRADE LEVELS: 9, 10, 11, 12 PREREQUISITES: Strong interest in singing and audition. NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>ELECTIVE</u>

Classes will consist of warmups, developing singing skills in a choir setting, sight-reading skills, and will focus on rehearsals and performances. Students are expected to attend extra rehearsals if necessary. Audition required: (1) Students will sing one song of their choice, and (2) sight sing a short passage. According to the level and style of their singing, students will be divided into different voice groups in class.

### PIANO 1, 2, 3 and 4 (.5 credit)

### GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: An audition is required. The capacity of the class is dependent on the number of available pianos.

### COURSE DESCRIPTION: ELECTIVE

Students must be able to read scores and learn pieces independently. Through the course, students will improve techniques and learn to collaborate with others. You will play solos, duets, and ensemble pieces that will include popular and classical music. Learning the skills associated with accompaniment will be a part of your curriculum as well.

### MUSIC COMPOSITION (.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: A basic knowledge of music theory is required COURSE DESCRIPTION: <u>ELECTIVE</u>

Classes will consist of music theory, aural skills, and composition-based projects. Students should be able to read notes in treble clef and bass clef, have a basic knowledge of note durations, meter, key, scales, flats, sharps, intervals, chords, and chord inversions. Students are expected to present their compositions and give comments to peers frequently. It is beneficial if students have some ability to play musical instruments.

### **VISUAL ARTS COURSES**

### AP ART AND DESIGN I and II (1 credit each year) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 4 PREREQUISITES: FOUNDATIONS OF ART and teacher approval COURSE DESCRIPTION: <u>FULFILLS THE ART ELECTIVE REQUIREMENT</u>

AP Art and Design is a two-year course. Students enrolled in this class should demonstrate advanced art skills and good working habits, such as submitting their work on time and producing high quality artwork. After the first year, students must have a minimum grade of 85 to continue in the program. The course is designed for intensive focus on creating an Art Portfolio for submission to the College Board. It can also be used for art schools and university art programs. "In an AP Art and Design course, students develop the skills that artists and designers use, and create a portfolio of work that is assessed to produce the AP score. The AP Art and Design program includes three different courses and portfolio exams: Drawing, 2-D Design 3-D Design" (taken from the CB website).

### DRAWING (.5 credit)

#### GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1

### PRERESQUISITES: Foundations of Art

### COURSE DESCRIPTION: FULFILLS THE ART ELECTIVE REQUIREMENT

Develop your drawing skills using graphite, charcoal, pastel and ink in this course which focuses on observational drawing techniques. Through still life, portrait and figure drawing, use sighting, proportion and perspective to create visually strong images. Learn about important contemporary and historical artists who influenced the art world through their drawings!

### EASTERN ART I AND II (.5 credit each)

### GRADE LEVELS: 9, 10, 11, 12

### NUMBER OF SEMESTERS: 1

#### PRERESQUISITES: EASTERN ART I IS REQUIRED TO TAKE EASTERN ART II COURSE DESCRIPTION: <u>FULFILLS THE ART ELECTIVE REQUIREMENT</u>

In Eastern art <u>I and II</u>, students will enhance aesthetic abilities and perceive the richness of Chinese and Eastern arts. The Art projects are structured, allowing students to express themselves autonomously and creatively. The curriculum will develop their overall artistic literacy, appreciation, and innovative abilities within the study of Eastern art, enhancing the abilities in artistic thinking, comparison, creation, and expression. It involves project-based learning in various contents, such as Chinese painting, design, sculpture, arts and crafts, Art History, online or offline exhibition viewing.

### FOUNDATIONS OF ART 1 (.5 credit)

### GRADE LEVELS: 9, 10, 11, 12

### NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: REQUIRED FOR ALL OTHER VISUAL ART ELECTIVES

: This course will help students develop a basic understanding of technical skills while encouraging creative investigation of formal and conceptual ideas. This course will emphasize making art as an ongoing process that involves critical thinking and risk taking while developing basic art skillsIt is an opportunity to work in mediums including different drawing materials and various types of paint. Students' abilities will be demonstrated by their capacity to respond to, analyze, and interpret their own artwork and the work of others through discussions, critiques, and writings. Students will also learn about various artists throughout history that coincides with the projects being taught.

### FOUNDATIONS OF ART 2 (.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: REQUIRED FOR ALL OTHER VISUAL ART ELECTIVES

This course is a continuation of the Foundation of Art 1 class to further develop the students basic understanding of technical skills while encouraging students' creative investigation of formal and conceptual ideas. Students will extend their skill knowledge from the Foundation of Art 1 class by learning how to carve, make a print plate for printing, plaster mold making, and learning about mixedmedia projects. This course will continue to emphasize making art as an ongoing process that involves critical thinking and risk taking. Students' abilities will be demonstrated by their capacity to respond to, analyze, and interpret their own artwork and the work of others through discussions, critiques, and writings. Students will also learn about various artists throughout history that coincides with the projects being taught.

### CERAMICS (.5 credit) **GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1** COURSE DESCRIPTION: FULFILLS THE ART ELECTIVE REQUIREMENT

The Ceramics 1 class students will learn the basic design concepts and modeling techniques used to create different ceramic projects. The ceramic techniques that will be taught are pinch, coil, and slab methods to create ceramic pieces. They will understand the different stages of clay, firing processes, and glazes and learn ceramic vocabulary. Students will learn about different ceramic artists to inspire their creativity. In addition, students will understand how to use their own stories or creative imaginations to construct their projects through pre-designing their ideas in their sketchbooks. Students will also learn about various artists throughout history that coincides with the projects being taught.

### CERAMICS 2 (.5 credit) **GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1**

### COURSE DESCRIPTION: FULFILLS THE ART ELECTIVE REQUIREMENT

The Ceramics 2 class students will continue to learn how to combine the different hand building methods they learned in Ceramics 1, and they will learn how to throw on the pottery wheel. They will continue to advance their design concepts and modeling techniques to create different ceramic projects. There will be a review on the hand building methods, the clay stages, firing processes, glazes, and the ceramic vocabulary. The students will learn about different ceramic artists from the previous ceramic class to inspire their creativity. In addition, students will continue to use their own stories or creative imaginations to construct their projects through pre-designing their ideas in their sketchbooks. Students will also learn about various artists throughout history that coincides with the projects being taught.

### PAINTING I-II (.5 credit) **GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1** PREREQUISITE: FOUNDATIONS OF ART COURSE DESCRIPTION: FULFILLS THE ART ELECTIVE REQUIREMENT

The painting class is project-based. You will make paintings applying different techniques by using a variety of materials and techniques in your projects, (watercolor, pastel, acrylic, oil painting, etc.). You will be learning art concepts while you are creating art projects. You will learn the history of painting and artists. You will learn the principles and methods of painting. We will develop painting skills,

learning various genres of painting. You will also develop your skills in art criticism, discussion, and presentation. You will be encouraged to create paintings to express your own feelings and ideas.

#### **SCULPTURE AND PRINTMAKING (.5 credit)**

### GRADE LEVELS: 10, 11, 12

#### NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: FULFILLS THE ART ELECTIVE REQUIREMENT

Experience working with a variety of art materials in this course. Using clay, cardboard and found objects you will learn to create 3D sculptural forms. Through rubber linoleum prints and silk screening, experiment with printmaking! Learn about important contemporary and historical artists who influenced the art world as sculptors and printmakers!

### THEATRE COURSES

### IMPROV THEATRE (.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: <u>ELECTIVE</u>

All great actors begin with improvisation. With this course, students will learn how to think on their feet, develop acting skills and learn about their own strengths as a performer. They will develop body awareness, stage presence, vocal control, and creative thinking. This class will help build character, develop public speaking skills, and confidence

### ADVANCED THEATRE (.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: IMPROV THEATRE COURSE DESCRIPTION: ELECTIVE

In this class, students will further develop acting techniques and learn what it means to be a part of an ensemble through working toward a rehearsed performance of a modern text. You will explore some theatrical traditions, the importance of actors, audiences, and characterization. You will refine your skills in movement and vocal control, while promoting individual growth.

### <u>PLAYWRIGHTING (</u>.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: <u>ELECTIVE</u>

In this class, students will learn how to creatively write your own short plays and follow the process from the starting point in an author's imagination to a finished production with an audience. Along the way you will learn about directing, stage management, lighting, sound and costume. This class will explore playwriting and devising. It's all about behind-the-scenes theatre and how each part brings a stage performance from idea to showtime!

### MOVEMENT AND DANCE (.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: <u>ELECTIVE</u>

This class will focus on the important part that movement plays in performance. Leaving the confines of naturalistic character-based movement associated with most modern acting students will explore the potential of stylized movement, mime, physical theatre, rhythm and dance to communicate ideas, emotions and tell a story, such as in the work of Marcel Marceau and Rudolf Laban.

### HOME ECONOMICS (.5 credit) GRADE LEVELS: 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: <u>ELECTIVE</u>

A delicious, fun, interactive, course, (the only course ever) where you can eat in front of the teachers. You will be able to learn foundational baking skills, develop culinary arts knowledge and put it to the test through designing your own recipes. Join this collaborative, engaging journey that explores the wonders of baking.

### **MODERN WORLD LANGUAGES**

#### ENGLISH LANGUAGE SUPPORT (1 credit)

### GRADE LEVELS: 9, 10 NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: <u>REQUIRED</u> if assigned for additional language support

This course is designed to focus on English language skills related to reading, writing, speaking and listening that are necessary to be successful in an academic environment. ELS supports students in developing the linguistic and academic abilities needed to meet the demands of their core subjects. The course explores topics across the core subjects while giving students structured practice in research, presentations, and essay writing.

### <u>FRENCH I</u> (1 credit) GRADE LEVELS: 9, 10, 11 NUMBER OF SEMESTERS: 2

### COURSE DESCRIPTION: ELECTIVE – must take a minimum of French I and II

*Parlez-vous français*? In French I students will learn the most basic of French language and culture, covering the level A1.1 of the CEFR. You will be able to ask and answer basic questions and state your tastes and preferences, as well as learn a bit about how life is for teenagers in French speaking countries. Students will be able to introduce themselves, ask and answer questions about identity, talk about school, talk about clothes and style and preferences, and more. The course uses the book system Adomania 1, a very new textbook from 2016, designed specifically for teenagers, with topics appealing to them. French class is taught mostly in immersion style and is task oriented – you learn by doing and communicating with a purpose.

### FRENCH II (1 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: FRENCH I COURSE DESCRIPTION: ELECTIVE

*Vous parlez français*! You now already know some French. In French II, students will expand their knowledge to secure level A1 of the CEFR and begin level A2. French 2 focuses on rudimentary and most frequent interactions, such as asking for directions, inviting people out, disagreeing with someone, expressing obligation or interdiction. We use the book system Adomania 2, a new textbook from 2016, designed specifically for teenagers, with topics appealing to them. French class is taught mostly in immersion style and is task oriented – you learn by doing and communicate with a purpose.

### FRENCH III (1 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: FRENCH II COURSE DESCRIPTION: <u>ELECTIVE</u>

*Vous êtes francophone*! You have mastered simple French and are ready to deal with intermediate French! In French III you will complete level A2 of the CEFR and should be able to take the DELF A2 exam. French III will allow more sophisticated interactions and nuanced language with things like expressing personal opinions, giving advice, congratulating or criticizing. We use the book system Adomania 3, a textbook designed specifically for teenagers, with topics appealing to them. French class is taught in immersion style and is task oriented – you learn by doing and communicate with a purpose.

### FRENCH IV (1 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: FRENCH III COURSE DESCRIPTION: <u>ELECTIVE</u>

Le français comme atout pour votre avenir! Your command of French is already impressive, and you can still go further. French III will complete level B1 of the CEFR and will teach students more complex structures and themes to allow argumentation and debate, the expression of hypothesis, wishes or likeliness, etc. We use the book system Adomania 4, a textbook designed specifically for teenagers, with topics appealing to them. French class is taught in immersion (all in French) and is task oriented: you learn by doing and communicate with a purpose.

### <u>SPANISH I (</u>1 credit) GRADE LEVELS: 9, 10, 11 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>ELECTIVE</u> — must take a minimum of Spanish I and Spanish II

Did you know that Spanish has more native speakers than any other language in the world except for Mandarin? If your English and Mandarin are already good enough, why not make the perfect trio with Spanish? In the Spanish I class, you'll get your very first taste of the language and culture shared by almost 500 million native speakers in 21 countries. In this class, you will learn to introduce yourself, talk about your family and your house, describe people, share your daily routines, ask for directions to places in the city, express your likes and dislikes and, above all, how to make friends in Spanish!

### <u>SPANISH II (</u>1 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: SPANISH I COURSE DESCRIPTION: <u>ELECTIVE</u>

In Spanish II, students will learn to make plans for the near future. They will get to know and appreciate Spanish-speaking countries' gastronomy, and they will talk about events and experiences that happened in the past. Do you want to tell us about your last summer's adventures in Spanish? Now you will be able to. In this course, students will take Spanish into a whole new level with more complex situations, more information about the Spanish speaking world, and more opportunities to see the language in real context.

### SPANISH III (1 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS:2 PREREQUISTES: SPANISH I and II COURSE DESCRIPTION: <u>ELECTIVE</u>

The Spanish III program will be centered on the comprehension and production of logically structured speech (holding a discussion, expressing one's point of view about something, etc.) and in the resolution of communicative tasks such as debating, writing, and reading an essay, in linguistically and culturally appropriate ways. This course will also continue further the understanding and practice of basic linguistic aspects like pronunciation and grammar, as well as techniques and procedures used in the study of any other world language.

<u>LINGUISTICS</u> (.5 credit) GRADE LEVELS: 10, 11, 12 PREREQUISITES: INTEREST IN LANGUAGE ACQUISITION NUMBER OF SEMESTERS: 1

#### COURSE DESCRIPTION: ELECTIVE

In this elective, students will learn about the various elements that make up a language and explore the various fields of Linguistics that study these elements, such as phonology, phonetics, syntax, semantics, psycholinguistics, and more. Students will also try some of the many tools and techniques available to the study of languages. For instance, you will learn the International Phonetic Alphabet (IPA) and how to use it to transcribe speech, or how to visualize speech on an audio-spectrogram. This course does not aim at making you proficient in any field but aims to give you a taste and develop an interest in learning more in university.

### **COMPUTER TECHNOLOGY**

### AP COMPUTER SCIENCE A (1 credit)

### GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 2 PREREQUISITES: INTRO TO COMPUTER SCIENCE COURSE DESCRIPTION: ELECTIVE

The AP Computer Science "A" course is designed to provide students with a learning experience equivalent to that of an introductory college course in Computer Science. This course emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development, and includes the study of data structures, design, and abstraction, and Java programming language.

### FILM STUDIES I and II (.5 credit each) GRADES LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITE: FILM STUDIES I NEEDED FOR FILM STUDIES II COURSE DESCRIPTION: <u>ELECTIVE</u>

Ranging from iconic classics to modern independent films, students will thoroughly examine the interplay of visual language, story structure, character development/motivations, visual metaphor, thematic representation, plot, pacing, sound design, and more. Students will analyze how these various elements are influenced by the cultural histories of the countries from which they come. All students should have an interest in scriptwriting, film analysis, and cultural studies.

### **INTRODUCTION TO COMPUTER SCIENCE** (.5 credit)

GRADE LEVELS: 9, 10, 11, 12

NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

This course introduces students to computer programming. Students will plan and write simple computer programs by applying fundamental programming concepts and learn to create clear and maintainable internal documentation. They will also learn to manage a computer by studying hardware configurations, software selection, operating system functions, networking, and safe computing practices. Students will also investigate the social impact of computer technologies.

#### **INTRODUCTION TO GAME DEVELOPMENT** (.5 credit)

#### GRADE LEVELS: 10, 11, 12

NUMBER OF SEMESTERS: 1

PREREQUISITE: INTRODUCTION TO COMPUTER SCIENCE

COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

Using the Unity game engine, students will advance in their coding skills through game development. In this course, students will: design mechanics and build levels, understand and use development practices, explore how to use assets of different types, and script game components (such as collisions, GUI, ray casting, animations, and basic AI behavior). Throughout the course, students will build upon a 3D game idea, by developing a playable prototype in two stages - a vertical (functional) prototype which will then be further developed into a polished high-fidelity prototype.

### <u>ROBOTICS (</u>.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: <u>FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT</u>

VEX EDR Robotics is designed to provide concrete, contextualized lessons that seamlessly integrate grade level mathematics, programming, and engineering activities for students.

Students will start off learning engineering, problem solving, and programming skills. Using the VEX Robotics Design System, students will build robots, participate in engineering challenges, and work both on their own and in groups. Students will gain hands-on experience by learning to design their robots, program in ROBOTC and Graphical ROBOTC, and participate in virtual and real-world challenges. Students will also explore important STEM fundamentals and computer science concepts, and as such, students will engage in a series of fun challenges that put their skills to the test. This course can only accept a maximum of 10 students.

### FOUNDATIONS OF AI & ML (.5 credit)

### Grade Level: 10, 11, 12

NUMBER OF SEMESTERS: 1 PREREQUISITES: INTRO TO COMPUTER SCIENCE

### COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

Foundations of Artificial intelligence (AI) and Machine Learning (ML) opens doors into possibilities that might have seemed like science fiction only yesterday. Using AI, you can build solutions and improve your apps. In this course, you will explore advanced technology in many fields, including healthcare, fiscal management, and environmental protection to name just a few. After the successful completion of this course, students may opt to pay for and take an online exam through the American Council on Education that could lead university credit. As with AP exams, students and families are encouraged to consult with their college counselor and college representatives as to whether or not this course is awarded college credits by specific colleges/universities and at what level of performance.

### **DIGITAL ANIMATION** (.5 credit)

GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: FOUNDATIONS OF DIGITAL ART COURSE DESCRIPTION: <u>FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT</u>

This course will concentrate on creating 2-D animation using Adobe After Effects. Students will learn the basic principles of animation, storyboarding, character creation, sound design, and more. Students will view and analyze a variety of animated films to understand and evaluate the form. Students will also review and critique peer work.

### DIGITAL PHOTOGRAPHY (.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: FOUNDATIONS OF DIGITAL ART COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

From smart phones to DSLR cameras, students will examine the ways image-production technologies have shaped the way we interpret the world around us. Students will participate in hands-on photography projects that challenge them to analyze how they relate to the images they create and consume. All students should be interested in taking photos, digital technologies, media analysis, and cultural studies.

DIGITAL VIDEO I and II (.5 credit each) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: FOUNDATIONS OF DIGITAL ART COURSE DESCRIPTION: <u>FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT</u>

Digital Video I is a practical class that focuses on creating audiovisual productions from pre-production through post-production and screening for an audience. Students will use digital cameras and professional editing software to write, plan, shoot, and edit both fiction and non-fiction projects. The final project is a collaborative short fiction film. In Digital Video II, students will continue with their own projects to establish and solidify their skills in film production. At the same time, students will also contribute to the development of the class by working collaboratively with and mentoring students in DV I.

#### FOUNDATIONS OF DIGITAL ART (.5 credit)

### GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITES: REQUIRED PREREQUISITE FOR ALL OTHER DIGITAL ARTS CLASSES COURSE DESCRIPTION: <u>FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT</u>

This semester-long course serves as an overview of the other various digital art electives available at THIS. Students will be provided with an opportunity to experiment with new technologies and digital platforms and will gain a basic understanding of video production, digital photography, game design, iOS development, 3-D modeling, and/or graphic design. Foundations of Digital Arts is a prerequisite for all other digital arts courses.

### <u>BEYOND NEW MEDIA</u> (.5 credit) GRADE LEVELS: 10, 11, 12 NUMBER OF SEMESTERS: 1

PREREQUISITES: FOUNDATIONS OF DIGITAL ART. If the number of students interested in the class is larger than the capacity, the instructor may request portfolio reviews.

### COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

Beyond New Media is a workshop-based course that hones technical skills and problem-solving abilities while experimenting with various video strategies. Students will develop research interests and apply their skills to create both short and expanded self-directed projects. They will experiment with various video strategies including video installations, video mapping to 3D objects, site-specific architectural projections, multi-channel projection environments, mixing moving-image content with live performance, or other elements that you might find interesting. It is a perfect example of a STEAM course, where art and technology are fundamental.

### **DIGITAL DESIGN AND FABRICATION** (.5 credit)

### GRADES LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 PREREQUISITE: FOUNDATIONS OF ART OR FOUNDATIONS OF DIGITAL ART COURSE DESCRIPTION: <u>ELECTIVE</u>

This class will introduce students to the latest ways that artists, designers, and engineers create objects using technology, in addition to techniques used in digital design and fabrication. Students will also have the chance to create computer models of three-dimensional objects and then use various machines, such as 3D printers and CNC routers, to fabricate them.

### STEAM I (.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1

### COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

As the first fundamental component of an interdisciplinary Science, Technology, Engineering, Art and Mathematics program, students will work together in small groups to explore and engage in real-world problems in structural stability and design. This course aims to cultivate student interest in STEM-related fields and a component in artistic expression. Students will learn essential scientific and mathematical concepts to help them design, model, and fabricate solutions to real-world based

problems in structural engineering. Students will also develop necessary critical thinking and construction skills through hands-on projects based on the engineering process. The course will be centered on projects focusing on the study of statics like bridge and tower construction.

### <u>STEAM II</u> (.5 credit) GRADE LEVELS: 9, 10, 11, 12 NUMBER OF SEMESTERS: 1 COURSE DESCRIPTION: FULFILLS THE TECHNOLOGY ELECTIVE REQUIREMENT

As the second fundamental component of an interdisciplinary Science, Technology, Engineering, Art and Mathematics program, students will work together in small groups to explore and engage in realworld problems in structural dynamics and design. The aim of this course is to cultivate student interest in STEM related fields and build upon fundamental knowledge of statics from STEAM I. Students will learn essential scientific and mathematical concepts related to the motion of objects to help them design, model, and fabricate solutions to real-world challenges in engineering. Students will also continue to develop necessary skills in critical thinking, design and problem solving through hands-on projects based on engineering principles. The course will be centered on projects that focus on the study of dynamics such as racecars and complex mechanical machines.

### ADDITIONAL GRADE 9 REQUIREMENT

### <u>HIGH SCHOOL ENRICHMENT</u> (.5 credit) GRADE LEVEL: 9 NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>REQUIRED</u>

This course is designed to help students make the transition from middle school to high school: academically, socially, and emotionally. Our goal is to help students make the most of their high school experience by starting it well.

### **INDEPENDENT STUDY**

### GRADE LEVEL: 12 (1 credit) NUMBER OF SEMESTERS: 2 COURSE DESCRIPTION: <u>OPTIONAL</u>

Grade 12 students may choose to take on an additional in-depth one-year path of inquiry if the senior has completed most of the requirements for graduation, has a minimum of a 3.25 GPA, and has an area of academic interest he/she wishes to concentrate and study. Though self-designed, under the academic supervision of a specific teacher, the course must be rigorous and contribute to the respective field of knowledge. It cannot take the place of a required or elective course and is not an AP self-study course. Independent Study involves a student working with a teacher to develop the path of inquiry and expectations for the year. The teacher and student will meet regularly to focus on research and project development. Students must meet with the Academic Principal for written permission to initiate the planning of an independent study and a second time for course outline approval.