



**High School  
Course Catalog  
2016-2017**

## **DAIS Mission and Vision**

### ***Mission***

Dalian American International School provides challenging, collaborative, and responsive experiences that engage learners in developing intellect, character, and health. At DAIS, every learner achieves personal excellence and contributes to the global community.

### ***Vision***

Dalian American International School provides programs that bridge the educational experiences of both international and Chinese national students. We ensure an attractive, well-resourced, and up-to-date educational facility.

Our learning environment fosters academic excellence and enhances students' personal development. We offer opportunities for students to collaborate, thereby developing an appreciation for diverse points of view and respect for each other as unique individuals. Our program expands student horizons and fosters in each student a better understanding of world cultures and citizenship.

Our students and graduates see themselves as global citizens who grow through challenges and are stewards of the world's resources. They are critical thinkers who have a lifelong intrinsic motivation for learning and are prepared to enter high quality educational institutions throughout the world. Most importantly, their community recognizes them as compassionate, ethical, and inspirational.

### ***School-Wide Learning Goals***

At Dalian American International School,

- I. Learners assume personal responsibility in developing their intellect, character, and health.
- II. Learners use critical thinking skills, inquiry, and collaboration strategies to solve problems and make decisions.
- III. Learners set and pursue goals to achieve personal excellence.
- IV. Learners contribute to the local and global community.



## DAIS Graduation Requirements

Academic Area	Graduation Requirement	Recommended Credits for University
Language Arts (English)	4	4
Mathematics	3	4
Social Sciences	3	4
Natural Sciences	3	4
World Languages	3	4
Fine Arts (Music and Visual Arts)	2	3
Physical Education	2	2
Senior Seminar	.5	
Junior Seminar	.5	
Applied Studies	4	
Elective Courses	4	7
<b>Total Credits</b>	<b>29</b>	<b>32</b>

### ***University Planning***

DAIS provides guidance for students and parents as they plan for successful university experiences. The school counselor provides both informational meetings and individual guidance to the secondary school community. Individual development of university plans is programmed into advisory groups. Junior seminar and Senior Seminar are important elements in a student's university planning experience.

## Course Descriptions

### **Applied Studies**

*All DAIS students participate in the Applied Studies curricular strand and may repeat the same course multiple times. Curricular standards associated with Applied Studies will remain largely constant, but performance tasks will vary over time and with the changing needs and interests of the student body. An element of assessment for each student includes a presentation of learning and reflection to the school community.*

Course Title: **Applied Studies: Model United Nations (MUN)**

Grade: 11 or 12

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with Model United Nations. The work may be individual or collaborative. Selecting and defining the task results from collaboration between students and a teacher-advisor. Through the completion of identified tasks, students utilize skills in researching, collaboration, and information technology to investigate, discuss, develop, share, and defend proposals and solutions. This class builds on already established reading, writing, listening, and speaking skills. For the MUN strand of applied studies, students will prepare for and attend a MUN conference outside of the province and for our local school held conference.

Course Title: **Applied Studies: Publications**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with publications. The work may be individual or collaborative. Selecting and defining the task, or project, results from collaboration between students and a teacher-advisor. Learning objectives are set in conjunction with the definition of the task and an emphasis is placed upon the application of student learning in real world scenarios. Through the completion of identified projects, students utilize skills in researching, collaboration, and information technology to investigate, discuss, develop, share, and defend proposals and solutions. Successful completion of this course will be measured by demonstrated competency of curricular standards and objectives drawn from relevant disciplines of study and are detailed in the scope and sequence of the course. Reporting processes detail student mastery of the included standards and objectives. For the publications strand of applied studies, students might produce a school yearbook, run a school news site, publish documentaries, or other tasks associated with publications.

Course Title: **Applied Studies: Business Management**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with business management. The work may be individual or collaborative. Selecting and defining the task, or project, results from collaboration between students and a teacher-advisor. Learning objectives are set in conjunction with the definition of the task and an emphasis is placed upon the application of student learning in real world scenarios. Through the completion of identified projects, students utilize skills in researching, collaboration, and information technology to investigate, discuss, develop, share, and defend proposals and solutions. Successful completion of this course will be measured by demonstrated competency of curricular standards and objectives drawn from relevant disciplines of study and are detailed in the scope and sequence of the course. Reporting processes detail student mastery of the included standards and objectives. For the business management strand of applied studies, students plan for and operate a school store.

**Course Title: Applied Studies: Government**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with the school's student governance body. The work may be individual or collaborative. Selecting and defining the task, or project, results from collaboration between students and a teacher-advisor. Learning objectives are set in conjunction with the definition of the task and an emphasis is placed upon the application of student learning in real world scenarios. Through the completion of identified projects, students utilize skills in researching, collaboration, and information technology to investigate, discuss, develop, share, and defend proposals and solutions. Successful completion of this course will be measured by demonstrated competency of curricular standards and objectives drawn from relevant disciplines of study and are detailed in the scope and sequence of the course. Reporting processes detail student mastery of the included standards and objectives. For the government strand of applied studies, students plan and lead student government meetings, initiatives, and events. Note: Elected Student Government Officers are required to take this Applied Studies.

**Course Title: Applied Studies: Environment**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with the local environment. The work may be individual or collaborative. Selecting and defining the task, or project, results from collaboration between students and a teacher-advisor. Learning objectives are set in conjunction with the definition of the task and an emphasis is placed upon the application of student learning in real world scenarios. Through the completion of identified projects, students utilize skills in researching, collaboration, and information technology to investigate, discuss, develop, share, and defend proposals and solutions. Successful completion of this course will be measured by demonstrated competency of curricular standards and objectives drawn from relevant disciplines of study and are detailed in the scope and sequence of the course. Reporting processes detail student mastery of the included standards and objectives. For the environment strand of applied studies, students may develop and implement a recycling program, reduce the DAIS carbon footprint and/or consumption, reduce water consumption, or some other project of similar nature.

**Course Title: Applied Studies: Drama**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with drama. The work may be individual or collaborative. Selecting and defining the task, or project, results from collaboration between students and a teacher-advisor. Learning objectives are set in conjunction with the definition of the task and an emphasis is placed upon the application of student learning in real world scenarios. Through the completion of identified projects, students utilize skills in researching, collaboration, and information technology to investigate, discuss, develop, share, and defend proposals and solutions. Reporting processes detail student mastery of the included standards and objectives. For the drama strand of applied studies, students plan for and produce a dramatic production.

**Course Title: Applied Studies: Engineering and Design**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: In this course of study, students plan and complete performance tasks associated with mechanical or structural engineering. The course provides students with the opportunity to learn about robotics, engineering, science, and mathematics (STEM) while building an underwater ROV as part of a science and engineering technology curriculum. Throughout the project, students will learn engineering concepts, problem solving, teamwork, and technical applications.

**Course Title: Applied Studies: Video Production**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: The purpose of this course is to provide a project-based film and video program, which guides students to achieve the standards in film production, video editing, news gathering and journalism training, by providing students with the technical instruction and practical experiences for aspiring video and film makers in the production of film, video, and new media projects for business and entertainment. This course uses the DAIS in-house news shows, DAISlive and Huamei Weekly as a vehicle to showcase student's video editing and journalism work. The competencies in this course are aligned with the USA Curriculum Standards for technology.

**English Language Arts****Course Title: Ancient World Literature and Composition**

Grade: 9

Prerequisite: none

Credit: 1

Course Description: The language arts program is an integrated component of the 9th grade humanities curriculum. The readings will correlate to the Ancient World Studies Course. This literature-based course focuses on reading, writing, comprehension, presentation, and communication skills. The study of literature encourages students to examine the human condition in all its aspects, and to effectively respond to the world around them in thoughtful and articulate ways. This course examines ancient world literature and storytelling from the beginning of humanity through Shakespeare and the rise of the English language. The units of study provide exposure to the depth and breadth of literary genres and writing domains. Writing assessment will follow the Common Core rubrics.

**Course Title: Modern World Literature and Composition**

Grade: 10

Prerequisite: none

Credit: 1

Course Description: The language arts program is an integrated component of the 10th grade humanities curriculum. The readings will correlate to the Modern World Studies Course. This literature-based course focuses on the development of critical thinking, reading, writing, and presentation skills. The study of literature encourages students to examine the human condition in all its aspects, and to effectively respond to the world around them in thoughtful and articulate ways. Students will be expected to analyze literature by deconstructing pieces of writing according to specified criteria. Students will be taught to synthesize this analysis to create formal essays. Writing assessment will follow the Common Core rubrics.

**Course Title: Asian Literature and Composition**

Grade: 11

Prerequisite: none

Credit: 1

Course Description: This literature-based course focuses on reading, writing, comprehension, presentation, and communication skills. All literature, poetry, or nonfiction pieces will focus on the regions studied in the Asian Studies course. Asian literature allows students to experience the voices of non-Western writers and their viewpoints. Students will analyze, discuss, and deconstruct pieces of literature by topic, theme, and style. Students will learn to identify methods authors use to express themes and opinions through the study of writing styles and techniques. Students will learn to write effective and well-reasoned essays, research papers, and personal responses. Writing assessments will follow the Common Core Writing rubrics.

**Course Title: American Literature**

Grade: 12

Prerequisite: none

Credit: 1

Course Description: This course is a comprehensive survey of the drama, poetry, fiction and nonfiction that represent the major periods and traditions in American literary history. Students will work independently and collaboratively to become confident and adept readers, writers, speakers and thinkers fortified with a variety of strategies to navigate text, increase understanding, improve communication, and enhance relevance. In addition, students will develop skills in research and public speaking as they read and compose for a variety of purposes.

**Course Title: Advanced Placement English Language and Composition**

Grade: 11 or 12

Prerequisite: teacher recommendation

Credit: 1

Course Description: The AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts and to become skilled writers who compose for a variety of purposes. Through writing and reading, students strengthen awareness of the interactions among multiple writers' purpose, audience expectations, and subjects, as well as the way conventions and the resources of language contribute to effectiveness in writing - the result being enhanced effectiveness and confidence in professional and personal writing. Students read primary and secondary sources carefully to synthesize materials from these texts in their own compositions and to cite sources using conventions recommended by professional organizations such as the Modern Language Association (MLA). Writing assessment is based on the AP Scoring Guidelines' 1-9 scale.

**Course Title: Advanced Placement English Literature and Composition**

Grade: 11 or 12

Prerequisite: teacher recommendation

Credit: 1

Course Description: The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should 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. Students will learn to write reasoned, well-thought out essays, researched projects, and literary responses. The course is designed to be comparable to a first year university course. Assessment is based upon the AP Scoring Guidelines' 1-9 scale.

**Course Title: Speech**

Grade: 9, 10, 11 or 12

Prerequisite: none

Credit: .5 elective

Course Description: This introductory course is designed to develop the basic knowledge, skills and self-confidence needed for students to communicate effectively in informal and formal speaking situations. Content will emphasize improving the student's ability to select and analyze topics, support assertions with proof, amplify ideas, structure messages, use language in appropriate and imaginative ways, incorporate effective visual aids, and deliver messages with effective vocal and physical behavior.

**Course Title: Film Studies**

Grade: 10, 11, or 12

Prerequisite: none

Credit: .5 elective

Course Description: This introductory course is designed to explore the world's most common form of communication – the film! Students will learn the basic vocabulary and historical knowledge needed to discuss movies. (cut some sentences) We will study and discuss the films of our most important directors (cut phrase) up to the modern period (cut phrase). Students will also make their own short films!

**Course Title: Creative Writing**

Grade: 9, 10, 11 or 12

Prerequisite: none

Credit: .5 elective

Course Description: In this one-semester course, students will create original works in a variety of genres—fiction (short stories), poetry, nonfiction, and drama. Students will read and discuss articles on the craft of writing as well as analyze example texts with the primary goal of experimenting with those styles and techniques in their own writing projects. Students are encouraged to write about topics they find personally engaging. Students will participate in regular writing workshops, sharing pieces with peers in order to give and receive feedback as active and supportive members of a writing community.

**Mathematics****Course Title: Algebra**

Grade: Usually Grade 8

Prerequisite: Elementary- &amp; Middle-School Mathematics (mathematics content prior to Algebra) or Teacher Recommendation

Credit: 1

Course Description: In this course students will interpret the structure of expressions, write expressions in equivalent forms to solve problems, perform arithmetic operations on polynomials, understand the relationship between zeros and factors of polynomials, use polynomial identities to solve problems, rewrite rational expressions, create equations that describe numbers or relationships, understand solving equations as a process of reasoning and explain the reasoning, solve equations and inequalities in one variable, solve systems of equations, represent and solve equations and inequalities graphically, and summarize, represent, interpret data and linear models of data.

Course Title: **Geometry**

Grade: Usually Grade 9

Prerequisite: Algebra or Teacher Recommendation

Credit: 1

Course Description: In this course students will experiment with transformations in the plane, understand congruence in terms of rigid motions, prove geometric theorems, make geometric constructions, understand similarity in terms of similarity transformations, prove theorems involving similarity, define trigonometric ratios and solve problems involving right triangles, apply trigonometry to general triangles, understand and apply theorems about circles, find arc lengths and areas of sectors of circles, translate between the geometric description and the equation of a conic section, use coordinates to prove simple geometric theorems algebraically, explain volume formulas and use them to solve problems, visualize relationships between two-dimensional and three-dimensional objects, and apply geometric concepts in modeling situations.

Course Title: **Advanced Algebra**

Grade: Usually Grade 10

Prerequisite: Geometry or Teacher Recommendation

Credit: 1

Course Description: In this course we will build on learnings from Algebra and Geometry to include complex numbers, polynomials beyond quadratic, rational and radical equations, functions {radical, rational, exponential, logarithmic} and transformations on them, extend the domain of trigonometric functions using the unit circle and deploy trigonometric functions in modeling periodic phenomena; extend our work with data, probability, and statistics we started in Algebra to include making inferences and justifying conclusions from sample surveys, experiments and observational studies.

Name of Course: **Pre-Calculus**

Grade: Usually Grade 11 or 12

Prerequisite: Advanced Algebra or Teacher Recommendation

Credit: 1

Course Description: Pre-Calculus includes the study of equations, inequalities, polynomials, rational, trigonometric, exponential logarithmic functions, and rational functions, and analysis of graphs of functions. Emphasis is placed on understanding functions and behaviors of functions, problem solving techniques and the course aims to build upon and extend skills gained in previous math courses. Matrices and Vectors will be treated as time allows and would focus on understanding the fundamentals and their applications.

Course Title: **Advanced Topics and Introduction to Calculus (ATIC)**

Grade: Usually Grade 11 or 12

Prerequisite: Advanced Algebra or Pre-calculus or Teacher Recommendation

Credit: 1

Course Description: Drawing on work completed in the previous courses, polynomial, rational, exponential, and logarithmic families of functions, vectors and matrices will be studied in depth. A combinatorics section covers some basic ideas using combination, permutation, and probability. Statistics will be revisited as time allows and would focus on understanding distributions. As an introduction to calculus, students will be introduced to limits, continuity, derivatives, some applications of derivatives, antidifferentiation, Fundamental Theorem of Calculus (FTC), integration, and some applications of integration. The course will utilize graphical, analytical, and numeric approaches to resolving problems. The foci of ATIC are to serve as a capstone for pre-calculus mathematics and as a robust introduction to Calculus.

**Course Title: Advanced Placement Calculus AB**

Grade: Usually Grade 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: The curriculum for AP Calculus AB is equivalent to that of a first-semester college calculus course.

AP Calculus AB is structured around three big ideas: limits, derivatives, and integrals and the Fundamental Theorem of Calculus. The concept of limits is foundational; the understanding of this fundamental tool leads to the development of more advanced tools and concepts that prepare students to grasp the Fundamental Theorem of Calculus, a central idea of AP Calculus.

**Course Title: Advanced Placement Calculus BC**

Grade: Usually Grade 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: AP Calculus BC explores the ideas in AP Calculus AB in additional contexts and also adds parametric, polar, and vector function, and the big idea of series. In both courses (AB and BC), the concept of limits is foundational; the understanding of this fundamental tool leads to the development of more advanced tools and concepts that prepare students to grasp the Fundamental Theorem of Calculus, a central idea of AP Calculus.

**Course Title: Advanced Placement Statistics**

Grade: Usually Grade 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

**Music****Course Title: Chorus**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: 1

Course Description: Students will sing in two, three, and four part harmony, drawing from a varied repertoire of music. Music skills, such as rhythm and standard western notation reading, are emphasized. Healthy and correct vocal technique will be learned and practiced. Various genres and styles of music will be explored. This is a performance class and will include after school concerts.

**Course Title: Advanced Chorus**

Grade: 10, 11, or 12

Prerequisite: Teacher permission

Credit: 1

Course Description: Students of proven vocal expertise will sing in two, three, and four part harmony, drawing from a varied repertoire of music. Music skills, such as rhythm and standard western notation reading, are emphasized.. This is a performance class and will include after school concerts. The advanced students also perform at venues outside the school and at special events.

**Course Title: Chamber Ensemble**

Grade: 9, 10, 11, or 12

Prerequisite: Students should have at least 1 year of experience on his or her instrument and must be able to read standard music notation.

Credit: 1

Course Description: Students will play a variety of styles, such as classical, world, and jazz. Performance and composition skills will be emphasized and augmented in relationship to one's own instrument in the context of the ensemble. This is a performance class and will include after school concerts. Students must be responsible for bringing their own instrument to and from school.

Instrumentation: Woodwinds, brass, strings, and percussion.

**Course Title: Guitar**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: .5

Course Description: This is a beginning level instrument course for the student with little or no previous experience on the guitar. Topics covered will include playing chords, single notes, accompaniment techniques, and guitar ensembles in a variety of styles, but focusing primarily on classical guitar technique. This will also focus music fundamentals such as notation and theory. An instrument will be provided.

**Course Title: Foundations of Music**

Grade: 9, 10, 11, or 12

Prerequisite: Some prior study of music and the ability to read standard music notation

Credit: 1

Course Description: This is an advanced survey of music for the student with some previous music experience. Topics covered in this class include music theory, music history, and music technology. The student that successfully completes this course will have the necessary background knowledge to take the Advanced Placement Music Theory course.

**Course Title: AP Music Theory**

Grade: 9, 10, 11, or 12

Prerequisite: Extensive music training and teacher permission

Credit: 1

Course Description: This class is equivalent to a first-year college course in music theory. The class primarily examines the harmony and form of Western European art music from Baroque, Classical and Romantic eras. Special topics include also include World music and Modern music. Aural skills of ear training, sight-singing and dictation are also included.

***Natural Sciences***

**Course Title: Integrated Science I: Biology and Chemistry**

Grade: 9

Prerequisite: none

Credit: 1

Course Description: Integrated Science I is the first year of an inquiry approach to high school science. This is course designed to give students a strong background in biology and chemistry to better prepare them for higher level studies. The course covers scientific knowledge and inquiry, atomic structure, the periodic table of elements, chemical reactions, nuclear reactions, structure and function of cells and cell organelles, cellular respiration, and photosynthesis.

**Course Title: Integrated Science II: Biology and Chemistry**

Grade: 10

Prerequisite: Integrated Science I

Credit: 1

Course Description: Integrated Science II is the second year of an inquiry approach to high school science. This program introduces students to the core concepts in biology and chemistry to better prepare them for higher level studies. Topics will include designing scientific investigations, chemical reactions, chemical equilibrium, natural selection, genetics, population growth and Evolution.

**Course Title: Environmental Science**

Grade: 11 or 12

Prerequisite: Integrated Science II or teacher recommendation

Credit: 1

Course Description: The Environmental Science course focuses on the diversity of life as a result of genetic variation, how species change over time and the interaction between species and their environment. The purpose is to present the environment through the use of hands on activities, laboratories, projects, and discussions. The course will encourage the development and use of higher order thinking strategies including logic, analysis, synthesis, evaluation and problem solving skills.

**Course Title: Physics**

Grade: 10, 11, or 12

Prerequisite: Integrated Science II or teacher recommendation

Credit: 1

Course Description: The Physics course is a math-oriented, problem solving, laboratory based approach to physics. It is a course designed for the above average student who intends to further pursue science courses at the university level. This course will teach each major area of physics in some detail including mechanics, properties of matter, waves and light, electricity, magnetism, and thermodynamics. The course will also serve as an introduction to modern physics topics such as nuclear and quantum physics.

**Course Title: Organic/Biochemistry**

Grade: 10, 11, or 12

Prerequisite: completion of or concurrent enrolment in Integrated Science II and teacher recommendation

Credit: 1

Course Description: The Organic/biochemistry course is a problem solving, laboratory-based approach to chemistry with a strong application of mathematics skills. It is a course designed for the student who intends to take either or both AP chemistry and/or AP biology but would like some added background in basic organic and biochemistry or is interested in the biological, chemical, or medical fields and wishes to have a stronger background for college. This course will teach basic organic and biochemistry, including general characteristics of organic molecules, introduction to hydrocarbons, organic nomenclature, functional groups, and an introduction to biochemistry. The biochemistry portion of the course will emphasize the role of biological molecules that contribute to an organism's growth, reproduction, metabolism, physiology, evolution, and heredity

**Course Title: Introduction to Psychology**

Grade: 10, 11 or 12

Prerequisite: none

Credit: 1

Course Description: This course introduces the foundational theories for how the physical body as well as social interaction relates to learning, thought, and emotion. During the survey course, students will utilize the latest research and leading theories to develop a greater awareness for the various perspectives on human behavior. Content areas of study will include cognition, scientific inquiry, biopsychology, development, psychological disorders, and social psychology. As part of the inquiry and applications units students will engage in scientific research projects.

**Course Title: Advanced Placement Chemistry**

Grade: 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: This course is designed to be the equivalent of a first year college general chemistry course. As such, the course is suitable only for high school students who exhibit high levels of commitment, motivation and academic maturity. This course presents a rigorous treatment of the following concepts: the nature of matter, gas laws, thermodynamics, stoichiometry, bonding, chemical kinetics, chemical equilibria, and more. Students are expected to be motivated and spend extra time studying outside of class. The problem-solving strategies obtained during this course will prepare college-bound students for careers in the sciences, medicine, engineering, and other technical areas.

**Course Title: Advanced Placement Biology**

Grade: 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: AP Biology is designed to be the equivalent of a university introductory biology course. The course provides students with opportunities to master the concepts and analytical skills necessary to work in the rapidly evolving science of biology. Therefore, there is an emphasis in developing understanding and demonstration of concepts rather than the memorization of terms and technical jargon. Essential to this conceptual understanding is an acceptance of science as a process rather than as an accumulation of facts. Experience with inquiry-based investigations and making connections among the major unifying themes of biology is essential to a thorough study of the discipline. The three major topics of study for the advanced biology course are: Molecules and Cells, Heredity and Evolution, and Organisms and Populations.

**Course Title: Advanced Placement Physics**

Grade: 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: Physics C: Mechanics is an Advanced Placement science course that focus instruction in each of the following six content areas: kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. In Physics C: Mechanics, methods of calculus are used along with a strong lab component wherever appropriate in formulating physical principles and in applying them to physical problems. The course is designed to be equivalent to an introductory college course in mechanics for physics or engineering majors. The College Board strongly recommends that this course follow a more general introductory physics class.

## ***Physical Education***

Course Title: **Team Sports**

Grade: 9, 10, 11, or 12

Credit: .5

Course Description: The goal of the Team Sports course is to inspire an enthusiastic attitude toward lifetime sports, to increase the ability to work together cooperatively to achieve a common goal, to foster social growth, sportsmanship, and expand and refine students' knowledge of games rules and specific skills. Skill development areas include basketball, field hockey, soccer, speedball, Aussie football, football, ultimate Frisbee, softball, volleyball, and more. Student's affinity toward specific areas will shape the curriculum.

Course Title: **Lifelong Fitness**

Grade: 10, 11, or 12

Credit: .5

Course Description: The goal of the course is to inspire an enthusiastic attitude toward lifetime sports, to foster social growth, sportsmanship, and individual confidence and expand and refine students' knowledge of games rules and specific skills. Skill development areas include badminton, gymnastics, track and field, archery, swimming, table tennis, and more. Student's affinity toward specific areas will shape the curriculum.

## ***Senior Studies***

Course Title: **Senior Seminar**

Grade: 12 required

Prerequisite: Senior Status

Credit: .5

Course Description: Within the framework provided by the instructor for the course, students develop a research question and intensively study the topic in an attempt to answer the question. Students learn skills of researching, documentation, and logical development of ideas. The outcome of the research will be published as a research paper. For the final assessment, students defend their process of research and idea development to a panel of adults. Students also have the opportunity to learn more about college application preparation and to hone college success skills.

## ***Junior Seminar***

Course Title: **Junior Seminar**

Grade: 11 required

Prerequisite: Junior Status

Credit: .5

Course Description: This course is designed to assist students in their research and writing skills in preparation for their senior seminar research paper. In addition, students will be planning steps needed to meet their future college goals. Students will research two possible career options, review perspective colleges, enhance their student profile and discover what their interest or passion is for their future.

## **Social Sciences**

Course Title: **Ancient World Studies**

Grade: 9

Prerequisite: none

Credit: 1

Course Description: The 9<sup>th</sup> grade social studies course is part of an integrated humanities curriculum that explores the events that defined world cultures during ancient times until the 1300's. This class will explore the social, political, economic, religious and cultural issues of civilizations in the ancient world. During the course, students will develop their critical reading and thinking skills to examine history and gain a better understanding of the world around them.

Course Title: **Modern World Studies**

Grade: 10

Prerequisite: none

Credit: 1

Course Description: The 10<sup>th</sup> grade social studies class is part of an integrated humanities curriculum which explores the important issues of modern times, from the 1400's until the present. With a focus on developing analytical thinking skills, students examine world history at a global level in order to better understand the issues facing the world today. The students will use oral presentations, essays, primary sources, and debates to express their knowledge and researched opinions.

Course Title: **Asian Studies**

Grade: 11 or 12

Prerequisite: none

Credit: 1

Course Description: This course is an investigation of histories and issues that define Asia today. The intertwined pasts of all Asian countries are explored in order to gain an understanding of the turmoil of the 20<sup>th</sup> century. The course will focus heavily on the histories of China, Japan, Korea, and Russia, and the influence those cultures had on the history and development of the city of Dalian.

Course Title: **AP World History**

Grade: 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: AP World History is designed to be equivalent to a first year university level history course. The content focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, state-building, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. AP World History divides history into six time periods and encompasses key concepts from each time period.

**Course Title: Introduction to Economics and Finance**

Grade: 11 &amp; 12

Prerequisite: none

Credit: .5

Course Description: Welcome to our course in Principals of Economics. We will approach this course as a group but we will also apply an individualized perspective which will “help students understand how people organize themselves into groups to meet their collective needs.” We will survey past and present events to better prepare ourselves for the future. We will organize these events into historical sequences and interpret data from timelines. This course of study will be broken down into the following units of study:

Unit 1: Choices, Values, Goals and Needs

Unit 2: Income and Taxation

Unit 3: Personal Banking

Unit 4: Credit and Debt

Unit 5: Investment and Wealth Building

Unit 6: Fundamentals of Economics

**Course Title: AP Macro Economics**

Grade: 11 &amp; 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: The purpose of the AP Macroeconomic course is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places particular emphasis on the study of national income and price-level determination. It also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Economics is a course designed to introduce and teach students the science of how goods and services are distributed, and how limited resources can best be utilized to fulfill unlimited wants. The intent of this course will be to develop the ability of students to organize information around historical, political and especially economic concepts in order to better understand and appreciate the society that is being formed around them in an ever expanding and changing world. The critical thinking skills which students will develop during this course will help them in the future to make educated decisions about the world around them. Students' overall understanding of how economics works will contribute strongly to their ability to gain a deeper insight into the workings of the world around them and the every society in history.

**Course Title: AP Micro Economics**

Grade: 11 &amp; 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: The purpose of the AP course in microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy.

**Course Title: Current Issues**

Grade: 10, 11 or 12

Prerequisite: none

Credit: .5

Course Description: The purpose of the Current Issues course is to make students aware of the critical issues that are happening in their world. This course not only makes students come face-to-face with problems, but also drives them to discover solutions. It also introduces the students to a global community that is rich with similarities and differences. Students will gain a fuller knowledge of the world in which they live.

**Course Title: Introduction to Psychology**

Grade: 10, 11 or 12

Prerequisite: none

Credit: 1

Course Description: This course introduces the foundational theories for how the physical body as well as social interaction relates to learning, thought, and emotion. During the survey course, students will utilize the latest research and leading theories to develop a greater awareness for the various perspectives on human behavior. Content areas of study will include cognition, scientific inquiry, biopsychology, development, psychological disorders, and social psychology. As part of the inquiry and applications units students will engage in scientific research projects.

**Name of Course: AP Psychology**

Grade: 11,12

Credit: 1

Course Description: This Advanced Placement course introduces the university level foundational theories for psychology as a scientific discipline. Students will learn how biochemistry of the nervous system as well as social interaction relates to learning, thought, emotion, and psychological disorders. Students will utilize the latest research and leading theories to develop a greater awareness for the various perspectives on human behavior. Content areas of study will include scientific inquiry and research methodology, learning, cognition, neuroscience, development, psychological disorders, psychological diagnosis and treatment, psychopharmacology, and social psychology. As part of the inquiry and methodology units students will engage in scientific research projects and report writing in APA format.

**Course Title: United States History**

Grade: 11 or 12

Prerequisite: none

Credit: 1

Course Description: United States History focuses on U.S. history from approximately 1491 to the present and applies historical thinking skills as students learn about the past. Major political, economic, social and global events will be emphasized within a chronological context. Throughout the course students will be encouraged to analyze issues, think critically, explain perspectives and participate collaboratively in the learning process.

**Course Title: Advanced Placement United States History**

Grade: 10, 11 or 12

Prerequisite: Teacher Recommendation

Credit: 1

Course Description: AP United States History focuses on developing students' abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.

## **Visual Arts**

Course Title: **Studio Art I**

Grade: 9,10,11, or 12

Prerequisite: None

Credit: .5

Course Description: Studio Art I is a studio course that provides experiences in thinking about art, talking about art, writing about art and producing art. Through the framework of the elements and principles of art students will explore visual language in its broadest sense.

Students will engage with concepts and approaches to art making drawn from the world history of visual arts, and contemporary art practices Students will create art through a range of techniques which may include drawing, painting, print-making, and sculpting. All High School art courses require student maintenance of a sketchbook.

Course Title: **Studio Art II**

Grade: 9, 10, 11, or 12

Prerequisite: Passing Studio Art I with a C grade or above or Teacher approval through portfolio review.

Credit: .5

Course Description: Studio Art II is a course that builds on the experience gained in Studio I. Whilst there will be new techniques and approaches introduced in units there will also be a greater expectation of students interpreting tasks and directing their own creative journey.

Course Title: **Studio Art III**

Grade: 10, 11, or 12

Prerequisite: Studio Art II at C or above or teacher approval through portfolio review

Credit: .5

Course Description: Studio Art III is an advanced level course in which students focus on a wide range of media and art techniques using both assigned and self-selected subject matter. They participate in group critiques and present their work in a portfolio. Students prepare and present their artwork for art shows and competitions. They participate in group discussions in which they analyze significant works of art and periods of art history.

Course Title: **Advanced Studio Art**

Grade: 10, 11 or 12

Prerequisite: Studio Art III, and teacher approval through portfolio review

Credit: .5

Course Description: Advanced Studio Art is an advanced level course that continues the work from Studio Art III. Students focus on self-selected subject matter and the teacher's role is that of tutor, advisor, and technician. They participate in group critiques and present their work in a portfolio.

Course Title: **Introduction to Design**

Grade: 9, 10, 11, or 12

Prerequisite: Studio Art I or teacher recommendation

Credit: .5

Course Description: The Introduction to Design course introduces students to the elements and concepts of design. Familiarity with the terminology, concepts and basic materials utilized in the studio by designers will be explored. Units will focus on producing solutions to real design problems with practical and applied outcomes.

## **World Languages**

Course Title: **Mandarin Language and Chinese Culture 1**

Grade: 9, 10, 11, or 12

Prerequisite: none

Credit: 1

Course Description: Level 1 courses utilize a competency approach to language learning. Speaking and listening skills are stressed as well as an appropriate level of grammatical and simple character writing accuracy. Topics related to daily life and school life will be introduced. The cultural component emphasizes Chinese traditional arts and festivals. Students will investigate the social aspects of both ancient and modern China. Meanwhile, multi-cultural awareness will be brought to the class by comparing and contrasting students own culture to the host country culture. The cultural and historical curriculum is enriched through study trips into the community.

Course Title: **Mandarin Language and Chinese Culture 2**

Grade: 9, 10, 11, or 12

Prerequisite: Level 1 or teacher recommendation

Credit: 1

Course Description: Level 2 courses focus on speaking and listening as well as building vocabulary for higher level reading and writing. Students will study basic grammar and syntax functions, as well as frequently-used characters. Topics related to daily life and school life will be expanded upon. The cultural component emphasizes Chinese traditional arts and festivals. Students will investigate the social aspects of both ancient and modern China. Meanwhile, multicultural awareness will be brought to the class by comparing and contrasting students own culture to the host country culture. The cultural and historical curriculum is enriched through study trips into the community.

Course Title: **Mandarin Language and Chinese Culture 3**

Grade: 9, 10, 11, or 12

Prerequisite: Level 2 or teacher recommendation

Credit: 1

Course Description: Level 3 courses focus on reading, writing, speaking, and listening. Students will study various grammar and syntax functions of the Chinese language. They will also write essays on various topics such as school events, Chinese culture, and modern literature. The cultural component emphasizes Chinese traditional art and traditional festivals as well as modern life in China. Students will utilize their Chinese language skills to report on the social aspects of both ancient and modern China. The cultural and historical curriculum is enriched through study trips into the community.

Course Title: **Pre-AP Chinese**

Grades: 9

Prerequisite:

Credit 1

Course Description: This course is designed for ninth graders who have finished Middle School Level 4 Chinese Course. It will prepare them for success with the AP Chinese course and exam. Its primary goal is to enable students to master conventions of communication through the exploration of topics reflecting multiple aspects of Chinese society and culture, the use of various authentic multimedia and literary materials in different linguistic registers, advanced-level Chinese language structures, and expressive styles. Students further develop their proficiencies across the three communicative modes and the five C areas. The vocabulary and phrasing chosen for instruction is planned to help students' entry into the local culture and everyday life. In addition, the course emphasizes an understanding and appreciation of the language and Chinese culture. Throughout this course, communicative skills, reading skills and writing skills will be developed.

**Course Title: Advanced Placement Chinese Language and Culture**

Grade: 10, 11, or 12

Prerequisite: High School Level 3 or Pre-AP Chinese or teacher recommendation

Credit: 1

Course Description: AP Chinese focuses on Chinese modern and ancient literature, culture, and world issues. Students will study ancient poetry, modern literature, as well as current events from various print media. The cultural component emphasizes Chinese traditional art and traditional festivals as well as modern life in China. Students will utilize their Chinese language skills to report on the social aspects of both ancient and modern China. The cultural and historical curriculum is enriched through study trips into the community.

**Course Title: Mandarin Literature**

Grade: 9, 10, 11, or 12

Prerequisite: AP Chinese or teacher recommendation

Credit: 1

Course Description: Mandarin Literature extends student learning beyond language acquisition and into the study of literature produced in that language. Both classical and modern literature is utilized within the class. This course focuses on reading, writing, comprehension, presentation, and communication skills, based on the Language Arts Common Core standards. Students continue to extend their knowledge of written Chinese characters, by reading fiction and informational texts. Students also participate in numerous oral presentations, improving their rhetorical skills.

**Course Title: Advanced Mandarin Literature**

Grade: 9, 10, 11, or 12

Prerequisite: Mandarin Literature or teacher recommendation

Credit: 1

Course Description: Advanced Mandarin Literature extends student learning beyond language acquisition and into the study literature produced in that language. Both classical and modern literature is utilized within the class. This course focuses on reading, writing, comprehension, presentation, and communication skills, based on the Language Arts Common Core standards. Students continue to extend their knowledge of written Chinese characters, by reading fiction and informational texts. They learn to write in the style of famous Chinese writers. Students also participate in numerous oral presentations, improving their rhetorical skills. Students who complete the Advanced Mandarin Literature course of studies move into the Chinese for Literacy Development strand.

*Students who complete Advanced Mandarin Literature may join the Mandarin literacy stream of courses:*

**Course Title: Chinese for Literacy Development I, II, III, IV**

Grade: 9 – 12

Credit: 1

Course Description: Students will continue their study of the Chinese language, extending their reading and writing of Chinese characters. The course will have traditional literature texts as well as historical and modern informational readings. Students will be expected to give write extensively as well as give oral presentations. Emphasis will be placed on the use of higher level thinking skills. The Common Core Language Arts standards guide study in both Chinese and English courses.