2016-2017

Course Catalog
State of Arizona Graduation Requirements

English 4 credits
Math 4 credits
Science 3 credits
Social Studies 3 credits
CTE/Vocational/Fine Art 1 credit
Electives 7 credits
TOTAL 22 credits

Typical Course Sequence of Students

IGCSE STEM Cohort

IGCSE 0654 Coordinated Science Biology (H) 1 credit
IGCSE 0654 Coordinated Science Chemistry (H) 1 credit
IGCSE 0654 Coordinated Science Physics (H) 1 credit
Math Course (Algebra, Geometry, Algebra II, Pre-Calc) 1-2 credits
Foreign Language (1st year) 1 credit
Electives 2 credits
US Government 0.5 credit
Economics 0.5 credit

IGCSE HUM Cohort

IGCSE 0470 History - World (H) 2 credits
IGCSE 0486 English - Literature 2 credits
IGCSE 0500 English First Language (H) 2 credits
American History 1 credit
Math Course (Algebra, Geometry, Algebra II, Pre-Calc) 1-2 credits
Foreign Language (2nd Year) 1 credit
Electives 2 credits

A-Level Year One

A-Level 9239 Global Perspectives 1 credit
A-Level 9093 English Language 1 credit
A-Level (Math & Science Concentration Course) 1 credit
A-Level (Arts & Humanities Concentration Course) 1 credit
Electives 1 credit
ASU Audit 0.5 credit
Mentorship Experience
A-Level Year Two

A-Level (Math & Science Concentration Course) 1 credit
A-Level (Arts & Humanities Concentration Course) 1 credit
Yearbook 1 credit
Electives 1 credit
ASU Audit 0.5 credit
Mentorship Experience

*Once a student completes Pre-Calculus at the academy, a student may enroll for additional math courses at Arizona State University for college credit*

**Cambridge IGCSE Courses**

Cambridge IGCSE is the world’s most popular international qualification for 14 to 16 year olds. It is recognised by leading universities and employers worldwide, and is an international passport to progression and success. Developed over 25 years ago, it is tried, tested and trusted by schools worldwide.

The Cambridge IGCSE curriculum offers a variety of routes for learners with a wide range of abilities, including those whose first language is not English.

We help schools build a curriculum around their specific needs. Starting from a foundation of core subjects, it is easy to add breadth and cross-curricular perspectives. Encouraging learners to engage with a variety of subjects, and make connections between them, is fundamental to our approach.

For schools, Cambridge IGCSE offers a flexible and stimulating curriculum, supported with excellent resources and training.

For learners, Cambridge IGCSE helps improve performance by developing skills in creative thinking, enquiry and problem solving. It is the perfect springboard to advanced study.

There are over 70 subjects available at Cambridge IGCSE, including 30 languages, and schools can offer them in any combination. Cambridge IGCSE develops learner knowledge, understanding and skills in:

- Subject content
- Applying knowledge and understanding to new as well as unfamiliar situations
- Intellectual enquiry
- Flexibility and responsiveness to change
- Working and communicating in English
- Influencing outcomes
- Cultural awareness.
Schools worldwide have been involved in the development of Cambridge IGCSE. The syllabuses are international in outlook, but retain a local relevance. They have been created specifically for an international student body and avoid cultural bias.

Cambridge IGCSE assessment takes place at the end of the course and can include written, oral, coursework and practical assessment. This broadens opportunities for students to demonstrate their learning, particularly when their first language is not English. In many subjects there is a choice between core and extended curricula, making Cambridge IGCSE suitable for a wide range of abilities.

Grades are benchmarked using eight internationally recognised grades, A* to G, which have clear guidelines to explain the standard of achievement for each grade.

Cambridge IGCSE examination sessions occur twice a year, in June and November. Results are issued in August and January.

**Cambridge International A-Level Courses**

Thousands of learners worldwide gain places at leading universities every year with Cambridge International AS & A Levels. The syllabuses develop a deep understanding of subjects and independent thinking skills.

We help schools to build a Cambridge Advanced curriculum that brings success for learners. The syllabuses prepare learners for university study, which is why universities worldwide value and recognise Cambridge International AS & A Level qualifications.

Cambridge International AS & A Level develops learners’ knowledge, understanding and skills in:

- In-depth subject content
- Independent thinking
- Applying knowledge and understanding to new as well as familiar situations
- Handling and evaluating different types of information source
- Thinking logically and presenting ordered and coherent arguments
- Making judgements, recommendations and decisions
- Presenting reasoned explanations, understanding implications and communicating them logically and clearly
- Working and communicating in English.

Cambridge International A Level is typically a two-year course, and Cambridge International AS Level is typically one year. Some subjects can be started as a Cambridge International AS Level and extended to a Cambridge International A Level.
Your learners can choose from a range of assessment options to gain Cambridge International AS & A Level qualifications:

- Take the Cambridge International AS Level only. The syllabus content is half a Cambridge International A Level.
- Take a ‘staged’ assessment route – take the Cambridge International AS Level in one examination series and complete the final Cambridge International A Level at a subsequent series.*
- Take all papers of the Cambridge International A Level course in the same examination session, usually at the end of the course.

We hold Cambridge International AS & A Level examination series twice a year, in June and November. Results are issued in August and January.

Each subject that a learner takes receives a separate grade.

Grades are benchmarked using internationally recognised grades, which have clear guidelines to explain the standards of achievement.

The Cambridge International A Level is reported on a grade scale from A* (highest) to E (minimum required performance). There is no A* grade for Cambridge International AS Levels, which run from grade A to E.

Many schools use Cambridge International AS Level to give learners valuable feedback on their performance, identifying strengths and weaknesses before they complete their full Cambridge International A Level.

In countries such as the United States and Canada, good grades in carefully chosen Cambridge International A Level subjects can result in up to one year of university course credit.

Over 500 US universities accept Cambridge International AS and A levels, including all Ivy League universities.

Research has been carried out to explore whether Cambridge International AS and A Levels predict readiness for and continued academic success at US universities. Findings from a number of research studies suggest that the Cambridge programme compares favourably with other, more established, acceleration programmes in the US including Advanced Placement (AP) and the International Baccalaureate (IB).

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The depth of knowledge displayed by the best A Level students makes them prime targets for America’s Ivy League universities.

Yale University, USA

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Cambridge AICE Diploma

The Cambridge Advanced International Certificate of Education (AICE) Diploma is an international curriculum and examination system that emphasises the value of broad and balanced study. Alongside in-depth understanding of a variety of subjects, students also need to master a broader range of skills critical for success in university study and employment.

The Cambridge AICE Diploma was first awarded in 1997 and has since become popular with a range of schools in different parts of the world. It encompasses the 'gold standard' Cambridge International AS and A Level qualifications, and offers students the opportunity to tailor their studies to their individual interests, abilities and future plans within an international curriculum framework.

The Cambridge AICE Diploma is made up of individual Cambridge International AS and A Levels, which have widespread international standing as educational qualifications.

By demanding knowledge from three different subject groups, plus the core compulsory subject, Cambridge International AS Level Global Perspectives & Research, the Cambridge AICE Diploma provides a broad curriculum with a balance of maths and science, languages, arts and humanities, and skills-based subjects. It maintains flexibility and choice by allowing students to choose subjects at different levels.

There are over 50 Cambridge International AS and A Level subjects to choose from across four subject groups:

Group 1: Mathematics and Sciences
Group 2: Languages
Group 3: Arts and Humanities
Group 4: Interdisciplinary and skills-based subjects (optional)

Learners must achieve at least one credit from each of Groups 1, 2 and 3. A maximum of two credits can count from Group 4, which is optional.

Cambridge International AS and A Levels are considered college-level courses of study. In countries such as the United States and Canada, good grades in carefully-chosen Cambridge International A Level subjects can result in up to one year of university course credit.


Learners who meet the requirements of the group award will receive a Cambridge AICE Diploma at one of three levels: Pass, Merit or Distinction. The level awarded is based on the overall Cambridge AICE Diploma score.
Cambridge AICE Diploma with Distinction: awarded to students with a score of 360 points or above. The maximum Diploma score is 420 points.

Cambridge AICE Diploma with Merit: awarded to students with between 250 and 359 points.

Cambridge AICE Diploma at Pass level: awarded to students with between 140 and 249 points.

Learners who do not meet the requirements of the group award will receive certificates for their individual subjects.
ENGLISH

IGCSE 0486 Honors English Literature 2.0 credits

Humanities Cohort

The syllabus enables learners to read, interpret and evaluate texts through the study of literature in English. Learners develop an understanding of literal meaning, relevant contexts and of the deeper themes or attitudes that may be expressed. Through their studies, they learn to recognise and appreciate the ways in which writers use English to achieve a range of effects, and will be able to present an informed, personal response to the material they have studied.

The syllabus also encourages the exploration of wider and universal issues, promoting learners' better understanding of themselves and of the world around them.

IGCSE 0500 Honors English Language 2.0 credits

Humanities Cohort

Cambridge IGCSE First Language English is designed for learners whose first language is English. Cambridge IGCSE First Language English learners develop the ability to communicate clearly, accurately and effectively in both speech and writing. They learn how to employ a wide-ranging vocabulary, use correct grammar, spelling and punctuation, and develop a personal style and an awareness of the audience being addressed.

Learners are also encouraged to read widely, both for their own enjoyment and to further their awareness of the ways in which English can be used. Cambridge IGCSE First Language English also develops more general analysis and communication skills such as synthesis, inference, and the ability to order facts and present opinions effectively.

A-Level 9093 English Language 1.0 credit

A-Levels

Cambridge International AS and A Level English Language gives learners the opportunity to study English language and its use in contemporary communication. It aims to encourage a critical response to texts in a range of forms, styles and contexts, and to promote skills of communication, reading, research and analysis.

Through their study, learners will develop an ability to read and analyse material, gaining further knowledge and understanding of English language features and issues, and writing clearly, accurately, creatively and effectively for different purposes and audiences.
A-Level 9695 English Literature 1.0 - 2.0 credits

A-Levels

Learners following the Cambridge International AS and A Level English syllabus will study a range of texts in the three main forms: prose, poetry and drama. Set texts are offered from a wide range of different periods and cultures.

Learners will develop skills of reading and analysis of texts, and are encouraged to undertake wider reading to aid understanding of the texts studied. They will learn skills of effective and appropriate communication including the ability to discuss the critical context of texts.

Composition Seminar 1.0 credit

A-Levels

The course is a hybrid course designed to further prepare students for university level reading, analysis, and writing. Learners will participate in an online edX course and meet in person for teacher support. Learners will participate in discussion boards with a global community of learners on a weekly basis. Learners will write varied forms of text including summary papers, college admission essays, advertisement analyses, profiles, synthesis papers, and research papers.

Literature Seminar 1.0 credit

A-Levels

Learners study a variety of texts in English. The course focuses on several genres of literature including science fiction, short stories, and literature by diverse authors. Learners will read “Ready Player One” by Ernest Cline, “The Hitchhiker’s Guide to the Galaxy” by Douglas Adams, short stories by Isaac Asimov, Ray Bradbury, and Kurt Vonnegut, and a variety of fiction and non-fiction texts that provide context for the study of literature. Learners will be responsible for creating a blog and updating it biweekly with original posts inspired by the literature.

Yearbook 1.0 credit

A-Levels

Learners will produce the 6th publication of the school yearbook during this blended, production-based course. Learners will use writing/interview skills, photography, and design skills to produce the publication with the aid of various design and online software. Additional time outside of the class period will be required to complete the yearbook by the deadline.
Introduction to Computer Programming 0.5 credit
STEM Cohort

This course is designed to help students learn the basics of computer programming; that is, writing programs to create visual output. They will learn how to plan, create, and debug a sequence. Topics include using lines and points, input/output, loops, functions, conditional statements, JavaScript, 1-dimensional arrays, nested loops, recursion, building a website using html-css, and basics of jQuery. The purpose of this course is to stimulate an interest in and enthusiasm for computer programming.

Theatre Production Practicum 0.5 credit
STEM Cohort, Humanities Cohort

The primary goal of the course is to refine and expand on a student's existing skill base and passion in the varied disciplines of performance and technical production. Additionally the course will afford learners an invaluable opportunity to demonstrate practical experience for future academic and career endeavors. This constructive and collaborative study of the theatrical production process may include the following areas: managing an alternative Performance Outreach Program project, devising an ongoing podcast or blog, working on the Frankenstein bicentennial project, touring in a youth theatre outreach production, composing an original musical, stage management, directing, scenery and/or prop construction, light design, costuming, etc…

Theatrical Analysis: Dinner and a Show 0.5 credit
STEM Cohort, Humanities Cohort

The course objective is to stimulate intellectual dialogue and provide a culmination of acquired and developed theatrical knowledge. While students effectively articulate ideas about live performance and put into practice their previously learned aesthetic and creative skill base, they will hone their facility to verbally communicate and write analytically with regard to theatre and performance. The coursework requirements include jointly attending four to eight suggested productions, partaking in lively and fun post-show discussions, and writing three two-page essays.

IGCSE 0411 Drama 1.0 credit
STEM Cohort, Humanities Cohort

Through practical and theoretical study, learners develop an understanding and enjoyment of drama, developing group and individual skills and studying ways to communicate ideas and feelings to an audience. They learn how to discover the performance possibilities of a text and other stimuli, and devise dramatic material of their own. Learners also develop their performance skills, the demonstration of which will form part of the final assessment.
A-Level 9609 Business 1.0 - 2.0 credits

A-Levels

The Business syllabus enables learners to understand and appreciate the nature and scope of business, and the role it plays in society. The syllabus covers economic, environmental, ethical, governmental, legal, social and technological issues, and encourages a critical understanding of organisations, the markets they serve and the process of adding value. Learners examine the management of organisations and, in particular, the process of decision-making in a dynamic external environment.

FOREIGN LANGUAGE

Spanish I 1.0 credit

STEM Cohort, Humanities Cohort

This course is designed for students who have not studied a language for three or more years previously to high school. This course develops entry-level skills in speaking, listening, reading and writing. They also foster an early understanding of the culture. Learners will be able to understand and to ask simple questions on structured, familiar topics. They can only satisfy a small number of immediate needs. Discourse is usually limited to the present tense, but may occasionally include introduction to the past tense. Oral proficiency is stressed.

Spanish II 1.0 credit

STEM Cohort, Humanities Cohort

This course helps learners to recombine practiced material and interpret simple messages in speaking, listening, reading, and writing. They deepen a student’s understanding of culture. Pupils will begin to speak and write in longer, more complex sentences and use the past tense. They will be comfortable with detailed personal information, and will read and comprehend simple instructions and stories. Oral proficiency is stressed.

Spanish III 1.0 credit

STEM Cohort, Humanities Cohort, A-Levels

The goal of this course is the steady enhancement of language proficiency. Learners will answer factual questions, and begin to use future and conditional tenses. They will write logical paragraphs. Learners will begin to create with the language and use simple circumlocutions. Oral proficiency continues to be emphasized, and accent and intonation will progress.
**Mandarin I**  
1.0 credit  
STEM Cohort, Humanities Cohort

This course is designed for students who have not studied a language for three or more years previously to high school. This course develops entry-level skills in speaking, listening, reading and writing. They also foster an early understanding of the culture. Learners will be able to understand and to ask simple questions on structured, familiar topics. They can only satisfy a small number of immediate needs. Discourse is usually limited to the present tense, but may occasionally include introduction to the past tense. Oral proficiency is stressed.

**Mandarin II**  
1.0 credit  
STEM Cohort, Humanities Cohort

This course helps learners to recombine practiced material and interpret simple messages in speaking, listening, reading, and writing. They deepen a student’s understanding of culture. Pupils will begin to speak and write in longer, more complex sentences and use the past tense. They will be comfortable with detailed personal information, and will read and comprehend simple instructions and stories. Oral proficiency is stressed.

**Mandarin III**  
1.0 credit  
STEM Cohort, Humanities Cohort

The goal of this course is the steady enhancement of language proficiency. Learners will answer factual questions, and begin to use future and conditional tenses. They will write logical paragraphs. Learners will begin to create with the language and use simple circumlocutions. Oral proficiency continues to be emphasized, and accent and intonation will progress.

**INTERDISCIPLINARY STUDIES**

**A-Level 9694 Thinking Skills**  
1.0 - 2.0 credits  
A-Levels

*Thinking Skills develops a specific set of intellectual skills, independent of subject content, reflecting the need voiced by universities and employers for more mature and sophisticated ways of thinking. The Thinking Skills syllabus also enables students to approach their other subjects with an improved ability to understand, analyse and resolve problems.

As a result, students will find the course of great benefit when preparing for higher education and for a wide range of careers, including law, scientific research, social science, journalism, medicine, business, accounting and engineering. The Thinking Skills syllabus encourages free and open debate, critical and investigative thinking, and informed and disciplined reasoning.*
ASU Audit
STEM Cohort, Humanities Cohort, A-Levels

Students are able to sit Arizona State University courses in their chosen topic of interest and earn a high school credit (0.5 credit) for each audit taken. Students may repeat this course.

MATHEMATICS

Algebra I
STEM Cohort, Humanities Cohort, A-Levels

Algebra 1 provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. The concept of function is emphasized throughout the course. Topics include: (1) operations with real numbers, (2) linear equations and inequalities, (3) relations and functions, (4) polynomials, and (5) algebraic fractions.

Students will be allowed to test for graduation from Algebra 1 and placed into Geometry at the end of the Fall semester. If the student scores an 80% or better on the assessment, they will have the opportunity to move up to Geometry for these second semester. Second semester Algebra will be conducted through ALEKS to offer a new modality and a “work at your own pace” option to those students requiring additional support with Algebra 1 content.

Geometry
STEM Cohort, Humanities Cohort, A-Levels

Patterns, lines, angles; reasoning and proof; parallel and perpendicular line properties; properties of triangles, quadrilaterals, polygons, and circles; transformations; congruence and similarity; right triangle trigonometry; perimeter, circumference, area, surface area, nets, and volume of figures. Students will analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships; specify locations and describe spatial relationships using coordinate geometry and other representational systems; apply transformations and use symmetry to analyze mathematical situations; use visualization, spatial reasoning, and geometric modeling to solve problems.

Algebra II & Trigonometry
STEM Cohort, Humanities Cohort, A-Levels

Functions and function notation, linear function, properties of exponents and exponential functions including growth and decay, geometric sequences,
polynomials and factoring, quadratic equations and functions, radicals and
geometry connections involving data analysis, rational equations and statistics,
exponential and logarithmic functions and equations; graphs of linear, quadratic,
exponential, and logarithmic functions; operations on rational expressions,
radical expressions, and complex numbers; rational exponents; applications,
right triangle trigonometry; angles of elevation and depression; sine and cosine
graphs and properties; laws of sines and cosines; applications.

**Pre-Calculus**  
1.0 credit  
STEM Cohort, Humanities Cohort, A-Levels

This course involves intensive preparation for calculus. Topics include analysis
and interpretation of the behavior of functions including linear, quadratic,
polynomial, rational, exponential, logarithmic, power, absolute value,
trigonometric, and piece-wise defined functions; systems of equations, modeling
and solving real world problems; trigonometric identities and solutions of
trigonometric equations. Additional topics may include matrices, conic sections,
sequence and series, polar and parametric functions, vectors, complex numbers,
and mathematical induction.

**Advanced Placement Statistics**  
1.0 credit  
STEM Cohort, Humanities Cohort, A-Levels

The major themes of the content of Advanced Placement Statistics are exploratory
analysis of data, planning a study, probability and statistical inference. Students will
describe patterns and departures from patterns, plan and conduct studies, and explore
random phenomena using probability and simulation. Learners will use computers and
graphing calculators to fit mathematical models to data, and also to produce graphs
designed for statistical analysis. Students are expected to read critically and interpret
problem situations describe in writing, and to write reports.

**A-Level 9709 Mathematics**  
1.0 - 2.0 credits  
A-Levels

Cambridge International AS and A Level Mathematics builds on the skills acquired at
Cambridge IGCSE (or equivalent) level. The syllabus allows teachers to choose from
three different routes to Cambridge International AS Level Mathematics: Pure
Mathematics only, Pure Mathematics and Mechanics or Pure Mathematics and
Probability and Statistics.

Teachers can also choose from three different routes to Cambridge International A Level
Mathematics depending on the choice of Mechanics, or Probability and Statistics, or
both, in the broad area of ‘applications’.
A-Level 9231 Mathematics 1.0 - 2.0 credits
A-Levels

This syllabus is intended for high ability learners who have achieved, or are likely to achieve, a high grade in the Cambridge International A Level Mathematics examination. The Cambridge International A Level Further Mathematics syllabus enables learners to extend the mathematical skills, knowledge and understanding developed in the Cambridge International A Level Mathematics course.

The content of the syllabus covers the areas of Pure Mathematics, Mechanics and Statistics. Knowledge of the whole content of the Cambridge International A Level Mathematics syllabus is assumed.

PHYSICAL EDUCATION

Physical Education 0.5 credit
STEM Cohort, Humanities Cohort, A-Levels

The HYSA Physical Education will focus on the assessment and maintenance of physical fitness to improve health and performance, and the requisite knowledge of physical fitness concepts, principles, and strategies; and the application of psychological and sociological concepts, including self-responsibility, positive social interaction, and group dynamics, in the learning and performance of physical activity.

SCIENCE

Forensics 0.5 credit
STEM Cohort and HUM Cohort

Murder at Old Fields is an exciting new Forensic Science lab-based curriculum for high school and college classrooms. Based on an actual cold-case, the 1842 double-murder of Alexander and Rebecca Smith at their farmhouse in Old Fields, Long Island, students examine evidence and conduct labs focused on the historical facts of this unsolved crime.

The course consists a digital component, as well as a hands-on laboratory component.

The Murder at Old Fields online activity is a cutting edge tool for teaching forensic science. It features an online classroom with lessons and quizzes, a 3D crime scene to explore, a virtual lab to study gathered evidence. Meticulously crafted to reflect the facts of this long cold case, Murder at Old Fields is an ideal interdisciplinary/cross-curricular learning experience, with a rich immersion in American history and a strong narrative of the crime and the time.
IGCSE 0654 Honors - Coordinated Science Biology 1.0 credit

STEM Cohort

With an emphasis on human biology, the Cambridge IGCSE syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. Learners gain an understanding of the basic principles of biology through a mix of theoretical and practical studies. They also develop an understanding of the scientific skills essential for further study at Cambridge International A Level, which are useful in everyday life.

As they progress, learners understand how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

IGCSE 0654 Honors - Coordinated Science Chemistry 1.0 credit

STEM Cohort

The Cambridge IGCSE syllabus enables learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. Learners gain an understanding of the basic principles of Chemistry through a mix of theoretical and practical studies. They also develop an understanding of the scientific skills essential for further study at Cambridge International A Level, skills which are useful in everyday life.

As they progress, learners understand how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

IGCSE 0654 Honors - Coordinated Science Physics 1.0 credit

STEM Cohort

The Cambridge IGCSE Physics syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. They learn about the basic principles of Physics through a mix of theoretical and practical studies. Learners also develop an understanding of the scientific skills essential for further study at Cambridge International A Level, skills which are useful in everyday life.

As they progress, learners gain an understanding of how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.
A-Level 9700 Biology 1.0 - 2.0 credits

A-Levels

Cambridge International AS and A Level Biology builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of biology, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A Level Biology is ideal for learners who want to study biology or a wide variety of related subjects at university or to follow a career in science.

A-Level 9702 Physics 1.0 - 2.0 credits

A-Levels

Cambridge International AS and A Level Physics builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of physics, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of physics ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A Level Physics is ideal for learners who want to study physics or a wide variety of related subjects at university or to follow a career in science.

SOCIAL STUDIES

US Government 0.5 credit

STEM Cohort

United States Government is a one semester course in which learners explore national, state, and local governments. Learners explore the Constitution and gain insight into the principles of federalism, popular sovereignty, limited government, judicial review, separation of powers and checks and balances. Learners will examine landmark court rulings and examine the Bill of Rights. Using a variety of resources, learners will analyze the actions and judgments about the powers and workings of Congress, the Presidency, and the Judicial Branch. As a result of their understanding of the principles of a democracy, students will be better prepared to function as informed, involved citizens.
Economics 0.5 credit  
STEM Cohort

This course provides a survey of basic economic principles such as supply and demand, scarcity, and opportunity cost. Learners will examine the relationship between the government and the economy. Macroeconomic topics such as fiscal policy, GDP, inflation, unemployment, and the federal budget will be covered. Microeconomic topics such as the nature and function of product markets, factor markets, efficiency, and role of government will be covered. Additional time will be spent discussing consumer economic issues and consumer protection.

Anthropology: Buried Cities, Lost Tribes 0.5 credit  
STEM or HUM Cohort

Learners will learn how to interpret the archaeological record in order to learn about the past life-ways of ancient human groups. The learners will develop an appreciation for the rich complexity and breadth of human behavior exhibited by the ancient peoples of the Old World. Learners will be able to use cross-cultural analysis to compare different Old World cultures and civilizations to one another and to evaluate our own society. Learning how archaeologists use empirically-based arguments to test hypotheses and develop theories in order to learn about ancient human groups will also be an integral part of this course.

IGCSE 0470 History 2.0 credits  
HUM Cohort

The Cambridge IGCSE History syllabus looks at some of the major international issues of the nineteenth and twentieth centuries, as well as covering the history of particular regions in more depth. The emphasis is on both historical knowledge and on the skills required for historical research.

Learners develop an understanding of the nature of cause and effect, continuity and change, similarity and difference and find out how to use and understand historical evidence as part of their studies. Cambridge IGCSE History will stimulate any learner already interested in the past, providing a basis for further study, and also encouraging a lifelong interest in the subject. Both coursework and non-coursework options are available.

A-Level 9389 History 1.0 - 2.0 credits  
A-Levels

Cambridge International AS and A Level History is a flexible and wide-ranging syllabus covering modern history in the nineteenth and twentieth centuries. The syllabus builds
upon skills gained at Cambridge IGCSE or Cambridge O Level and develops lifelong skills including understanding issues and themes within a historical period.

The emphasis is again on both historical knowledge and on the skills required for historical research. Learners develop an understanding of cause and effect, continuity and change, similarity and difference, and use historical evidence as part of their studies. At AS learners can select from topics on European, American or International history.

At A Level learners can select from topics on European, American, African, Southeast Asian and International history. Teachers choose which periods to focus on, allowing them to build a course that reflects their learners’ interests and staff specialisms, or which is relevant to the local or regional context.

A-Level 9239 Global Perspectives 1.0 - 2.0 credits

A-Levels

Cambridge International AS & A Level Global Perspectives and Research prepares learners for positive engagement with our rapidly changing world.

Learners broaden their outlook through the critical analysis of - and reflection on - issues of global significance. The Cambridge International AS & A Level Global Perspectives and Research syllabus is based on skills rather than on specific content. Learners develop research, thinking, reasoning and communication skills by following an approach to analysing and evaluating arguments and perspectives called the Critical Path. Collaborative skills are enhanced through participation in a team project. The skills gained through study of Cambridge International AS & A Level Global Perspectives and Research enable students to meet the demands of twenty-first century learning and to make a successful transition to study in higher education.

A-Level 9696 Geography 1.0 - 2.0 credits

A-Levels

The Geography syllabus builds upon skills gained at Cambridge IGCSE (or equivalent) level study. Learners widen their knowledge and understanding of the subject, while developing their investigative abilities and their evaluation and decision-making skills.

The syllabus is wide-ranging and comprises a variety of options. For example, learners can study topics such as hydrology and fluvial geomorphology, atmosphere and weather, rocks and weathering, population change and settlement dynamics. The syllabus considers a range of environments, from tropical to arid, and learners can also study subjects such as environmental management, global interdependence and economic transition.
Cambridge International AS and A Level Psychology learners develop their appreciation of the subject by exploring the ways in which psychology is conducted. As part of their studies, learners also review important research; this provides an insight into the ways in which psychology has been applied, thereby leading to a better understanding of key themes and issues.

The syllabus reflects five core areas of psychology, namely cognitive, social, physiological, developmental and the psychology of individual differences; it also relates psychology to education, health, organisations, the environment and abnormality.