



Cambridge Course Descriptions

AICE English Language

The AICE English Language course 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 analyze material, gaining further knowledge and understanding of English language features and issues, and writing clearly, accurately, creatively and effectively for different purposes and audiences.

AICE General Paper (*required for all Pasco County High School Juniors)

The AICE General Paper course encourages learners to develop a maturity of critical thought and argument and a mastery of expression in the English language. These are all skills of great use for university level study. The course draws on topics from across the school curriculum, and learners are able to draw upon knowledge and understanding gained from study of other subjects.

AICE English Literature

The AICE English Literature course will provide learners with the opportunity to gain further knowledge and understanding of international poetry, prose and drama, with candidates studying all genres. Throughout the course learners will be encouraged to practise their skills in close reading through the study of literary extracts and unseen texts; developing skills of analysis and interpretation of texts, alongside their expression of personal response to the texts studied. Learners will explore the conventions of genres of texts and the contexts in which works have been written, read and received.

Pre-AICE Math 1

The fundamental purpose of the course in Pre-AICE Math 1 is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, called units, deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Pre-AICE Math 2

The Cambridge IGCSE Math 2 course aims to enable students to: develop their mathematical knowledge and skills in a way which encourages confidence and provides satisfaction and enjoyment. Learners will develop an understanding of mathematical principles and an appreciation of mathematics as a logical and coherent subject and acquire a range of mathematical skills, particularly those which will enable them to use applications of mathematics in the context of everyday situations and of other subjects they may be studying.

Pre-AICE Math 3

Cambridge IGCSE Additional Mathematics is a rigorous college preparatory course intended to prepare students for the AICE Math curriculum. Students will devise mathematical arguments and present them precisely and logically, develop creativity and perseverance in the approach to problem solving, derive enjoyment and satisfaction from engaging in mathematical pursuits, and gain an appreciation of the beauty, power and usefulness of mathematics.

AICE Math

The AICE Math course aims are to enable students to: develop the ability to analyse problems logically, recognise when and how a situation may be represented mathematically, identify and interpret relevant factors and select an appropriate mathematical method to solve the problem, use mathematics as a means of communication with emphasis on the use of clear expression, acquire the mathematical background necessary for further study in mathematics or related subjects. Learners will participate in the qualification option of Pure Math (Paper 1) and Probability & Statistics (Paper 5).

AICE History

The AICE U.S. History class focuses on both a student's historical knowledge and on the skills required for historical research. Students learn about cause and effect, continuity and change, similarity and difference, and use of historical evidence as part of their studies. Students will study the American past to develop an understanding of complex historical events and their significance to modern society. By the end of this course, students will be able to assess different interpretations of an argument, formulate their own ideas about a subject, present clear, logical arguments, and evaluate historical evidence.

AICE Media Studies

The AICE Media Studies course offers learners the chance to develop an understanding and appreciation of the place of media in our everyday lives. The course enables learners to take a hands-on approach to the subject. Through the coursework components they create their own media products from planning through to execution. Learners also consider and analyze examples from existing media, examining production processes and technologies and the effects they achieve.

AICE Psychology

Students enrolled in this course develop their appreciation of psychology by exploring the ways in which it 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 approaches, research methods and issues and debates.

AICE Global Perspectives & Research (required for all students in the Cambridge Programme)

The AICE Global Perspectives & Research aims to encourage young people to think about and explore issues of global significance. The course enables students to explore and make judgements about global issues of relevance and importance to their own lives. It offers learners opportunities to acquire, develop and apply skills in critical thinking, problem solving, research, communication and collaboration. This course encourages the development within young people of global competency – the ability to define a global problem, reflect and take action.

AICE Geography

The AICE Geography course will allow learners to develop: an understanding of the principal processes operating within physical geography and human geography, an understanding of the causes and effects of change on natural and human environments, an awareness of the usefulness of geographical analysis to understand and solve contemporary human and environmental problems, the ability to handle and evaluate different types and sources of information, and the skills to think logically to present an ordered and coherent argument in a variety of ways

Pre-AICE Biology

With an emphasis on human biology, the Cambridge IGCSE Biology course 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 AS Level, which are useful in everyday life. As they progress, learners understand how science is

studied and practiced, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

Pre-AICE Chemistry

The Cambridge IGCSE Chemistry course 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 AS Level, skills which are useful in everyday life. As they progress, learners understand how science is studied and practiced, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.

AICE Marine Science

The AICE Marine Science course aims are to enable students to: acquire knowledge and understanding and develop practical skills, including efficient, accurate and safe scientific practices, learn to apply the scientific method, while developing an awareness of the limitations of scientific theories and models, develop skills in data analysis, evaluation and drawing conclusions, cultivating attitudes relevant to science such as objectivity, honesty, enquiry and inventiveness, develop effective scientific communication skills, using appropriate terminology and scientific conventions, understand their responsibility to others/society and to care for the environment, and enjoy science and develop an informed interest in the subject that may lead to further study.

AICE Environmental Management

The AICE Environmental Management course aims are to enable students to develop: knowledge of natural systems which make life possible on Earth, an understanding that humans are part of these systems and depend on them, an appreciation of the diverse influences of human activity on natural systems, an awareness of the need to manage natural systems, an understanding of sustainable development to meet the needs of the present, without compromising the ability of future generations to meet their own needs, a sense of responsibility and concern for the welfare of the environment and all organisms, an awareness of their own values concerning environmental issues, an awareness of the values of others, a willingness to review their own attitudes in the light of new knowledge and experiences, and a sound basis for further study, personal development and participation in local and global environmental concerns.

AICE Spanish

Students in the AICE Spanish course gain lifelong skills, including: the ability to communicate confidently and clearly in the target language, a sound understanding of the nature of language and language study, and of the skills and abilities required for further study, work and leisure, insight into the culture and contemporary society of countries where the language is spoken, better integration into communities where the language is spoken, positive attitudes towards language learning, towards the speakers of other languages, and towards other cultures and societies, and skills which can be used in other areas of learning, such as analysis and memory skills.

*Also offered:

Pre-AICE Spanish 1, 2, 3

Pre-AICE French 1, 2