



UNIVERSITY *of* CAMBRIDGE
International Examinations

AICE

Sarasota High School
Established 2011



Advanced International Certificate of Education

Five-Year Plan

FOR

Sarasota High School

Five-Year Plan (2010/2011)

Planning Year

1. Visit Belleview High to view the AICE program in action and get information from those who are implementing AICE.
2. First year AICE teachers will participate in trainings between October 26-29th in Rockledge, Florida.
3. Incorporate AICE courses into the master schedule.
4. Produce promotional material to educate incoming freshmen and their parents.
5. Prepare for Pre-AICE (IGCSE) Courses: Pre-AICE Math I/II/III, Pre-AICE English Language, Pre-AICE Coordinated Science I/II, Pre-AICE Spanish
6. Prepare for AICE Courses offered by interdisciplinary group:
Math and Science: AICE Math, AICE Chemistry/Biology/Physics
Language: AICE English Language, AICE Spanish
Arts and Humanities: AICE English Literature, AICE General Paper, AICE Thinking Skills, AICE Art & Design, AICE Art & Design: Graphic Design, AICE Photography, AICE Ceramics, AICE US History, AICE European History, AICE Geography, AICE Economics

COURSE DESCRIPTIONS

IGCSE = Pre-AICE (9th & 10th grades)

IGCSE : English - First Language (0500)

Designed for students for whom English is their mother tongue, IGCSE First Language English develops the ability to communicate clearly, accurately and effectively in both speech and writing. Students 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. Students 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. 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.

IGCSE : Mathematics (0580)

An essential subject for all students, IGCSE Mathematics is a fully examined course which encourages the development of mathematical knowledge as a key life skill, and as a basis for more advanced study. The syllabus aims to build students' confidence by helping them develop a feel for numbers, patterns and relationships, and places a strong emphasis on solving problems and presenting and interpreting results. Students also learn how to communicate and reason using mathematical concepts.

IGCSE : Sciences - Co-ordinated (Double) (0654)

A double award, earning two grades, IGCSE Co-ordinated Sciences gives students the opportunity to study Biology, Chemistry and Physics within a cross-referenced, scientifically coherent syllabus. Students learn about the basic principles of each subject through a mix of

theoretical and practical studies, whilst also developing an understanding of the scientific skills essential for further study. Students learn 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. As well as focusing on the individual sciences, the syllabus therefore enables students to better understand the technological world in which they live, and take an informed interest in science and scientific developments.

AICE level courses AS (1 year of study) A (2 years of study)

A & AS Level : Biology (9700)

A and AS Level Biology builds on the skills acquired at 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 will foster creative thinking and problem-solving skills which are transferable to any future career path, and A and AS Level Biology is ideal for students who want to study biology or a wide variety of related subjects at university or to follow a career in science. Please note that the Scheme of Assessment has changed since 2005.

A & AS Level : Chemistry (9701)

A and AS Level Chemistry builds on the skills acquired at IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of chemistry, 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 chemistry ideas in novel contexts as well as on the acquisition of knowledge. The course will foster creative thinking and problem-solving skills which are transferable to any future career path, and A and AS Level Chemistry is ideal for students who want to study chemistry or a wide variety of related subjects at university or to follow a career in science. Please note that the Scheme of Assessment has changed since 2005.

A & AS Level : Economics (9708)

Through the A and AS Level Economics syllabus, students learn how to explain and analyze economic issues and arguments, evaluate economic information, and organize, present and communicate ideas and judgements clearly. The syllabus covers a range of basic economic ideas, including an introduction to the price system and government intervention, international trade

and exchange rates, the measurement of employment and inflation, and the causes and consequences of inflation. Students also study the price system, the theory of the firm, market failure, macroeconomic theory and policy, and economic growth and development.

A & AS Level : English - Language (8693)

AS Level English is designed for students who can already communicate effectively in English as it may be their mother tongue or second language. The AS Level English syllabus enables students to achieve greater fluency, accuracy and confidence in the language as it is spoken and written, thereby also improving their communication skills. Students will learn how to improve their use of English in a variety of situations, understanding how to read texts and other source materials, and how to extract information, initiate conversations and respond to questions both orally and in writing.

A & AS Level : English - Literature (9695)

Students following the A and AS 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. Students 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.

A & AS Level : General Paper 8001 (8001)

The AS General Paper is multi-disciplinary, its subject matter drawn from across the curriculum. The syllabus encourages in candidates the ability to make cross-curricular links; to develop a maturity of thought appropriate to students at this level; and to achieve an understanding and usage of the English language which enables them to express arguments, ideas and opinions in a reflective and academic manner.

A & AS Level : Geography (9696)

The Geography syllabus builds upon skills gained at IGCSE (or equivalent) level study. Students 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, students can learn more about 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 students can also study subjects such as environmental management, global interdependence and economic transition.

A & AS Level : History (9697)

The A and AS Level History syllabus builds upon skills gained at IGCSE (or equivalent) level study. The emphasis is again on both historical knowledge and on the skills required for historical research. Students learn about cause and effect, continuity and change, similarity and difference, and use historical evidence as part of their studies. The flexible and wide-ranging syllabus covers six periods, ranging from the history of the Caribbean from 1794 to 1900, to international history from 1945 to 1991. Students can also study periods from European, Asian, African and American history. Centres choose which periods to focus on, allowing them to build a course that reflects student interest and staff specialisms, or which is relevant to the local or regional context.

A & AS Level : Mathematics (9709)

A and AS Level Mathematics builds on the skills acquired at IGCSE (or equivalent) level. The syllabus allows Centers flexibility to choose from three different routes to AS Level Mathematics - Pure Mathematics only or Pure Mathematics and Mechanics or Pure Mathematics and Probability and Statistics. Centers can choose from three different routes to A Level Mathematics depending on the choice of Mechanics, or Probability and Statistics, or both, in the broad area of 'applications'.

A & AS Level : Physics (9702)

A and AS Level Physics builds on the skills acquired at 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 will foster creative thinking and problem-solving skills which are transferable to any future career path, and A and AS Level Physics is ideal for students who want to study physics or a wide variety of related subjects at university or to follow a career in science. Please note that the Scheme of Assessment has changed since 2005.

A & AS Level : Spanish (9719)

A Level Spanish builds on the language skills gained at IGCSE, O Level or AS Level, and is the ideal foundation for university-level study, or to improve career prospects. Students will learn

how to use the language in a variety of situations. They will be expected to handle texts and other source materials, extracting information in order to respond to specific tasks. Through their studies, students can expect to achieve greater fluency, accuracy and confidence in the language.

A & AS Level : Thinking Skills (9694)

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, analyze 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.

A & AS Level : Art and Design (9704)

The Art and Design syllabus considers expression and communication. Students learn about visual perception and aesthetic experience, and the ways in which art and design creates a language of its own. Most of the work for this syllabus is practical or studio based, so that students can develop their abilities of observation and analysis of the visual world, sensitivity, skill, personal expression and imagination. They also learn how to relate their skills to an enhanced knowledge of their own cultures, past and present, as well as an appreciation of practical design problems.

Five-Year Plan (2011/2012 AICE Courses)

9TH GRADE (1st AICE Cohort)

Pre AICE Math I/II (Algebra 1/Geometry)

Pre AICE English Language (English I)

Pre AICE Coordinated Science I (Physical Science)

Pre AICE Spanish I

10th GRADE

AICE General Paper (English II) (Interdisciplinary Studies college credit & FTE money with appropriate score)

11th/12th GRADE

AICE Math (Precalculus/Calculus) (Precal/Trig college credit & FTE money with appropriate score)

AICE Physics (AP Physics) (Physics college credit & FTE money with appropriate score)

AICE Thinking Skills (Social Studies Elective) (Philosophy college credit & FTE money with appropriate score)

* (50 Freshmen, 200 10th-12th testing= 250 Total)

Five-Year Plan (2012/2013 AICE Courses)

9TH GRADE

Pre AICE English Language

Pre AICE Math I/II

Pre AICE Coordinated Science I

10th GRADE (1st AICE Cohort)

Pre AICE Math II/III (Geometry/Algebra 2)

Pre AICE Coordinated Science II (Integrated Science)

Pre AICE Spanish II

AICE English Language AS Level (English II)

AICE International History (World History)

11th/ 12th GRADE

AICE Math

AICE Physics

AICE Thinking Skills

AICE General Paper

* (75 Freshmen, 250 10th-12th testing= 325 Total)

Five-Year Plan (2013/2014 AICE Courses)

9TH GRADE

Pre AICE English Language
Pre AICE Math I/II
Pre AICE Coordinated Science I

10th GRADE

Pre AICE Math II/III
Pre AICE Coordinated Science II
AICE English Language AS Level

11th GRADE (1st AICE Cohort)

AICE Math/Stat AS Level or Pre AICE Math III
AICE Physics/Biology/Chemistry
AICE English Language A Level (English III)
AICE US History
AICE Art & Design: Graphic Design
AICE Art & Design
AICE Photography
AICE Ceramics
AICE Spanish AS Level

12th GRADE

AICE Math
AICE Physics/Biology/Chemistry
AICE Thinking Skills

* (100 Freshmen, 300 10th-12th testing= 400 Total)

Five-Year Plan (2014/2015 AICE Courses)

9th GRADE

Pre AICE English Language

Pre AICE Math I/II

Pre AICE Coordinated Science I

10th GRADE

AICE English Language AS Level

Pre AICE Math II/III

Pre AICE Coordinated Science II

11th GRADE

AICE Math/Stat AS Level or Pre AICE Math III

AICE Physics/Biology/Chemistry

AICE English Language A Level

AICE US History

AICE Art & Design

AICE Art & Design: Graphic Design

AICE Photography

AICE Ceramics

12th GRADE (1st AICE Cohort)

AICE English Literature A Level (English IV)

AICE Math A Level or AICE Math AS Level (Pure 1&2)

AICE Physics/Biology/Chemistry

AICE Economics

AICE Geography

AICE European History

AICE Thinking Skills

AICE Art & Design

AICE Art & Design: Graphic Design

AICE Photography

AICE Ceramics

AICE Spanish A Level

* (100 Freshmen, 350 10th-12th testing= 450 Total)

By the end of this progression the 1st AICE Cohort Students would have had the opportunity to choose between 17 different AICE courses. They need to accumulate 6 points through AICE exams with at least one from the three different areas (Math & Science, Language, & Arts and Humanities) to receive their AICE diploma. AS Level courses provide 1 point and A Level courses provide 2 points. By the end of the 4th year we will be able to offer more courses/choices so students can tailor their high school experience to help prepare them for college/career.

All students at SHS will have the opportunity to take any AICE course they'd like to and do not need to be an AICE diploma seeking student. They also don't need to be enrolled in Pre AICE courses to take future AICE courses.