

IB Course Descriptions

South Texas Business, Education and Technology Academy

Theory of Knowledge I

Prerequisite: IB students only

Theory of Knowledge is an integral part of the IB philosophy and is required for every IB Diploma candidate. The course challenges students to reflect on the nature of knowledge and its relationship to their experiences in and out of the classroom. Part I examines the role of language and thought in knowledge, the requirements of logical rigor for knowledge, and the systems of knowledge.

Theory of Knowledge II fosters attitudes, which lead students to critically evaluate what they and others know. The subject matter introduced in Theory of Knowledge I is expanded upon pursued further, with an emphasis on examining moral, political, and aesthetic judgments as they relate to knowledge. Also examined is the relationship between knowledge and truth. This course, which is required of all diploma candidates, is assessed through an oral presentation and an essay on a selected topic. The extended essay will be completed in this course.

History of the Americas (HL)

This study is a unique approach to American history that includes key comparison with other countries in our hemisphere. Students will come to appreciate their own cultural heritage in the broad context of the experiences of the peoples of the region. Students are introduced to history as a discipline and to the historian's methods. This course of study obliges students to go beyond simple narrative; it requires comparison analysis.

English A (HL)

This course is the first part of an in-depth, two-year literary and language analysis training course. Complete two-year focus includes emphasis on all forms and genres of literature (novel, short story, play, essay, poetry, etc.) as material for study with partial concentration on American and British literature in the first year. In addition to written assignments, student must engage in extensive oral commentaries along with at least one extensive analysis (700-1,000 words) based on works studied.

Biology (SL)

This course builds on the foundation of Biology by investigating the natural world. Students study organisms and communities both in the lab and in the natural environment that include biotic and abiotic factors, as well as physiological and behavioral adaptations.

Spanish B (SL)

Students will develop the ability to communicate orally, through writing, and in response to spoken language. Three major themes will be explored: exploring change (social, political, technological), and exploring groups (family, community, racial), and exploring leisure (arts, film, media). Successful completion prepares the student for the SL Spanish B examination.

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Business Management (HL)

The business management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the sociocultural and economic contexts in which those organizations operate.

Philosophy (HL)

The IB Philosophy class will deal with issues that are profound, usually difficult, and important for humanity. IB Philosophy aims to be inclusive and to deal with a wide range of issues that can be approached in a philosophical way. The IB Philosophy program explores the fundamental questions that people have asked since the beginning of time, and confronts new problems arising within contemporary society. What exists? What is it to be a human being? What can we know? How do I know what is the right thing to do?

IB Physics (SL)

International Baccalaureate Physics program is a two year rigorous pre-university course which is internationally well recognized. The focus of this program is to impart in students the knowledge and skills required to excel in their university studies. By design this course allows students to experience the challenges which are normally felt at undergraduate level. The course introduces the students to Scientific methods and techniques which are needed for scientific investigations. Students are made aware of the moral and ethical social responsibility in the use of scientific knowledge. Students are encouraged to understand the relationship between the various scientific disciplines and carry out an interdisciplinary project.

IB Chemistry (SL)

The chemistry course of the IB Diploma is designed to extend your existing skills and understanding in order that you can progress to higher education or a career that demands higher level scientific understanding. In addition to gaining chemical subject knowledge we have the opportunity to: research key chemical concepts both practically and theoretically; analyze and evaluate information in a variety of forms; focus on personal skills required for successful group work; solve complex intellectual problems; demonstrate manipulative skills for practical work.

IB Computer Science (HL)

The computer science standard level course focuses on software development, fundamentals of computer systems and the relationship between computing systems and society. The higher level course extends learning began in IB Computer Science SL and encompasses all these elements; but is extended to include an advanced/investigative case study, computer mathematics and logic, advanced data structures and algorithms, further system fundamentals, and file organization.

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IB Mathematical Studies (SL)

The IB Diploma Program mathematical studies course, available in standard level only, is for students with varied backgrounds and abilities. The course is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course, however, should be already equipped with fundamental skills and a rudimentary knowledge of basic processes. In addition, the course will enable students to:

- develop logical, critical and creative thinking
- develop an understanding of the principles and nature of the subject
- employ and refine their powers of abstraction and generalization
- develop patience and persistence in problem solving
- appreciate the consequences arising from technological developments
- transfer skills to alternative situations and to future developments
- communicate clearly and confidently in a variety of contexts
- enjoy the courses and develop an appreciation of the elegance, power and usefulness of the subjects
- appreciate the multiplicity of cultural and historical perspectives of mathematics, including the international dimension of mathematics

IB Film (HL)

IB Film is an introduction to the “reading” and the comprehension of film as a language and to cinema as an institution. We will look at film as a medium: both what is specific to it (e.g., editing/montage) and what it shares with other media (such as theater and photography). We will direct our attention to the ways people organize filmic materials into formal systems (e.g., into arguments, explanations, and stories). We will pay particular attention to story or narrative form. We will also seek to understand how cinema functions as an institution: how it reinforces and, occasionally, resists cultural values. We will also use the tools of the medium and train our artistic sensibilities to communicate our visions through sound and sight.