

# IB Diploma Programme~ Cheat Sheet for Course Selection

## Requirements for the Full Diploma:

~The SHORT Version:

3 (courses @ the HL) + 3 (courses @ the SL) + 3 (other requirements: ToK, CAS and the EE)

~MORE Explanation:

- 6 courses from 5 Different subject areas
- 3 (no more than 4) at the Higher Level
- 3 (no fewer than 2) at the Standard Level
- Theory of Knowledge (for two years)
- Extended Essay
- Creativity, Action, and Service (150 hours over two years)

## Requirements for Certificate Candidates:

~Students may take as many or as few courses as academically appropriate.



## Group 1: Language & Literature (English)

### Language A HL: Literature

This course:

- promotes a study of English and World literature
- exposes students to various genres of literature across many time periods
- analyzes literature, the writer's craft, and the power of words
- examines the author's style and voice
- develops an understanding of literary criticism
- promotes the development of oral and written communication skills in a variety of styles and situations
- engages students in a comparative study of literature

## Group 2: Language Acquisition (Foreign Language)

### French SL

### Spanish SL

These courses:

- focus on the continued acquisition and development of listening, reading, speaking, and writing in the target language.
- emphasize speaking and listening with a variety of activities.
- extend reading skills with the use of authentic and adapted literary texts.
- improve writing skills through writing varied styles of compositions and the perfection of grammar and structure.

## Group 3: Individuals & Societies

### **Business and Management SL/HL**

This course:

- is the rigorous and critical study of the ways in which individuals and groups interact in a dynamic business environment.
- gives students an understanding of business principles, practices, and skills.
- emphasizes the understanding of technical innovation and day-to-day business functions of marketing, human resource management and finance.

Modules studied:

- Introduction to organizations
- Marketing
- Human Resource management
- Accounting and Finance
- Operations Management (HL only)
- the External Environment (HL only)

### **History of the Americas HL**

This course:

- will cover the NYS Regents requirements for US History
- will also meet NYS requirement for PIG and Econ
- broadens the curriculum to emphasize the interconnected -ness of US History with the history of the Americas as a region.
- requires students to analyze, interpret, and evaluate primary and secondary historical sources from multiple regions and perspectives.

**Year 1** focuses on US History with some exploration of topics from the Canadian, American and Latin American experience. Students may elect to take the AP US History examination but outside preparation is necessary.

**Year 2** continues examination of major events and themes of the Twentieth century from a global perspective.

### **Environmental Systems & Societies SL (*INTERDISCIPLINARY—meets group3 & 4 requirements*)**

This course:

- will provide students with a coherent perspective of the interrelationships between environmental systems and the societies effected
- students will evaluate the scientific, ethical, and socio-political aspects of issues

### **Information Technology in a Global Society (ITGS)**

This course:

- is the study and evaluation of the impact of information technology (IT) on individuals and society. It explores the advantages and disadvantages of the use of digitized information at the local and global level.

Topics will include:

- social and ethical issues (reliability, integrity, security, privacy, authenticity, intellectual property, equality of access, etc.)
- IT systems in a social context (system fundamentals, networks, software fundamentals, spreadsheets, images, sound, and presentations, communications systems, integrated systems-robotics and artificial intelligence etc.)
- areas of impact (business and employment, education, health, arts, entertainment, science and the environment, and politics and government).

### **World Religions SL**

This course:

- offers a systematic, analytical and empathetic study of a variety of beliefs and practices encountered in the nine major world religions
- the course seeks to promote an awareness of religious issues in the contemporary world
- promotes the study of religion in a scholarly, open-minded and objective way
- provides students with a sense of what it is like to belong to a particular religion and how that influences understanding of the world

## Group 4: Experimental Sciences

### **Biology SL/HL**

These courses:

- will expose students to a strong and complete foundation in the basics of biology that includes exposure to experimental biology.

Topics may include:

- Cells
- Biochemistry/Metabolism
- Genetics/Heredity
- Evolution/Classification
- Botany
- Anatomy/Physiology
- Ecology

### **Chemistry SL/HL**

These courses:

- provide a strong background in chemical principles that are the foundations of all physical and biological sciences, with emphasis placed upon practical and investigative skills.

Topics may include:

- Stoichiometry
- Atomic Theory
- Periodicity
- bonding
- States of Matter
- Energetics
- Kinetics
- Equilibrium
- Acids and Bases
- Oxidation and Reduction
- Organic Chemistry (HL only)

### **Physics SL**

This course:

- will study the laws of nature through topics such as: physical measurement, oscillations and waves, electric charge and current, fields and forces, atomic and nuclear physics and Global environmental physics.
- will also prepare students to take the NYS Physics Regents exam.

Topics will include:

- Physics and physical measurement
- Mechanics
- Thermal Physics
- Waves
- Electricity and magnetism
- Atomic and nuclear physics

and may also include:

- quantum physics and nuclear physics
- energy

## Group 5: Mathematics

### Mathematics SL/HL

This course:

- will review and extend ideas about functions and trigonometry from previous math courses as well as examine matrices, vectors, statistics and probability
- will culminate in a basic study of the concepts, techniques and applications of both differential and integral calculus

Topics will include:

- algebra
- functions and equations
- circular functions and trigonometry
- matrices
- vectors
- statistics and probability
- calculus

### Mathematical Studies SL

This course:

- caters to students whose main interests lie outside the field of mathematics
- encourages an appreciation of math in students who do not anticipate a need for math in their future studies

Topics will include:

- number and algebra
- sets and logic
- geometry and trigonometry
- statistics and probability
- functions
- financial mathematics
- further statistics and probability

## Group 6: the Arts

### Visual Arts SL/HL

This course includes part A (Studio Work) and part B (Research workbooks).

Key concepts include:

- identify core Elements of Art and Principles of Design
- use of various media
- acquire basic studio techniques
- apply research to personal art work
- encourage the development of individual artistic interests
- integrate art history and art criticism into studio work
- provide opportunities in varied media and studio techniques
- relate art to socio-cultural and historical contexts

## **Music SL/HL**

Each of these courses will involve:

- a study of Prescribed Work
- a study of Musical Genres and Styles
- Musical Investigation

SL Solo performance Option:

This is designed for the student who has a background in musical performance. Solo performance (voice or instrument, one or more recitals).

SL Group Performance Option:

This is designed for students with a general interest in music, particularly members of ensembles. Group performance (2 or more public performances).

SL Composition Option:

This is designed for the student who has a background in musical composition. Composition: two contrasting compositions

HL:

This is designed for the specialist music student with a background in musical performance and composition, who may pursue music at university or conservatoire level.

Topics will include:

- solo performance: voice or instrument, one or more recitals
- composition: three contrasting compositions

## **Three "extras" for DP Candidates: Hexagon's Core**

### **Theory of Knowledge**

In this course:

- students will consider the concept of knowledge, how we acquire knowledge and the various fields and areas where knowledge can be obtained.
- students will become aware of the responsibility inherent in being knowledgeable.

Topics may include:

- knowers and knowing
- ways of knowing
- areas of knowledge: history, language, math, science, art, interdisciplinary connections, ethics

### **Extended Essay**

This is an independent research project on a subject of the student's choosing. Each student will have a mentor to help guide the project. The Essay must be between 2500 and 4000 words.

### **Creativity, Action, and Service**

Students must complete these hours by participation in activities which involve creativity, physical activity, or community service. Participation in school extra-curricular events as well as community groups can contribute to the requirement.