



Oporto British School

Established 1894



**IB DIPLOMA
PROGRAMME HANDBOOK**

FOREWORD BY THE HEADMASTER

At Oporto British School we are proud to offer the IB Diploma, which we strongly believe to be, the foremost qualification and curriculum of its type as a programme for young people preparing for life after school. It prepares them for university study better than any other alternative qualification, as it does for the world of employment and for their role as active contributors to the increasingly multicultural society that we hope they will help to shape.

There are many elements to the IB Diploma that we especially champion. Foremost among them are the following:

- The broad nature of the programme that sees the pupils continuing key disciplines to the age of 18.
- The holistic nature of the programme that includes the requirement to engage in CAS (Creativity, Activity and Service) as an integral aspect to passing through their programme.
- The values and ethos that it upholds and instils in the pupils, and the merits of service in the community, encapsulated in the Learner Profile.
- The approach to learning that encourages independence, the seeking of knowledge and the understanding of theory and practice.
- The Theory of Knowledge and Extended Essay aspects of the curriculum, which prepare them so well both for undergraduate and postgraduate study at university.

Much of the spirit and practice of delivering the IB Diploma is also fed down throughout the School. We encourage all our children to combine specialisation and fascination in one particular field of interest with the broad-minded, Renaissance-type approach that will ensure our young people can be both experts and socially-balanced young adults. In addition, they will understand that leadership is best realised through service; a message and practice that is at the core of our values.

We hope that this booklet is informative and that it helps you to make some exciting choices for your course of study in Forms 11 and 12.

With best wishes
Nick Sellers
Headmaster-elect

CONTENTS

| | |
|--|-----------|
| A THE IBDP CURRICULUM AT OBS | 6 |
| OBS Mission Statement and Aims | 6 |
| Vision | 6 |
| Mission | 6 |
| Ethos | 6 |
| Values | 6 |
| IB Diploma Programme Overview | 6 |
| IB Learner Profile | 7 |
| IB Diploma Programme Subjects Areas | 8 |
| IB Diploma Programme Courses offered at OBS | 9 |
| Recommended Entry Requirements for IB Diploma Assessment | 10 |
| IB Certificate Programme Overview | 11 |
| | |
| B SUBJECT AREA DESCRIPTIONS | 14 |
| Group One Studies in Language or Literature | 14 |
| Languages A | 14 |
| Languages A Literature | 15 |
| Languages A Language and Literature | 15 |
| Group Two Language Acquisition | 22 |
| Languages B | 22 |
| Languages <i>Ab Initio</i> | 23 |
| Group Three Individuals and Societies | 24 |
| Business Management | 24 |
| Economics | 25 |
| Geography | 27 |
| History | 28 |
| Information Technology in a Global Society | 30 |
| Psychology | 31 |

| | |
|---|-----------|
| Group Four Experimental Sciences | 32 |
| The Group 4 Project (G4P) | 32 |
| Physics | 32 |
| Chemistry | 33 |
| Biology | 34 |
| Environmental Systems and Societies | 36 |
| Sports, Exercise and Health Science | 37 |
| Group Five Mathematics | 40 |
| Group Six The Arts | 41 |
| Visual Arts | 41 |
| Music | 42 |
| C CORE IB DIPLOMA REQUIREMENTS | 44 |
| Extended Essay | 44 |
| Theory of Knowledge (TOK) | 45 |
| Creativity, Activity and Service (CAS) | 46 |
| D STUDENT SUPPORT | 48 |
| E OTHER IB DIPLOMA MATTERS | 50 |
| Academic Honesty | 50 |
| IA Deadlines | 50 |
| Options Evening | 50 |
| Non Regular Diploma | 50 |
| Higer School Leaving Certificate | 51 |



Dear Parents, Students, Alumni and Friends of OBS,

In the course of academic year 2019-2020 the school underwent a lengthy and carefully thought-out process to look at our core statements, mission and vision and to develop them into something more meaningful and shared for the whole community. Contributions from students, staff, the Senior Leadership Team and governors were elicited in a series of forums over this period and the school finally settled on new tenets that we believe epitomise the school's purpose and outlook, whilst reflecting our heritage and the fact that we are an International Baccalaureate School.

Over the coming year we aim to continue to discuss all of these statements and ideas with our students and with the whole community. They will be at the forefront of our new website and will be central to what we are doing within the school, and as part of our development campaign.

Please see below for the full Ethos, Vision, Mission and Values.

With best wishes
Nick Sellers
Headmaster-elect

A | THE IBDP CURRICULUM AT OBS

VISION, MISSION AND VALUES

Our Vision

Oporto British School aims to be an inspirational institution of thinking and learning, promoting excellence from all our pupils, and developing the compassionate, responsible leaders of the future.



Our Mission

To do everything we can to motivate each and every child here, and work to ensure they do the best they possibly can in their academic work and other areas of their lives.

In doing this, we combine tradition with forward-thinking educational practice, providing a dynamic, high-quality and internationally-minded experience to develop creative, compassionate and inquiring life-long learners and leaders.

Our Ethos

Knowledge,
Vision,
Humanity



Our Values



CURIOUS

We nurture curiosity, inquiry and research, both independently and in collaboration with others



KNOWLEDGEABLE

We value intellectual endeavour and the pursuit of knowledge across a broad range of disciplines



THINKERS

We think critically on complex problems and theories and seek to take reasoned and ethical decisions



CARING

We show compassion and empathy; and we lead in committing ourselves to the service of others



LEADERS

We develop thoughtful, collaborative leadership and encourage our young people to conduct themselves accordingly



CREATIVE

We combine tradition and innovation, inspiring creativity throughout all our pursuits



OPEN MINDED

We value open-mindedness and respect for all cultures, values and traditions, and seek to listen to and learn from others



RESPONSIBLE

We act with integrity, fairness, justice and take responsibility for our actions and their consequences

IB DIPLOMA PROGRAMME OVERVIEW

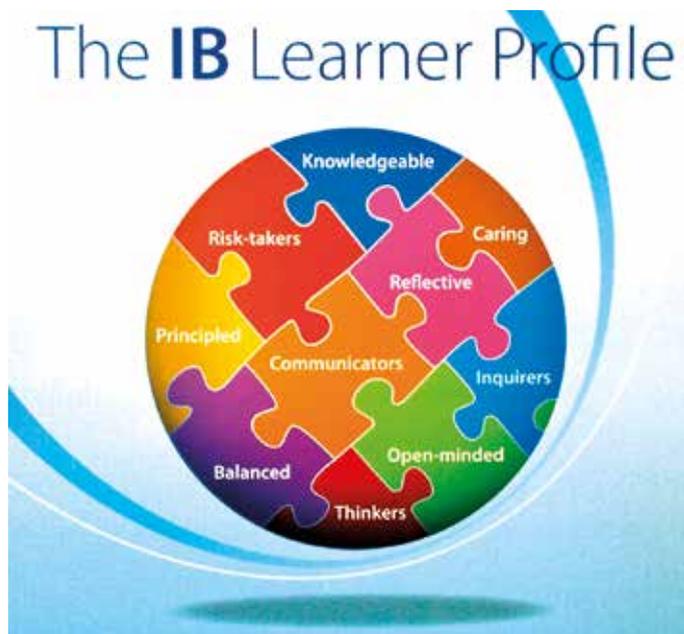
The International Baccalaureate Diploma Programme is taught over two years and is recognised throughout the world as a pre-university course by all leading universities in Portugal and internationally. In order to obtain the IB Diploma, a student is required to study 6 subjects. In general, three courses are taken at the Higher Level (HL) and three at the Standard Level (SL). Additionally, all students follow a common course in the Theory of Knowledge and write an Extended Essay (personal research) of 4000 words. The aim of the International Baccalaureate is to combine a liberal education in a range of disciplines with the opportunity to study a limited number of subjects in depth.

All IBDP courses have work externally assessed by examination and internally assessed work that is externally moderated. The proportion of the final grade determined by internally assessed coursework and final examination varies amongst subjects.

IB LEARNER PROFILE

The IB learner profile is the IB mission statement translated into a set of learning outcomes for the 21st century.

The learner profile provides a long-term vision of education. It is a set of ideals that can inspire, motivate and focus the work of schools, teachers and pupils, uniting them in a common purpose.



IB DIPLOMA PROGRAMME SUBJECT AREAS

Each Diploma Programme (DP) student will choose among the following subjects:

- One subject from each of the Groups 1-5.
- A sixth subject from Group 6 or an additional subject from the other Groups.

Group 1: Studies in Language or Literature.

Group 2: Language Acquisition.

Group 3: Individuals and Societies.

Group 4: Sciences.

Group 5: Mathematics.

Group 6: The Arts.



In addition to these academic disciplines, the IBDP is founded on three core components for which the students are required to:

- 1 | Complete a 4000 word Research Essay.
- 2 | Undertake a two year course of study in the Theory of Knowledge (TOK).
- 3 | Commit to a range of Creative, Activity, and Service (CAS) oriented endeavours.

IB DIPLOMA PROGRAMME COURSES OFFERED AT OBS

| SUBJECT GROUP 1 STUDIES IN LANGUAGE OR LITERATURE | | |
|---|----|----|
| Language A: Literature (English) | HL | SL |
| Language A: Literature (Portuguese) | HL | SL |
| Language A: Language and Literature (English or Portuguese) | HL | SL |
| Language A: Self taught | | SL |

| SUBJECT GROUP 2 LANGUAGE ACQUISITION OR A SECOND LANGUAGE A | | |
|---|----|----|
| French B | HL | SL |
| Spanish B | HL | SL |
| Portuguese B | HL | SL |
| Spanish <i>ab initio</i> | | SL |

| SUBJECT GROUP 3 INDIVIDUALS AND SOCIETIES | | |
|---|----|----|
| Business Management | HL | SL |
| Economics | HL | SL |
| Geography | HL | SL |
| History | HL | SL |
| Information Technology in a Global Society | HL | SL |
| Psychology | HL | SL |

| SUBJECT GROUP 4 SCIENCES | | |
|--------------------------------------|----|----|
| Physics | HL | SL |
| Chemistry | HL | SL |
| Biology | HL | SL |
| Environmental Systems and Societies* | | SL |
| Sports Exercise and Health Science | | SL |

| SUBJECT GROUP 5 MATHEMATICS | | |
|--|----|----|
| Mathematics: analysis and approaches | HL | SL |
| Mathematics: applications and interpretation | HL | SL |

* Environmental Systems and Societies can be used as a group 3 or 4 subject. It is only offered at SL.

SUBJECT GROUP 6 | THE ARTS

| | | |
|-------------|----|----|
| Visual Arts | HL | SL |
| Music | HL | SL |

All these courses will be offered, provided there is sufficient demand to ensure viable class sizes and that the classes can be timetabled. The final offers of all subjects, with the possibility of added subjects, will be posted later, based on student preferences.

Please note that school life does not take place only in the classroom. On the contrary, students will be involved in all sorts of activities and services, where they will learn new skills, and meet people from outside the school. The school works hard to integrate into the broader community.

RECOMMENDED ENTRY REQUIREMENTS FOR IB DIPLOMA

Due to the course content the following recommendations are made regarding entrance into some subjects at different levels:

- A* at IGCSE is recommended for Mathematics A&A HL.
- B or higher at IGCSE is recommended for Mathematics A&A SL.
- B or higher at IGCSE is recommended to take Biology, Chemistry or Physics at HL.
- B or higher at IGCSE is recommended for languages A and B at HL.



ASSESSMENT

IBDP Subjects are graded on a scale of 1 (minimum) to 7 (maximum). The students may gain up to another 3 points through the Theory of Knowledge and Extended Essay. The maximum number of points awarded for the IB Diploma is 45.

The following are the failing conditions of the IBDP:

- 1 | CAS requirements have not been met.
- 2 | Candidates' total points are fewer than 24.
- 3 | An "N" has been given for Theory of Knowledge, the Extended Essay or for a contributing subject.
- 4 | A grade "E" has been awarded for one or both of Theory of Knowledge and the Extended Essay.
- 5 | There is a grade 1 awarded in a subject/level.
- 6 | Grade 2 has been awarded three or more times (HL or SL).
- 7 | Grade 3 or below has been awarded four or more times (HL or SL).
- 8 | Candidate has gained fewer than 12 points on HL subjects (for candidates who register for four HL subjects, the three highest grades count).
- 9 | Candidate has gained fewer than 9 points on SL subjects (candidates who register for two SL subjects must gain at least 5 points at SL).
- 10 | IB coursework for one or more of the subjects has not submitted.

IB CERTIFICATE OVERVIEW

IBDP subjects can also be taken on an individual basis and will be certified accordingly. It is possible to enter UK Universities with IB Certificate subjects which consists of 3, 4 or 5 IBDP subjects selected at any level.

Completion of certificates means students do not have to complete all elements of the core (the extended essay, Theory of Knowledge or CAS) however, any element they do take would be rewarded by universities when applying through UCAS.

Certificates are not recognised in Portugal.





B | SUBJECT AREA DESCRIPTIONS

GROUP ONE | STUDIES IN LANGUAGE AND LITERATURE IN THE DIPLOMA PROGRAMME:

Languages A

These courses are designed for native speakers or students who have experience of using the language of the course in an academic context. The languages offered at the OBS at this level are English and Portuguese. The skills developed play a major part in supporting study across the IBDP curriculum.

- Language A: Literature in which the focus is directed towards the study of a wide range of literature, developing an understanding of the techniques involved in literary criticism and promoting the ability to form independent literary judgments.
- Language A: Language and Literature in which the focus is directed towards the study of a range of literary and non-literary texts, developing and understanding the constructed nature of meanings generated by language and the function of context in this process.

Both courses involve a range of learning techniques, such as: individual or group investigation and analysis; note taking; the leading of discussion; the sharing and explaining of research undertaken. In addition to the development of higher order critical thinking skills, there is an increased emphasis on written and oral communication skills. The oral work will include critical analysis and various forms of presentation to an audience. Students produce regular essays and written tasks to improve and prepare for examinations, to develop understanding and improve powers of written expression.

Group One | Aims

The aims of Language A: Literature and Language A: Language and Literature:

- 1 | Introduce students to a range of texts from different periods, styles and genres.
- 2 | Develop in students the ability to engage in close, detailed analysis of individual texts and make relevant connections.
- 3 | Develop the students' powers of expression, both in oral and written communication.
- 4 | Encourage students to recognize the importance of the contexts in which texts are written and received.
- 5 | Encourage, through the study of texts, an appreciation of the different perspectives of people from other cultures, and how these perspectives construct meaning.
- 6 | Encourage students to appreciate the formal, stylistic and aesthetic qualities of texts.
- 7 | Promote in students an enjoyment of, and lifelong interest in, language and literature.

The additional aims of the Language A: Language and Literature course are to:

- 8 | Develop in students an understanding of how language, culture and context determine the ways in which meaning is constructed in texts.
- 9 | Encourage students to think critically about the different interactions between text, audience and purpose.

Language A | Literature

Language A | Language and Literature

Both courses are designed for students from a wide variety of linguistic and cultural backgrounds who have experience of using the language of the course in an educational context. The focus of the study developed in each of the subjects varies depending on the subject's individual characteristics.

The language profile of students taking these courses will vary, but their receptive, productive and interactive skills should be strong and the expectation is that the course will consolidate them further. Students are expected to develop their proficiency, fluency and linguistic range, and in particular to acquire the vocabulary appropriate to the analysis of texts. They will also deepen their understanding of a wide variety of concepts explored through literary and non-literary texts in order to interpret, analyse, evaluate and then communicate this understanding in clear, organized and developed products.

The two courses each have their own identity and are designed to support future academic study or career-related paths by developing social, aesthetic and cultural literacy, as well as improving language competence and communication skills. For each course, the syllabus and assessment requirements are identical for all languages offered. The teaching and assessment of any particular studies in language and literature course will be conducted in that language.

Both courses explore elements of language, literature and performance and focus on:

- The relationships between readers, writers and texts
- The range and functions of texts across geographical space and historical time
- Aspects of intertextuality.

Within this framework, each course has its own emphases.

Language is crucial to both courses, but is treated more broadly in the Language A: Language and Literature course.

Literary texts are the sole focus of the language A: literature course, while the language A: language and literature course examines both literary and non-literary texts.

The study of literary, non-literary, visual and performance texts provides a focus for understanding how meaning is constructed within belief or value systems, and how it is negotiated across multiple perspectives generated by single or multiple readers. Thinking critically about texts, as well as responding to, producing or performing them, leads to an understanding of how language sustains or challenges ways of thinking and being. The study additionally builds an awareness that all texts may be understood in relation to their form, content, purpose, audience and their associated contexts, such as social, historical and cultural circumstances.

Course aims

The aims of these course are to enable students to:

- Engage with a range of texts, in a variety of media and forms, from different periods, styles, and cultures.
- Develop skills in listening, speaking, reading, writing, viewing, presenting and performing.
- Develop skills in interpretation, analysis and evaluation.
- Develop sensitivity to the formal and aesthetic qualities of texts and an appreciation of how they contribute to diverse responses and open up multiple meanings.
- Develop an understanding of relationships between texts and a variety of perspectives, cultural contexts, and local and global issues, and an appreciation of how they contribute to diverse responses and open up multiple meanings.
- Develop an understanding of the relationships between studies in Language A and other disciplines.
- Communicate and collaborate in a confident and creative way.
- Foster a lifelong interest in and enjoyment of language and literature.

Development of linguistic skills

Students will use and develop the following linguistic skills at all levels in the studies in Language A courses.

Receptive skills

Students will understand and evaluate a wide range of works, attending to textual detail, applying knowledge of textual conventions and making informed interpretations, analyses, comparisons and evaluations. They will consider arguments, distinguishing the main points from relevant supporting details and explanations. They will use a variety of strategies to deduce meaning and move beyond the literal level to broader implications.

Productive skills

Students will present and develop their ideas and opinions on a variety of topics, orally and in writing. They will construct and support complex arguments with explanations and examples. They will experiment with form by carrying out, as part of their class activities, transformative and re-creative activities either in writing or as performance. They will speak and write at length and with purpose in order to meet a wide range of communicative needs: describing, narrating, comparing, explaining, persuading and evaluating.

Interactive skills

Students will begin, maintain and close oral exchanges, displaying the ability to adjust style or emphasis; using a variety of strategies to maintain the flow of discussions; attending to diverse perspectives and opinions. They will take into account audience and purpose employing appropriate language, tone of voice, body language and gesture. They will also be able to interact with texts and maintain written conversation in various registers and on various platforms.

What students will learn in the *Language A: Literature course*

In the Language A: Literature course, students will learn about the various manifestations of literature as a powerful mode of writing across cultures and throughout history. They will explore and develop an understanding of factors that contribute to the production and reception of literature, such as:

- The creativity of writers and readers.
- The nature of the interaction with the writers' and readers' respective contexts and with literary tradition.
- The ways in which language can give rise to meaning and/or effect.
- The performative and transformative potential of literary creation and response.

Through close analysis of literary texts in a number of forms and from different times and places, students will consider their own interpretations, as well as the critical perspectives of others. In turn, this will encourage the exploration of how viewpoints are shaped by cultural belief systems and how meanings are negotiated within them. Students will be involved in processes of critical response and creative production, which will help shape their awareness of how texts work to influence the reader and how readers open up the possibilities of texts. With its focus on literature, this course is particularly concerned with developing sensitivity to aesthetic uses of language and empowering students to consider the ways in which literature represents and constructs the world and social and cultural identities.

Course requirements

At standard level (SL), at least 9 works must be studied across the three areas of exploration while at higher level (HL), at least 13 works must be studied.

Assessment

Standard level

Assessment component – Weighting

External assessment (3 hours), 70%

Paper 1: Guided literary analysis (1 hour 15 minutes), 35%

The paper consists of two passages from two different literary forms, each accompanied by a question. Students choose one passage and write an analysis of it. (20 marks).

Paper 2: Comparative essay (1 hour 45 minutes), 35%

The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course. (30 marks).

Internal assessment, 30%

This component consists of an individual oral that is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Individual oral (15 minutes)

Supported by an extract from one work written originally in the language studied and one from a work studied in translation, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt:

Examine the ways in which the global issue of your choice is presented through the content and form of two of the works that you have studied. (40 marks).

Higher Level

Assessment component – Weighting

External assessment (4 hours), 80%

Paper 1: Guided literary analysis (2 hours 15 minutes), 35%

The paper consists of two literary passages, from two different literary forms, each accompanied by a question. Students write an analysis of each of the passages. (40 marks).

Paper 2 Comparative essay (1 hour 45 minutes), 25%

The paper consists of four general questions. In response to one question, students write a comparative essay based on two works studied in the course. (30 marks)

Higher level (HL) essay, 20%

Students submit an essay on one literary text or work studied during the course. (20 marks).

The essay must be 1,200–1,500 words in length.

Internal assessment, 20%

This component consists of an individual oral that is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Individual oral (15 minutes)

Supported by an extract from one work written originally in the language studied and one from a work studied in translation, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt:

Examine the ways in which the global issue of your choice is presented through the content and form of two of the works that you have studied. (40 marks).

The learner portfolio

The learner portfolio is a central element of the Language A: Literature course and is mandatory for all students. It is an individual collection of student work compiled during the two years of the course.

The work carried out for the learner portfolio forms the basis of preparation for the assessment, although the portfolio itself will not be directly assessed or moderated by the IB. However, it is a fundamental element of the course, providing evidence of the student's work and a reflection of his or her preparation for the assessment components. Schools may be required to submit these learner portfolios in cases in which it is necessary to determine the authenticity of student's work in a component, to certify that the principles of academic honesty have been respected or to evaluate the implementation of the syllabus in a school.

The learner portfolio must consist of a diversity of formal and informal responses to the works studied, which may come in a range of critical and/or creative forms, and in different media. It is the student's own record of discovery and development throughout the course.

What students will learn in the Language A: Language and Literature course

In the Language A: Language and Literature course students will learn about the complex and dynamic nature of language and explore both its practical and aesthetic dimensions. They will explore the crucial role language plays in communication, reflecting experience and shaping the world. Students will also learn about their own roles as producers of language and develop their productive skills. Throughout the course, students will explore the various ways in which language choices, text types, literary forms and contextual elements all effect meaning. Through close analysis of various text types and literary forms, students will consider their own interpretations, as well as the critical perspectives of others, to explore how such positions are shaped by cultural belief systems and to negotiate meanings for texts. Students will engage in activities that involve them in the process of production and help shape their critical awareness of how texts and their associated visual and audio elements work together to influence the audience/reader and how audiences/readers open up the possibilities of texts. With its focus on a wide variety of communicative acts, the course is meant to develop sensitivity to the foundational nature, and pervasive influence, of language in the world at large.

Course requirements

Across the three areas of exploration at least four literary works must be studied in the SL course and at least six works must be studied in the HL course. In addition, a wide range of non-literary texts will be studied.

Standard level

Assessment component – Weighting

External assessment (3 hours), 70%

Paper 1: Guided textual analysis (1 hour 15 minutes), 35%

The paper consists of two non-literary passages, from two different text types, each accompanied by a question. Students choose one passage and write an analysis of it. (20 marks).

Paper 2: Comparative essay (1 hour 45 minutes), 35%

The paper consists of four general questions. In response to one question students write a comparative essay based on two works studied in the course. (30 marks).

Internal assessment, 30%

This component consists of an individual oral which is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Individual oral (15 minutes)

Supported by an extract from one non-literary text and one from a literary work, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt:

Examine the ways in which the global issue of your choice is presented through the content and form of two of the texts that you have studied. (40 marks).

Higher Level

External assessment (4 hours), 80%

Paper 1: Guided textual analysis (2 hours 15 minutes), 35%

The paper consists of two non-literary passages, from two different text types, each accompanied by a question. Students write an analysis of each of the passages. (40 marks).

Paper 2: Comparative essay (1 hour 45 minutes), 25%

The paper consists of four general questions. In response to one question students write a comparative essay based on two works studied in the course. (30 marks).

HL essay, 20%

Students submit an essay on one non-literary text or a collection of non-literary texts by one same author, or a literary text or work studied during the course. (20 marks)

The essay must be 1,200-1,500 words in length.

Internal assessment: Individual oral (15 minutes), 20%

This component consists of an individual oral which is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Individual oral (15 minutes)

Supported by an extract from both one non-literary text and one from a literary work, students will offer a prepared response of 10 minutes, followed by 5 minutes of questions by the teacher, to the following prompt:

Examine the ways in which the global issue of your choice is presented through the content and form of two of the works that you have studied. (40 marks).

Career and Degree Opportunities

Language A courses are a frequent requirement at university across a range of disciplines. They are particularly useful in areas such as humanities, further literature, journalism, law, media studies, graphic design and the arts. The critical and communication skills developed are widely applicable in career and further educational situations.

GROUP TWO | LANGUAGE ACQUISITION

LANGUAGES B

Language B is an additional language-learning course designed for students with some previous learning of that language. It may be studied at either SL or HL. The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written and spoken material. Such material will extend from everyday oral exchanges to literary texts, and should be related to the cultures concerned.

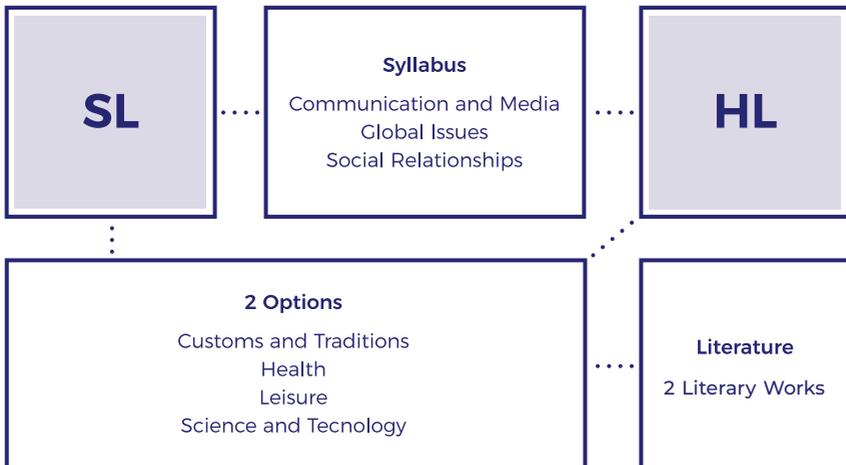
Distinction Between SL and HL

Portuguese, Spanish and French B subjects are available at SL and HL. The courses give students the possibility of reaching a high degree of competence in an additional language while exploring the cultures where that language is spoken. The courses aim to develop the students' linguistic competence and intercultural understanding.

Prior Learning

Many factors determine the group 2 course that a student should take: the student's best second language, and any previous knowledge of the language of study. The most important consideration is that the language B course should be a challenging educational experience for the student.

Syllabus outline



LANGUAGES *Ab Initio*

Language *Ab Initio* is a language acquisition course designed for students with no prior experience of the target language, or for those students with very limited previous exposure. It should be noted that language *ab initio* is offered at SL only. In the language *ab initio* course, students develop the ability to communicate in the target language through the study of language, themes and texts. In doing so, they also develop conceptual understandings of how language works. Communication is evidenced through receptive, productive and interactive skills across a range of contexts and purposes that are appropriate to the level of the course. The study of language requires careful attention to forms, structures, functions and conceptual understandings of language. Knowledge of vocabulary and grammar – the what of language – is reinforced and extended by understanding the why and how of language: audience, context, purpose, meaning.

| | SL | PERCENTAGE OF FINAL GRADE |
|---|--|-------------------------------------|
| Paper 1 (externally assessed by examiner) | <ul style="list-style-type: none"> • 1 hour • Productive skills – writing (30 marks) • Two written tasks of 70-150 words each from a choice of three tasks, choosing a text type for each task from among those listed in the examination instructions. | <p>75%</p> <p>25%</p> |
| Paper 2 (externally assessed by examiner) | <ul style="list-style-type: none"> • 1 hour and 45 minutes • Receptive skills – separate sections for listening and reading (65 marks) • Listening comprehension (45 minutes) (25 marks) • Reading comprehension (1 hour) (40 marks) • Comprehension exercises on three audio passages and three written texts, drawn from all five themes. | 50% |
| Internal Assessment (internally assessed by the teacher and externally moderated by the IB at the end of the course) | <ul style="list-style-type: none"> • Individual oral assessment A conversation with the teacher, based on a visual stimulus and at least one additional course theme. (30 marks) | 25% |

5 Prescribed themes: Identities, Experiences, Human Ingenuity, Social Organisation, Sharing the planet.

GROUP THREE | INDIVIDUALS AND SOCIETIES

Business Management

Business Management studies business functions, management processes and decision-making in contemporary contexts of strategic uncertainty. It examines how business decisions are influenced by factors internal and external to an organization, and how these decisions impact upon its stakeholders, both internally and externally. Business Management also explores how individuals and groups interact within an organization, how they may be successfully managed and how they can ethically optimize the use of resources in a world with increasing scarcity and concern for sustainability. Business Management is the study of decision-making within an organization, whereas economics is the study of scarcity and resource allocation, both on micro and macro levels.

Students learn to analyse, 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 socio-cultural and economic contexts in which those organizations operate.

Emphasis is placed on strategic decision-making and the operational business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course, as this integration promotes a holistic overview of Business Management. Through the exploration of six concepts underpinning the subject (change, culture, ethics, globalization, innovation and strategy), the Business Management course allows students to develop their understanding of interdisciplinary concepts from a Business Management perspective.

Syllabus Outline

Modules

| | |
|---|---------------------------|
| 1. Business Organisation and Environment. | 4. Marketing. |
| 2. Human Resource Management. | 5. Operations Management. |
| 3. Finance and Accounts. | |

Assessment

| | SL | HL |
|---------------------|------------------------------|-------------------------------|
| P1 | 35% – 1 hour and 15 minutes. | 35% – 2 hours and 15 minutes. |
| P2 | 40% – 1 hour and 45 minutes. | 40% – 2 hours and 15 minutes. |
| Internal Assessment | 25% – Written Commentary. | 25% – Research Project. |

Career and Degree Opportunities

The course is ideally suited to students who want to pursue a career in business, management or finance. It is also useful to students looking to pursue other areas as it equips students with knowledge and skills that are vital to those entering the world of work in general.

Some leading UK Universities (LSE and Warwick) have requested Mathematics HL to be studied also at IBDP for an Economics course.

Economics

Economics is a dynamic social science. The study of Economics is essentially about the concept of scarcity and the problem of resource allocation.

Although Economics involves the formulation of theory, it is not a purely theoretical subject: economic theories can be applied to real-world examples. Neither is Economics a discreet subject, since Economics incorporates elements of history, geography, psychology, political studies and many other related fields of study.

Economics must consider how economic theory is to be applied in an international context. Economics has an important role to play in promoting international cooperation and mutual understanding because of its focus on global issues.

The key objectives of the course are so that the student will be expected to:

- 1 | Have an understanding and knowledge of economic concepts and theories.
- 2 | Apply economic theory to a range of circumstances and a variety of situations.
- 3 | Analyse information through the use of economic concepts and theories.
- 4 | Evaluate concepts and theories from different economic perspectives.

Assessment

| | SL | HL |
|---------------------|------------------------------|------------------------------|
| P1 | 40% – 1 hour and 30 minutes. | 30% – 1 hour and 30 minutes. |
| P2 | 40% – 1 hour and 30 minutes. | 30% – 1 hour and 30 minutes. |
| P3 | | 20% – 1 hour. |
| Internal Assessment | 20% – Written Commentaries. | 20% – Written Commentaries. |



Syllabus Outline

Higher Level and Standard Level students study the same sections set out below.

Section 1: Microeconomics. Section 2: Macroeconomics. Section 3: International Economics. Section 4: Development Economics.

HL students take an additional paper based on handling quantitative data. To be a successful Economics student you should be a good all rounder, comfortable in English and Maths, and have a genuine interest in current affairs and global issues.

Career and Degree Opportunities

Economics is a good subject to take if you wish to study economics, business, finance, law, politics and other social sciences like sociology at degree level or if you have a desire to pursue a career in these fields in later life.

Some Universities require Economics HL and Mathematics HL if you wish to study Economics at degree level. These include LSE, Oxbridge, Warwick and Faculdade de Economia da Universidade do Porto. You would be advised, even now, to check whether certain courses in the UK require Mathematics HL to go along with Economics HL.

Geography

Geography is a dynamic subject that is firmly grounded in the real world; it seeks to identify trends and patterns and examines the processes behind them. Geography describes and helps to explain the similarities and differences between spaces and places. These may be defined on a variety of scales and from a range of perspectives.

Within group 3 subjects, Geography is distinctive in that it occupies the middle ground between social sciences and natural sciences, and ensures that students acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

The Geography course embodies global and international awareness in several distinct ways. It examines key global issues, such as poverty, sustainability and climate change. It considers examples and detailed case studies at a variety of scales, from local to regional, national and international. Inherent in the syllabus is a consideration of different perspectives, economic circumstances and social and cultural diversity.

Geography seeks to develop international understanding and fosters a concern for global issues as well as raising students' awareness of their own responsibility at a local level. Geography also aims to develop values and attitudes that will help students reach a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interconnected world.

Basic Outline of IBDP Geography

Part 1 Geographic themes – seven options, two options are studied at SL, and three options at HL.

- 1 | Freshwater – drainage basins.
- 2 | Oceans and coastal margins.
- 3 | Extreme environments.
- 4 | Geophysical hazards.
- 5 | Leisure, tourism and sport.
- 6 | Food and health.
- 7 | Urban environments.

Part 2 SL and HL core Geographic perspectives – global change.

- 1 | Population distribution – changing population.
- 2 | Global climate – vulnerability and resilience.
- 3 | Global resource consumption and security.

Part 2 HL only Geographic perspectives – global interactions.

- 1 | Power, places and networks.
- 2 | Human development and diversity.
- 3 | Global risks and resilience.

Internal Assessment

Fieldwork Internal Assessment (SL/HL) Fieldwork, leading to one written report (2500 words) based on a fieldwork question assessed out of 25 marks. Information collection and analysis with evaluation. This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Career and Degree Opportunities

Geography is one of the most versatile subjects to study and can lead to career prospects in Management, Law, Education, City Planning and Government. Many universities consider it as a Science subject and it is useful for Geological Sciences, Journalism, Psychology, Politics and Resource Management.

History

History matters because it seeks to explain the past, an understanding of which is vital if we are to make sense of our present and future. We must not only seek to find out when things happened, but also why they happened. History is not about simply learning accepted “facts”, but challenging accepted ideas and offering possible alternative and personal views.

The aims of IBDP History are to promote an understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations; encourage an understanding of the present through critical reflection upon the past; encourage an understanding of the impact of historical developments at national, regional and international levels and to develop an awareness of one's own historical identity through the study of the historical experiences of different cultures.

Basic Outline of IBDP History

Students who choose History at Higher Level or Standard Level study the following topics:

Paper 1 Prescribed topic: The Move to Global War.

Paper 2 World History Topic 10: Authoritarian States (20th Century) – a study of the origins, ideology, organisation, nature and impact of totalitarian single-party states. The dictatorships of Hitler, Stalin and Mao Zedong will be compared to consider similarities and differences between regimes.

Paper 2 World History Topic 11: Causes and Effects of 20th Century Wars – a study of conflict in the 20th Century, which includes examples of civil wars, revolutionary wars and guerrilla warfare.

Paper 3 (for students who choose History at Higher Level) – They will study Regional Option 4, The History of Europe.

Assessment

Higher Level – 3 exam papers (80% of final mark) based upon all parts of the course plus an internally marked and externally moderated assessment essay (20%) – 2,200 words, which enables students to choose a topic of historical interest to them.

Standard Level – 2 exam papers (75% of final mark) plus an internally marked and externally moderated piece of coursework (25%) – usually a 2,000 word essay.

Career and Degree Opportunities

IBDP History is usually required for students who wish to study History in Higher Education. A History degree, like most other purely academic degrees, can be a pathway into many possible careers. The study of History involves the development of many worthwhile and cross curricular skills; therefore a History degree is often taken as proof of all round ability and as such it can lead into such diverse areas as banking, accountancy, law, teaching, marketing, the media, the Civil Service, the military, industrial administration and information handling/retrieval. Similarly, IBDP History can also be regarded as a route into many possible Higher Education courses that are not normally taught at school level.

Information Technology in a Global Society (ITGS)

The IB Diploma Programme Information Technology in a Global Society (ITGS) course is the study and evaluation of the impacts of information technology (IT) on individuals and society. It explores the advantages and disadvantages of the access and use of digitized information at the local and global level. ITGS provides a framework for the student to make informed judgments and decisions about the use of IT within social contexts.

Students come into contact with IT on a daily basis because it is so pervasive in the world in which we live. This increasingly widespread use of IT inevitably raises important questions with regard to the social and ethical considerations that shape our society today. ITGS offers an opportunity for a systematic study of these considerations, whose range is such that they fall outside the scope of any other single discipline.

Syllabus Outline

Students at SL and HL in ITGS are presented with a syllabus that has a common core consisting of three strands:

- A | Social and Ethical Significance.
- B | Application to Specified Scenarios.
- C | IT Systems.

HL students also study the HL extension consisting of two additional topics in the IT systems strand:

- A | IT systems in organizations.
- B | Robotics, artificial intelligence and expert systems.

In addition, the HL course has one more externally assessed component that comprises a pre-seen case study based on a fictitious organization; this allows students to research various aspects of the subject, which may include new technical concepts and additional subject content, in greater depth.

Assessment

Higher Level – 3 exam papers (80% of final mark) based upon all parts of the course plus an internally marked and externally moderated piece of coursework (20%). The coursework is a project which requires the development of an original IT product for a specified client. Students must produce: I) an original IT product and II) supporting documentation (word limit 2,000 words).

Standard Level – 2 exam papers (70% of final mark) plus an internally marked and externally moderated piece of coursework (30%). The coursework is a project which requires the development of an original IT product for a specified client. Students must produce: I) an original IT product and II) supporting documentation (word limit 2,000 words).

Career and Degree Opportunities

This course would benefit any student wishing to further their studies in the field of ICT, however, it will be focusing on the social issues and less emphasis is placed on the technical aspects of ICT. ITGS forms a base for studies in many Social Sciences which use Global Perspectives as an element. These courses can lead to careers in fields as far apart as Politics and Journalism.

Psychology

The IB Diploma Programme psychology course is the systematic study of behaviour and mental processes.

Since the psychology course examines the interaction of biological, cognitive and sociocultural influences on human behaviour, it is well placed in group 3, individuals and societies. Students undertaking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow them to have a greater understanding of themselves and appreciate the diversity of human behaviour.

The holistic approach reflected in the curriculum, which sees biological, cognitive and sociocultural analysis being taught in an integrated way ensures that students are able to develop an understanding of what all humans share, as well as the immense diversity of influences on human behaviour and mental processes. The ethical concerns raised by the methodology and application of psychological research are also key considerations of the IB psychology course.

GROUP FOUR | EXPERIMENTAL SCIENCES

It is mandatory for IBDP students to take at least one Group 4 Science subject*. At OBS we offer a choice of four IBDP Experimental Sciences:

- IB Physics (SL or HL).
- IB Chemistry (SL or HL).
- IB Biology (SL or HL).
- IB Environmental Systems and Societies (SL only).
- IB Sports Exercise and Health Science (SL only).

The Group Four Project (G4P)

As part of the scheme of practical work in the Sciences, students in F11 take part in the G4P. This is a one-group activity as the name suggests, taking in all the students of each experimental science.

The group brainstorms for ideas, discusses these topics and then decides on one to investigate collectively. The product of such investigations is not assessed. In the past, a group chose “Surfing” as its title and investigated the Physics, Chemistry and Biology of Water Pollution and the Aerodynamics of the board.

Each student spends 10 hours of practical work on the G4P.

*Please note that currently in order to study Medicine in Portugal pupils will have to do a non-regular Diploma of Maths, Physics, Chemistry, Biology, Language A and Language B. It means they will not be able to do a Group 3 or Group 6 subject.

- B or higher at IGCSE is recommended to take Biology, Chemistry or Physics at HL
- C or higher at IGCSE is recommended to take ESS, SEHS, Biology (SL), Chemistry (SL) or Physics (SL)
- IGCSE Chemistry (single science or as part of Co-ordinated Science) is required to take Biology (SL/HL)

Physics

Physics is the most fundamental of the experimental sciences as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies.

Classical Physics is built upon the great pillars of Newtonian mechanics, electromagnetism and thermodynamics which went a long way to deepening our understanding of the universe. From Newtonian mechanics came the idea of predictability in which the universe was deterministic. However, at the end of the 19th Century classical Physics could not explain experimental discoveries and was eventually replaced with quantum mechanics.

In the IBDP Physics course both theory and experiments will be undertaken which will complement one another naturally, as they do in the wider scientific community. The Diploma Programme Physics course allows students to develop traditional practical skills and techniques alongside learning new concepts. It also allows students to develop interpersonal skills and information and communication technology skills which are essential in modern scientific endeavour.

As well as gaining an understanding of the natural world, students will gain an understanding of how to change the world through the technological side of Physics. Here Physics principles can be applied to construct and alter the material world to suit our needs. The moral, ethical and social impact of Physics on society will be raised.

The major topics covered are:

- Mechanics – kinematics, linear and circular motion, forces, Newton's laws, momentum, energy, projectile motion, gravitation.
- Thermal physics – heating and cooling, kinetic theory of gases, thermodynamics.
- Waves – properties of waves, travelling waves, standing waves, interference.
- Electricity and magnetism – current electricity, magnetism, electromagnetic induction.
- Fields and Forces – gravitational, electrical and magnetic fields.
- Atomic and nuclear physics – the atom, radioactivity, nuclear energy,
- Energy, Power and Climate change – energy sources and their environmental effects.

In addition all students will study one option e.g.: astrophysics, relativity, engineering physics and imaging.

Assessment

Internal – The internal assessment, worth 20% of the final assessment, consists of one scientific investigation.

External – Written papers contribute 80% of the final grade.

Career And Degree Opportunities

Engineering – aeronautic, civil, electrical, electronics, mechanical, materials, chemical, nuclear, etc.... Medicine and Pharmacy. Physics also seems a popular requirement for many non-science based disciplines.

Chemistry

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigative skills. It is called the central science as chemical principles underpin both the physical environment in which we live and all biological systems. Apart from being a subject worthy of study in its own right, Chemistry is a prerequisite for many other courses in higher education, such as Medicine, Biological Science and Environmental Science, and serves as useful preparation for employment.

Syllabus Outline

The syllabus consists of a number of compulsory topic areas as well as options. The difference between studying Chemistry at Higher Level and Standard Level (HL or SL) is that at HL more aspects of every topic will be discussed, and in significantly greater depth.

The topic areas are:

| | Additional higher level (AHL): |
|--------------------------------------|---|
| 1. Stoichiometric relationships. | 12. Atomic structure. |
| 2. Atomic structure. | 13. The periodic table — the transition metals. |
| 3. Periodicity. | 14. Chemical bonding and structure. |
| 4. Chemical bonding and structure. | 15. Energetics/thermochemistry. |
| 5. Energetics/thermochemistry. | 16. Chemical kinetics. |
| 6. Chemical kinetics. | 17. Equilibrium. |
| 7. Equilibrium. | 18. Acids and bases. |
| 8. Acids and Bases. | 19. Redox processes. |
| 9. Redox processes. | 20. Organic Chemistry. |
| 10. Organic Chemistry. | 21. Measurement and analysis. |
| 11. Measurement and data processing. | |

Options:

- A | Materials.
- B | Biochemistry.
- C | Energy.
- D | Medicinal Chemistry.

Assessment

Practical work is an essential element of the Group Four experimental sciences.

HL students are required to spend 60 hours, and SL students 40 hours on practical investigative work. They will also spend 10 hours on the inter-disciplinary Group Four Project. Practical work counts for 20% of the overall Chemistry grade.

At the end of the course students are assessed externally by written examination which comprises 3 papers (multiple choice, structured answers and options).

Career and Degree Opportunities

A background in Chemistry at IBDP level aids a successful pursuit of a variety of studies, including medicine, dentistry, pharmacy, biological sciences, agriculture, food technology and dietetics, environmental studies, material sciences and physics. To enter certain courses, it may be required that Chemistry be studied in the IBDP.

Biology

Biology is the study of living organisms. This study is undertaken at a variety of levels from the molecule and to that of the biosphere, each with distinctive approaches and methods. By the end of the course, however, the student should have developed an appreciation of the interactions between these levels and of the organisms and their functions within the biosphere.

The design of Science at IBDP level seeks to incorporate recent scientific thinking. Curriculum content has been selected with the realisation that because science is continuously and rapidly progressing, both in breadth and depth, the contemporary science curriculum can never be considered to be stable.

The new emphasis in IBDP Biology is to provide students with ample opportunities to go beyond the understanding of concepts to include areas such as:

- Nature of Science.
- Theory of Knowledge.
- International Mindedness.
- Cross-Curricular Links.
- Application and Skills (including ICT).

Basic Outline of Biology

Students who choose Biology at Standard Level carry out 40 hours of practical work and study the following topics:

- Topic 1 Cell Biology.
- Topic 2 Molecular Biology.
- Topic 3 Genetics.
- Topic 4 Ecology.
- Topic 5 Evolution and Biodiversity.
- Topic 6 Human Physiology.

Students who choose Higher Level Biology carry out 60 hours of practical work and study all of the core topics in more detail.

In addition, they study:

- Topic 7 Nucleic Acids.
- Topic 8 Metabolism, Cell Respiration and Photosynthesis.
- Topic 9 Plant Biology.
- Topic 10 Genetics.
- Topic 11 Animal Physiology.

Options (students study ONE option from the list):

- Option A Neurophysiology and Behaviour.
- Option B Biotechnology and Informatics.
- Option C Ecology and Conservation.
- Option D Human Physiology.

Assessment

Internal – Practical work is assessed from one final individual investigation worth 20% of the final grade, including 10 hours of individual practical work.

External – written papers contribute towards 80% of the final grade.

Career and Degree Opportunities

The breadth of biological sciences is reflected in the range of jobs available in these subjects; agriculture, applied biology, biochemistry, biomolecular science, biophysics, botany, cell biology, environmental biology, marine biology, sports science, social biology, zoology just to mention a few. Opportunities are available in work related to medicine, as well as in many other areas such as with food, agriculture and water. Major employers include universities, hospitals, government laboratories and industry. Some biologists use their subject outside a laboratory in work such as medical sales, or in the production of pharmaceuticals or foodstuffs. Some areas of biology, e.g. conservation, ecology and wildlife are highly attractive careers where ability, determination and willingness are needed. Biology develops intellectual and personal skills which can be used in a wide variety of work as diverse as finance, computing, retailing and the armed services.

Environmental Systems and Societies

Environmental Systems and Societies is the study of the environment from a scientific, geographical and social basis. By the end of the course, students will have developed a good understanding of environmental issues from an ethical and political perspective as well as a theoretical one. This will be applied locally as well as globally.

As with the other science courses at IBDP, Environmental Systems and Societies incorporates recent scientific thinking and, as a result the curriculum, offers ample opportunities for research and discovery.

Basic Outline of the Course

The course can only be studied at standard Level including:

- Topic 1 Foundations of environmental systems and societies.
- Topic 2 Ecosystems and Ecology.
- Topic 3 Biodiversity and Conservation.
- Topic 4 Water, Food Production Systems and Society.
- Topic 5 Soil Systems and Society.
- Topic 6 Atmospheric Systems and Society.
- Topic 7 Climate Change and Energy Production.
- Topic 8 Human Systems and Resource Use.

Assessment

Internal – individual investigation of a research question designed and implemented by each student that has its foundations in the environment and society. Written report of such investigation brings 25% to the overall grade and serves as an opportunity for an independent study that focuses on a particular aspect of an ESS issue and reflects students' environmental value systems.

External – Paper 1 (25%) is a case study based paper that requires data analysis and application. Paper 2 (50%) is a two section paper that tests knowledge and understanding of topics covered throughout the course.

Career and Degree Opportunities

The breadth of this course opens up a wide range of possibilities in agriculture, environmental sciences and marine biology, earth sciences, geology, ecology, forestry, conservation and wildlife.

Sport, Exercise & Health Science

The course is designed to enable students to look more closely at human physical performance within the specialist areas of sport, exercise and health. It will also provide the basis for applying scientific principles through a critical evaluation of human performance and draw on historical, current and emerging global issues as a context for studies.

Who is the option for?

Any student who has an interest in applied sciences and sport or physical activity and who enjoys investigations in both a laboratory and field settings. It is good as a stand-alone choice or for pupils who are intending to go on to University to study Sport & Exercise Sciences, Injury and Rehabilitation, Physiotherapy, Physical Education teaching, Sports Coaching, Sports Analysis, Sports Product Design, Fitness Instruction. It also enables a broader more detailed understanding of the industries that may be a focus for further studies in Marketing & Promotion, Business Management, Psychology, some specialised branches of Medicine and Biochemistry, Podiatry, Osteopathy, Chiropractics, Dietetics & Nutrition.

The aims of the course are to:

- Provide stimulating and challenging opportunities for scientific study and creativity within a global context.
- Provide a body of knowledge, methods and techniques that characterize science and technology, enabling students to apply and use a body of knowledge, methods and techniques that characterize science and technology.
- Develop an ability to analyse, evaluate and synthesize scientific information.
- Engender an awareness of the need for, and the value of, effective collaboration and communication during scientific activities.
- Develop experimental and investigative scientific skills.
- Develop and apply the students' information and communication technology skills in the study of science.
- Raise awareness of the moral, ethical, social, economic and environmental implications of using science and technology.
- Develop an appreciation of the possibilities and limitations associated with science and scientists.
- Encourage an understanding of the relationships between scientific disciplines and the overarching nature of the scientific method.

Syllabus

| CORE TOPICS | |
|--|--|
| SL | HL |
| <p>Topic 1: Anatomy The skeletal system. The muscular system.</p> | <p>Topic 7: Further Anatomy The skin system. The brain.</p> |
| <p>Topic 2: Exercise Physiology The ventilatory system. The cardiovascular system.</p> | <p>Topic 8: Endocrine system</p> |
| <p>Topic 3: Energy Systems Nutrition. Carbohydrate and fat metabolism. Nutrition and energy systems.</p> | <p>Topic 9: Fatigue</p> |
| <p>Topic 4: Movement Analysis Neuromuscular function. Joint and movement type. Fundamentals of biomechanics.</p> | <p>Topic 10: Friction & Drag</p> |
| <p>Topic 5: Skill in Sport The characteristic and classification of skill. Information processing. Principles of skill learning.</p> | <p>Topic 11: Notational Analysis Pedagogy for skill acquisition. Notational analysis.</p> |
| <p>Topic 6: Measurement and evaluation of human performance Statistical analysis. Study design. Components of fitness. Principles of training programme design.</p> | <p>Topic 12: Genetics & Athletic</p> <hr/> <p>Topic 13: Exercise & Immunity</p> |

The Options offered

A. Optimizing physiological performance.
Training.
Environmental factors and performance.
Non nutritional Ergogenic aids.
Recovery from Sport & Exercise.
Training & Performance at Altitude.

B. Psychology of sport.
Individual differences.
Motivation.
Mental preparation for sports.
Psychological skills training.
Talent identification & development.
Self-determination theory & Self-regulated learning.

Assessment

| EXTERNAL | | |
|----------------------|--|---|
| | SL | HL |
| Paper 1 (20%) | (45 minutes) 30 multiple-choice questions on the core syllabus. | (1 hour) 40 multiple-choice questions on the core syllabus. |
| Paper 2 (35%) | (1 hour and 15 minutes) Section A: Students answer one data-based question and several short-answer questions on the core. Section B: Students answer one of three extended-response question on the core. | (2 hours and 15 minutes) Section A: Students answer one data-based question and several short-answer questions on the core. Section B: Students answer one of three extended-response question on the core. |
| Paper 3 (25%) | (1 hour) Several short-answer questions (all compulsory) in each of the two options studied. | (1 hour and 15 minutes) Several short-answer questions (all compulsory) in each of the two options studied. |
| INTERNAL | | |
| (20%) | (10 hours) A research study whose topic is decided by the learner | |



GROUP FIVE | MATHEMATICS

The New DP Mathematics Courses

Two mathematics subjects have been designed, each offered at SL and HL. They are Mathematics – analysis and approaches and Mathematics – applications and interpretation.

Mathematics: analysis and approaches

Mathematics can be described as having two facets. One facet is driven by abstract concepts and generalizations that are linked to form new ideas, which may not have any immediate application in the real world. This approach to mathematics is built on axioms, and is presented in the form of conjectures and logical theoretical arguments to form theorems. We live in a world of innovation which is often dependent on this deep understanding of mathematics and analytical expertise.

Mathematics: analysis and approaches follows this approach. The course covers topics that are seen as necessary for further study of mathematics, and includes the study of functions, trigonometry and calculus, as well as topics that investigate patterns, look for conjectures, and develop proofs, for example, direct proof at SL, and proof by contradiction and by induction at HL. This course is offered at both SL and HL.

Mathematics: applications and interpretation

The other side of mathematics is based on describing the real world and solving practical problems. It is often carried out within the context of other disciplines. Mathematics is used as a language and a tool to help us explore the world around us and beyond. Trends are analyzed, predictions are made, and relationships are explored. In a data – and technology – rich world, skills such as modelling and prediction are increasingly becoming more important.

Mathematics: applications and interpretation follows this approach, and includes topics that are traditionally part of pre-university mathematics courses, such as statistics and calculus. The course makes extensive use of technology to allow students to explore data, develop models and make predictions, often within the context of a practical problem. This course is presently only offered at SL.

Source: Lorraine Heinrichs (Oxford University Press).

GROUP SIX | THE ARTS

Visual Arts

The Visual Arts are an integral part of everyday life, permeating all levels of human creativity, expression, communication and understanding. The IB Diploma Programme Visual Arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study Visual Arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. Supporting the International Baccalaureate mission statement and learner profile, the course encourages students to actively explore the Visual Arts within and across a variety of local, regional, national, international and intercultural contexts. Through inquiry, investigation, reflection and creative application, Visual Arts students develop an appreciation for the expressive and aesthetic diversity in the world around them, becoming critically informed makers and consumers of visual culture.

Learning outcomes

Throughout the course, teachers should help students to:

- Develop the skills and techniques of investigation – both visual and written.
- Relate art to its cultural and historical contexts.
- Explore art concepts.
- Explore art elements.
- Develop and use the processes of art criticism and analysis.
- Develop confidence and expertise in the use of various media.
- Extend their knowledge of design.
- Share their work with an audience through displays, exhibitions or presentations.
- Extend individual investigation to inform practical work.
- Make connections between ideas and practice – both their own and others'.

| ESL AND HL | |
|---------------------|-----|
| External Assessment | |
| Comparative Study | 20% |
| Process Portfolio | 40% |
| Internal Assessment | |
| Exhibition | 40% |

Syllabus Outline

The Visual Arts syllabus demonstrates a clear distinction between the course at SL and at HL, with additional assessment requirements at HL that allow for breadth and greater depth in the teaching and learning.

Music

Involving aspects of the composition, performance and critical analysis of music, the course exposes students to forms, styles and functions of music, from a wide range of historical and socio-cultural contexts. Students create, participate in, and reflect upon music from their own background and those of others. They develop practical and communicative skills which provide them with the opportunity to engage in music for further study, as well as for lifetime enjoyment.

Both standard level (SL) and higher level (HL) music students are required to study musical perception.

SL students in music are then required to choose one of three options:

- Creating (SLC).
- Solo performing (SLS).
- Group performing (SLG).

HL students are required to present both creating and solo performing.

Outline of IBDP Music

Music perception

Study, analysis and examination, comparing and contrasting of musical cultures (compulsory for SL and HL students).

Creating

The development of creative skills through exploration, control and development of musical elements.

The following options are available:

- Composing.
- Music technology composing.
- Arranging.
- Improvising.
- Stylistic techniques.
(compulsory for HL and SLC* students only).

Solo performing

The development of performance skills through solo music making (compulsory for HL and SLS* students only).

Group performing

The development of performance skills through group music making (compulsory for SLG* students only).

Assessment

Higher Level

| TYPE OF ASSESSMENT | FORMAT OF ASSESSMENT | Weighting of final grade (%) |
|-----------------------------|---|------------------------------|
| Listening paper | Five musical perception questions. | 30 |
| Musical Links investigation | A written media script of 2,000 words or less, investigating the significant musical links between two or more pieces from distinct musical cultures. | 20 |
| Creating and performing | Creating: Three pieces of coursework with recordings and written work. Solo performing: A recording selected from pieces presented during one or more public performances. | 25 |

Standard Level

| TYPE OF ASSESSMENT | FORMAT OF ASSESSMENT | Weighting of final grade (%) |
|-----------------------------|--|------------------------------|
| Listening paper | Four musical perception questions. | 30 |
| Musical Links investigation | A written media script of 2,000 words or less, investigating the significant musical links between two or more pieces from distinct musical cultures. | 20 |
| Creating or performing | Students choose one of the three options: Creating: Two pieces of coursework with recordings and written work. Solo performing: A recording selected from pieces presented during one or more public performances. Group performing: A recording selected from pieces presented during two or more public performances. | 50 |

C | CORE IB DIPLOMA REQUIREMENTS

Extended Essay

The Extended Essay is an in-depth study of a focused topic chosen from the list of approved Diploma Programme subjects — normally one of the student's six chosen subjects for the IB Diploma. It is intended to promote high-level research and writing skills, intellectual discovery and creativity. It provides students with an opportunity to engage in personal research on a topic of their own choice, under the guidance of a supervisor (a teacher in the school). This leads to a major piece of formally presented, structured writing, in which ideas and findings are communicated in a reasoned and coherent manner, appropriate to the subject chosen. The students will reflect on the process of research and writing which will be stored in a reflection space on *Managebac*. They will have three formal reflection sessions with their supervisor; the last being a *vive voce*.

The extended essay is assessed against common criteria, interpreted in ways appropriate to each subject.

The Extended Essay is:

- Compulsory for all Diploma Programme students.
- Externally assessed and, in combination with the grade for Theory of Knowledge, contributes up to three points to the total score for the IB Diploma.
- A piece of independent research/investigation on a topic chosen by the student in cooperation with a supervisor in the school.
- Chosen from the list of approved Diploma Programme subjects, published in the Handbook of procedures for the Diploma Programme.
- Presented as a formal piece of scholarship containing no more than 4,000 words
- The result of approximately 40 hours of work by the student.
- Concluded with a short interview, or *viva voce*, with the supervising teacher (recommended).

In the Diploma Programme, the Extended Essay is the prime example of a piece of work where the student has the opportunity to show knowledge, understanding and enthusiasm about a topic of his or her choice. In those countries where it is the norm for interviews to be required prior to acceptance for employment or for a place at university, the Extended Essay has often proved to be a valuable stimulus for discussion.

Theory of Knowledge

TOK is part of the International Baccalaureate (IB) Diploma Programme (DP) core, and is mandatory for all students. Theory of knowledge (TOK) is assessed through an oral presentation and a 1,600 word essay. It asks students to reflect on the nature of knowledge, and on how we know what we claim to know.

What is TOK?

Theory of knowledge (TOK) plays a special role in the International Baccalaureate® (IB) Diploma Programme (DP), by providing an opportunity for students to reflect on the nature of knowledge, and on how we know what we claim to know.

It is one of the components of the DP core and is mandatory for all students. The TOK requirement is central to the educational philosophy of the DP.

How is TOK structured?

As a thoughtful and purposeful inquiry into different ways of knowing, and into different kinds of knowledge, TOK is composed almost entirely of questions.

The most central of these is "How do we know?", while other questions include:

- What counts as evidence for X?
- How do we judge which is the best model of Y?
- What does theory Z mean in the real world?

Through discussions of these and other questions, students gain greater awareness of their personal and ideological assumptions, as well as developing an appreciation of the diversity and richness of cultural perspectives.

Assessment of TOK

The TOK course is assessed through an oral presentation and a 1,600 word essay.

The presentation assesses the ability of the student to apply TOK thinking to a real-life situation, while the essay takes a more conceptual starting point.

For example, the essay may ask students to discuss the claim that the methodologies used to produce knowledge depend on the use to which that knowledge will be used.

What is the significance of TOK?

TOK aims to make students aware of the interpretative nature of knowledge, including personal ideological biases – whether these biases are retained, revised or rejected.

It offers students and their teachers the opportunity to:

- Reflect critically on diverse ways of knowing and on areas of knowledge
- Consider the role and nature of knowledge in their own culture, in the cultures of others and in the wider world.

In addition, TOK prompts students to:

- Be aware of themselves as thinkers, encouraging them to become more acquainted with the complexity of knowledge
- Recognize the need to act responsibly in an increasingly interconnected but uncertain world.

TOK also provides coherence for the student, by linking academic subject areas as well as transcending them.

It therefore demonstrates the ways in which the student can apply their knowledge with greater awareness and credibility.

Source: <https://www.ibo.org/programmes/diploma-programme>

Creativity, Activity and Service (CAS)

- Creativity, Activity, Service (CAS) is one of the three essential elements that every student must complete as part of the Diploma Programme (DP).
- CAS enables students to enhance their personal and interpersonal development by learning through experience.
- It provides opportunities for self-determination and collaboration with others, fostering a sense of accomplishment and enjoyment from their work.
- At the same time, CAS is an important counterbalance to the academic pressures of the DP.
- Completion of CAS is based on student achievement of the seven CAS learning outcomes.
- Through their CAS portfolio, students provide the school with evidence demonstrating achievement of each learning outcome. Some learning outcomes may be achieved many times, while others may be achieved less frequently. *Managebac* will be the electronic environment used to record these experiences.

CAS Learning Outcomes

- Identify own strengths and identify areas for growth.
- Demonstrate that new challenges have been undertaken, developing new skills in the process.
- Demonstrate how to initiate and plan a CAS experience.
- Show commitment to, and perseverance in, CAS experiences.
- Demonstrate the skills and recognize the benefits of working collaboratively.
- Demonstrate engagement with issues of global significance.
- Recognise and consider the ethics of choices and actions.

This focus on learning outcomes emphasizes that it is the quality of a CAS activity (its contribution to the student's development) that is of most importance. The guideline for the minimum amount of CAS activity is approximately the equivalent of half a day per school week (three to four hours per week), or approximately 150 hours in total, with a reasonable balance between creativity, action and service. "Hour counting", however, is not encouraged.



D | STUDENT SUPPORT

Students are supported by their Form Tutor, Head of House, Teachers, Heads of Department and the IB DP Coordinator; this two tier system provides both academic and pastoral oversight. Students will be placed in tutor groups assigned at the beginning of the year. In these tutor groups they will have tutorial lessons once a week where Diploma Programme matters are addressed. Students will get support from their tutors throughout the two years on the IBDP; this includes careers advice, information and guidance including applications through UCAS to the UK, to Portugal and other countries.

UCAS.com provides detailed course information for each further education institution in the UK with relevant entrance requirements. Students will be shown how to use this website. Tutors and teachers can provide general guidance on subject selection but for requirements to specific institutions parents and students should check entrance requirements individually with each institution.





E | OTHER IB DIPLOMA MATTERS

Academic Honesty

Students will exercise academic honesty in all aspects of their work and will receive sessions on this in both subjects and tutor period.

They will acknowledge the work of others, including material taken from other sources. They will not claim as their own the work of others. They will not give their work to others to pass off as their own. They will observe the integrity of the examination room.

IA Deadlines

A calendar of deadlines will be published at the start of the academic year outlining all Internal Assessment coursework deadlines when work must be submitted. It is important that all students keep to these deadlines. Not submitting coursework for one of more subjects is a filing condition of the IBDP.

Options Evening

In February students are invited to choose their IBDP subject packages with guidance from their tutor and teachers. Students will be asked to complete a form which requires signatures from their subject teachers. The form should be fully completed and presented to the IBDP Coordinator for checking and approval.

Non-Regular Diploma

If the conditions of entry into an institution of higher education require a candidate to offer a choice of subjects different from that specified in the regulations for the Diploma Programme, the candidate may be allowed to make a reasonable substitution on presentation to the IB of the appropriate documentary evidence. This evidence, which may take the form of pages from a university prospectus, must be submitted in support of all requests.

A candidate will generally be authorized to take a non-regular diploma only if the proposed higher education course allows no other alternative. The possibility of offering a subject as an additional seventh subject (that does not contribute to the diploma) must be considered before submitting a request for a non-regular diploma and is advised up to the approval of the request. In no circumstances will a candidate be exempt from taking a group 1 and a group 2 subject.

High School Leaving Certificate

The Portuguese Ministry of Education currently requires a minimum of six IGCSEs A*-C to consider a student to have successfully completed Form 10. This is the same criteria – six IGCSEs A*-C or equivalent – which we require for entry into our IB Diploma Programme. Please contact the IBDP Coordinator for clarification if required.



Rua da Cerca, 338 · Foz do Douro
4150-201 | Porto

Tel.: +351 226 166 660

Fax.: +351 226 166 668

school@obs.edu.pt

www.obs.edu.pt