

The International Baccalaureate Diploma Programme

Curriculum Content Guide *for May 2009 IB Examinations*



December 2008

Compiled by JH Kazi
Charterhouse
jhk@charterhouse.org.uk

Endorsements

This document has been endorsed by the following:

The Abbey School
Alton College
Aloha College, Spain
ACS Cobham International School
ACS Egham International School
ACS Hillingdon International School
Ardingly College
Anglo-European School, Ingatestone
Atlantic College
Barton Court
Bedford High School
Bedford School
Bexley Grammar School
British School of Brussels
Broadgreen High School
Brockenhurst College
CTC Kingshurst Academy
Dartford Grammar School
Dane Court Grammar School
Dormers Wells High School
Ellesmere College
Exeter College
Fettes College
Formby High School
Godolphin and Latymer School
Gresham's School
Haileybury and Imperial Service College
Highlands School
Hockerill Anglo-European College
Impington Village College
King Edward's School, Witley

King William's, Isle of Man
Kings College for the Arts and Technology
King's College School, Wimbledon
Llandrillo College
Malvern College
Marymount School
North London Collegiate School
North London International School
Oakham School
The Red Maids' School
The Ridings High School
Rossall School
Sevenoaks School
Slough Grammar School
Southbank School
St. Clare's, Oxford
St. Dunstan's College
St. Helen's School, Northwood
St. Leonards School, St Andrews
Sherborne School
Swansea College
The Sixth Form College, Colchester
TASIS, The American School in England
Taunton School
Thomas Deacon Academy
Tonbridge Grammar School
Truro College
Wellington College
Whitgift School
Wyggeston and Queen Elizabeth I College
Worth School

and

IBSCA

(The International Baccalaureate Schools and Colleges Association of the UK and Ireland)

The next version of this document will be available in December 2009

CONTENTS

GENERAL POINTS	6
Overview	6
The IB Diploma Programme.....	6
Assessment	8
Awards.....	9
IB Diploma Programme Components.....	9
THE DIPLOMA CORE	11
<i>Extended Essay</i>	12
<i>Creativity, Action and Service (CAS)</i>	14
<i>Theory of Knowledge (ToK)</i>	15
GROUP 1: Language A1	16
Aims	16
<i>Languages A1 Higher Level</i>	17
<i>Languages A1 Standard Level</i>	18
<i>Text and Performance Standard Level</i>	19
GROUP 2: Second Language	20
Aims	20
Overview	20
<i>Languages A2 Higher and Standard Level</i>	21
<i>Languages B Higher and Standard Level</i>	22
<i>Languages ab initio Standard Level</i>	23
<i>Latin and Classical Greek Higher and Standard Level</i>	24
GROUP 3: Individuals & Societies	26
Aims.....	26
<i>Business and Management Higher Level</i>	27
<i>Business and Management Standard Level</i>	28
<i>Economics Higher Level</i>	29
<i>Economics Standard Level</i>	30
<i>Geography Higher and Standard Level</i>	31
<i>History Higher and Standard Level</i>	32
<i>Information Technology in a Global Society (ITGS) Higher and Standard Level</i>	33
<i>Peace and Conflict Studies Standard Level</i>	34
<i>Philosophy Higher and Standard Level</i>	35
<i>Political Thought Standard Level</i>	36
<i>Psychology Higher and Standard Level</i>	37
<i>World Politics & International Relations Standard Level</i>	38

GROUP 4: Experimental Sciences	39
Aims	39
<i>Biology Higher Level</i>	40
<i>Biology Standard Level</i>	41
<i>Chemistry Higher Level</i>	42
<i>Chemistry Standard Level</i>	43
<i>Design and Technology Higher and Standard Level</i>	44
<i>Ecosystems and Societies Standard Level</i>	45
<i>Physics Higher Level</i>	46
<i>Physics Standard Level</i>	47
GROUP 5: Mathematics	48
Aims	48
Overview	48
<i>Mathematics Higher Level</i>	49
<i>Further Mathematics Standard Level</i>	50
<i>Mathematics Standard Level</i>	51
<i>Mathematical Studies Standard Level</i>	52
GROUP 6: Arts	53
Overview	53
<i>Art History Standard Level</i>	54
<i>Music Higher and Standard Level</i>	55
<i>Theatre Higher and Standard Level</i>	56
<i>Visual Arts Higher and Standard Level</i>	57
APPENDIX 1: The UCAS and QCA Tariffs	58
APPENDIX 2: Diploma Points Distribution May 2008.....	62
APPENDIX 3: A Level Results by Subject 2008	63
APPENDIX 4: IB Diploma Grade Inflation Analysis	64

GENERAL POINTS

Overview

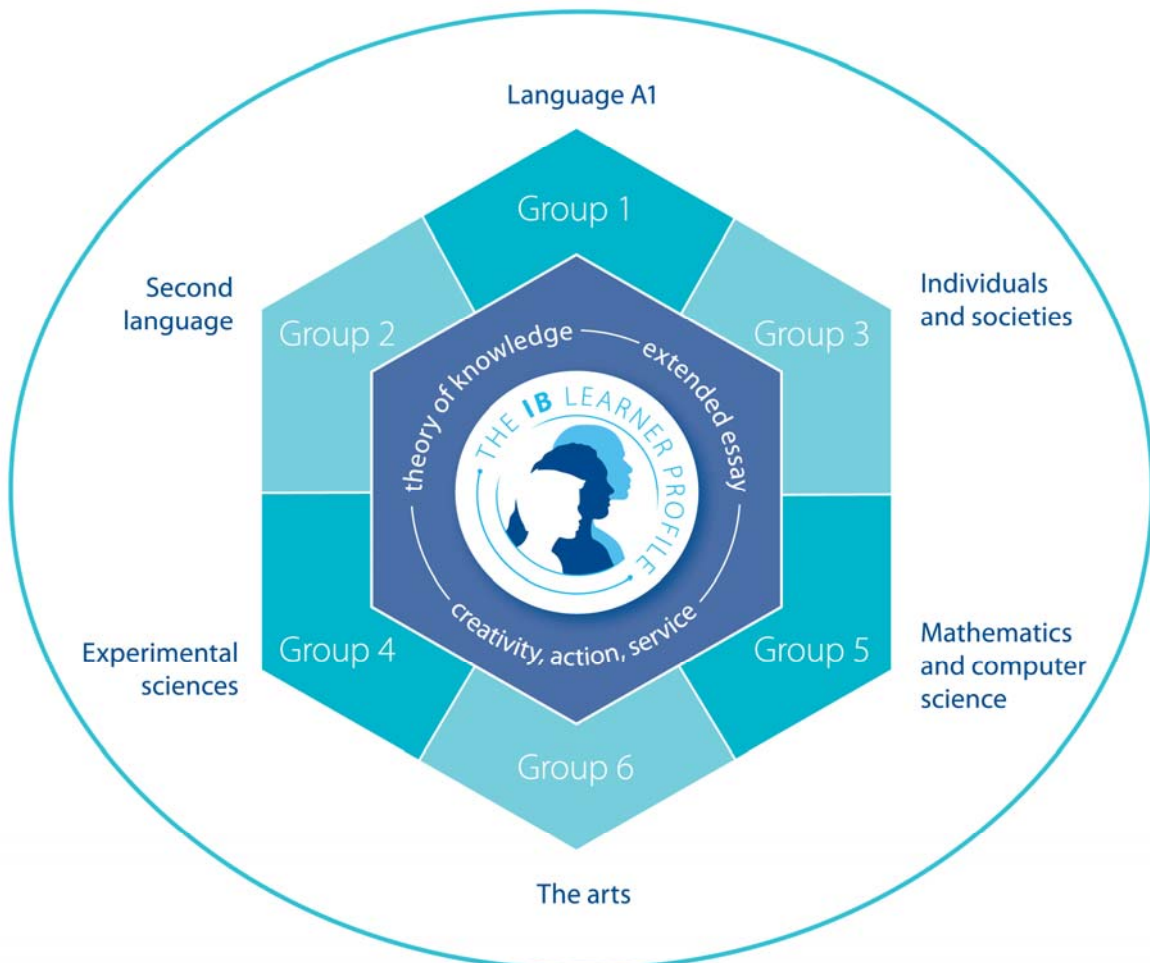
The first edition of this document was published in December 2005 by Nick Alchin, Director of IB at Sevenoaks. Since December 2007 the document has been published by IBSCA (International Baccalaureate Schools and Colleges Association of the UK and Ireland).

This document is **designed to compare the A Level and International Baccalaureate Diploma Programme (IB Diploma Programme or DP) courses that are being assessed in 2009**. Therefore, course descriptors refer to Curriculum 2000 A Levels and not the revised A Levels that started to be taught in September 2008. Similarly, the IB Diploma Programme courses that are referenced are those that are due for assessment in May 2009.

In compiling this document there was a conscious need to be **scrupulously fair to both A Levels and the IB Diploma Programme** and so draft copies were circulated to all IBSCA members. Comments were invited and, where there were differences, further consultation was undertaken. Only comments which received overwhelming support have been included in the final document.

The IB Diploma Programme

The Hexagon is the model of the IB Diploma Programme curriculum, which contains six subject groups together with a Core made up of three separate parts. The curriculum itself is founded on the tenets of the Learner Profile.



It is important to note that the IB Diploma Programme is a package, **and the whole is bigger than the sum of its parts**. In addition to subject-specific knowledge, the academic challenge of concurrently addressing six subjects (3 at Higher Level [HL] and 3 at Standard Level [SL]), the Extended Essay and Theory of Knowledge allow students to develop excellent academic skills in preparation for further study.

We believe that the **breadth of the IB Diploma Programme** adds a value independent of any specific course. It is hard to quantify the value of scientists being required to study literature, or of artists being required to study mathematics, but we see it in our schools and we believe that it adds much to the educational experience of those in the sixth form.

Beyond the explicitly academic aspect of the courses, the IB's mission statement is translated into a set of learning outcomes through the **Learner Profile**. At all stages of the course, in all areas of the course, reflection and action are encouraged in students (as well as teachers) that they might seek to be:

- Inquirers
- Knowledgeable
- Thinkers
- Communicators
- Principled
- Open-minded
- Caring
- Risk-takers
- Balanced
- Reflective

This is obviously a considerable step away from harnessing information and performing according to the requirements of assessment objectives.

A further important difference between A Levels and the IB Diploma Programme is the **non-modularity of DP courses**.

- Re-sits are available for specific modules at A Level before final certification; with the DP, resits are only available after final certification. Our experience is that provided they have been awarded a Diploma, very few students resit any IB subject.
- 50% of A Level grades are made up of AS grades, the standard of which is between GCSE and A2 standard. By contrast, all DP grades are awarded by assessment at the end of the two years of study.
- DP examinations are totally synoptic whereas A Levels are not.
- In some A Level subjects the number of combinations of modules is large. This means that even the A2 exams cannot be truly synoptic as students may or may not have studied some previous modules. For example, in studying a Mechanics A2 paper in Mathematics, candidates cannot be assumed to have knowledge of certain trigonometric identities. This rules out the setting of certain types of demanding problems. No such restrictions are placed upon DP examiners, who may draw on disparate parts of a syllabus for inclusion in one exam, or indeed inclusion in any individual question in an exam.

These differences should be taken into account in comparing the IB Diploma Programme with A Levels. UCAS and QCA have developed tariffs to this effect. The difference between the two tariffs is a result of differing research methodologies and we include full details of both tariffs and our evaluation of them in Appendix 1.

The distinction between Higher Level and Standard Level is another important feature of the IB Diploma Programme. While details vary from subject to subject, some subjects have some common examination papers, and for these papers the SL is as conceptually demanding as the HL. In Geography, for example, the current syllabus specification is such that both HL and SL students study a common core and have identical examinations on this core, but HL students then take 4 from 11 options whereas SL students take 2 from the same 11 options. In cases like these, the conceptual demands, if not the breadth, of the SL are therefore generally more like an A2 than an AS.

Assessment

Individual subjects. All subjects, regardless of whether they are HL or SL, are assessed on a scale of 7 (the highest) through to 1 (the lowest), with a 4 constituting a “pass” in an individual subject.

The Diploma Core consists of three elements:

- Creativity, Action, Service
- Extended Essay
- Theory of Knowledge

The Creativity, Action, Service element must be completed but does not count towards points for the award of the Diploma. The Extended Essay and Theory of Knowledge components are awarded grades A to E, with A being the highest grade and E being the lowest. These grades are then combined according to the following table, and up to three Core points can be awarded.

			THEORY OF KNOWLEDGE					
			Excellent	Good	Satisfactory	Mediocre	Elementary	Not Submitted
			A	B	C	D	E	
EXTENDED ESSAY	Excellent	A	3	3	2	2	1	N
	Good	B	3	2	1	1	0	N
	Satisfactory	C	2	1	1	0	0	N
	Mediocre	D	2	1	0	0	0	N
	Elementary	E	1	0	0	0	Failing Condition	N
	Not Submitted		N	N	N	N	N	N

Thus the maximum possible Diploma Programme point score of 45 points is made up of 42 points for 6 subjects and 3 points for the Diploma Core.

Assessment Models have two forms in the case of the IB Diploma Programme: internal assessment which is undertaken internally and then moderated by external examiners; and external assessment which is wholly undertaken by external examiners.

Grade inflation is not an issue for the IB Diploma Programme. The assessment is **criteria-based**, not norm-referenced. **Neither is assessment subject to political interference.** While there are small fluctuations in the percentage of candidates gaining a top score (7) in individual subjects, there is long-term stability (as opposed to A Levels where, for example, the percentage of candidates achieving an “A” in Economics has risen from 14% in 1994 to 35% in 2008). This means that the **IB Diploma Programme continues to distinguish between good and excellent students**, and that the “7” may be considered as comparable to the missing “A*” at A Level. Appendices 2, 3 and 4 contain various IB Diploma Programme and A Level data for comparative purposes.

Awards

Diplomas are awarded to successful candidates who achieve 24 points or more and have no failing conditions (these are caveats to the award of a Diploma but which can be compensated by achievements in other areas). A complete list of the failing conditions can be supplied upon request.

Bilingual Diplomas are awarded to successful candidates who fulfil one of the following criteria:

- Take two languages A1
- Take a language A1 and a language A2
- Take examinations in at least one of the subjects from Group 3 or Group 4 in a language that is not the same language as their Language A1 nominated for Group 1
- Submit an Extended Essay in a Group 3 or Group 4 subject written in a language that is not the same language as their Language A1 nominated for Group 1

The inherent challenge that has been surmounted by candidates in presenting themselves for the Bilingual Diploma is significant, indeed.

Certificates can be awarded for individual subjects and Core components. There are three types of candidate who can be awarded Certificates instead of the Diploma:

- Those candidates who actively choose to study for Certificates only (they cannot be entered for assessment in Theory of Knowledge or the Extended Essay)
- Those candidates who actively choose to study for Certificates combined with other qualifications such as A Levels, Pre-U courses or APs (they cannot be entered for assessment in Theory of Knowledge or the Extended Essay)
- Those candidates who fail to achieve the Diploma

For many candidates, the award of Certificates is a significant achievement in itself and is evidence of the IB Diploma Programme's ability to provide candidates from a variety of levels with access to an appropriately challenging curriculum. Information about the recognition of Certificates and Core components can be found in Appendix 1.

The IB statistics within this document all refer to worldwide data and are drawn from the annual IB Statistical Bulletins. There are many more languages available than have been listed here – we can provide data for any of these if necessary.

IB Diploma Programme Components

Languages. As an international curriculum and qualification, the IB Diploma Programme offers many modern languages at a variety of levels. Classical Greek and Latin are also available. As all students will study at least two languages, it is important to understand the *level* of languages studied. All students must study a Language A1 (literature) course (usually English for British students) and at least one of Language A2, Language B or Language *ab initio* or a classical language. Further detail is available within this document in the relevant section.

Mathematics. As Mathematics is compulsory for all Diploma Programme students, there is a range of courses offered. Further detail is available within this document in the relevant section.

Experimental Sciences. Whereas at A Level it is possible for students to do a relatively small amount of practical work, IB Diploma Programme students carry out practical work throughout the course with a requirement for a scheme of work that covers the whole syllabus. The practical work is thus extensive and integral to the course.

Pilot Subjects. The IB often develops subjects on a pilot basis which schools may offer on the understanding that the syllabus content and assessment methods may evolve during the lifetime of the syllabus. Some Pilot Subjects are trans-disciplinary in nature (see below) whereas others are assigned to one group only. There are seven Pilot Subjects and information is provided on those that are asterisked:

- Dance HL & SL – Group 6
- Ecosystems and Societies SL* - Groups 3 & 4
- Film HL & SL – Group 6
- Sports, Exercise and Health Science SL – Group 4
- Text and Performance SL* - Groups 1 & 6
- World Cultures SL – Groups 3 & 6
- World Religions SL – Group 3

Transdisciplinary Standard Level Subjects (TSLs). Most subjects are assigned to one group alone but others are designated as belonging to two groups (TSLs – only available at Standard Level) which means that a single SL subject can meet the requirements of two groups, thereby allowing candidates to choose an additional subject in order that they might meet the requirements of the Diploma Programme. The additional subject can be chosen from any of the hexagon's groups, including a group already covered by the TSL. However, only one TSL may contribute to a candidate's Diploma. TSLs thereby allow candidates to achieve greater specialisation in a particular group by having two or even three subjects from a particular group within their course of study.

School-based Syllabuses (SBSs). The IB offers schools the opportunity to develop their own Standard Level syllabuses to meet their own interests and national circumstances. The syllabuses are developed in conjunction with external advisors and experts and examined externally. There are 16 such SBSs and information is provided on those that are asterisked:

- Astronomy
- Art History*
- Beginners' Hindi
- Beginners' Nynorsk
- Chile and Pacific Basin
- Chinese Studies
- Classical Greek and Roman Studies
- Food Science and Technology
- Historical and Contemporary Brazilian Studies
- Human Rights
- Peace and Conflict Studies*
- Political Thought*
- Science, Technology and Society
- Social Studies
- Turkish Social Studies
- World Politics and International Relations*

THE DIPLOMA CORE

Extended Essay

Core Content:	Students are required to write independently a research essay (maximum 4000 words) on a topic of their own choice in an IB subject.
Assessment:	All Extended Essays are marked externally, often by university lecturers.

May 2008 Results	A	B	C	D	E
% awarded grade	10.59	16.50	38.88	27.62	6.41

The aims of the Extended Essay are to provide students with the opportunity:

- To pursue independent research on a focused topic
- To develop research and communication skills
- To develop the skills of creative and critical thinking
- To engage in a systematic process of research appropriate to the subject
- To experience the excitement of intellectual discovery.

All IB Diploma Programme students must undertake an Extended Essay on a topic of their choice within an IB Diploma Programme subject. This requirement reflects the principle that independent research skills are vital to all areas of study and deserve a central role in the curriculum. With the other Core components (Theory of Knowledge and Creativity, Action, Service) the Extended Essay provides the 'glue' that makes the DP a coherent and integrated qualification.

The Extended Essay is an in-depth study of a focused topic within a DP subject. It is recommended that students spend a maximum of 40 hours on it, though many willingly exceed this, often by a significant amount. Candidates have around 3 hours contact time with an academic supervisor, who is usually a teacher within the school, but they are expected to work independently for the remainder of the time. The supervisor provides the candidate with advice and guidance in the skills of undertaking research – by assisting, for example, with defining a suitable topic; with techniques of gathering and analysing information / evidence / data; with documentation methods for acknowledging sources and with writing an abstract. The work is typically undertaken over several months. 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 IB recommends that completion of the essay is followed by a *viva voce* with the supervisor.

The assessment criteria are common to all Extended Essays, regardless of the subject; however, each separate subject area has specific guidance as to how the assessment criteria can be interpreted. A proportion of the marks is based on subject specific merit but the majority is awarded for specific research skills that are common and highly-transferable:

- Formulation of Research Question
- Introduction to the Research Question
- Investigation
- Knowledge and understanding of the topic
- Reasoned argument
- Application of analytical and evaluative skills
- Appropriate use of language
- Conclusion
- Formal presentation (referencing, bibliography etc.)
- Abstract
- Holistic judgement

Recent examples of Extended Essay titles:

- How is the subject of death treated in selected poems by Emily Dickinson? (Group 1)
- To what extent has Bill 101 contributed to increasing the prevalence of the French language in Quebec? (Group 2)
- Does the Melian debate, as presented by Thucydides, reveal the true nature of Athenian democracy, or does he present it as an atypical aberration? (Classical Greek and Latin)
- An exploration of the concept of "the dictatorship of the proletariat" in Marxism-Leninism. (Politics)
- An investigation into the kinetics of the reaction between the permanganate and oxalate ions. (Chemistry)
- Modelling the astrometric effect of an extra-solar planet on its star. (Physics)
- The Hausdorff dimension of fractal sets. (Mathematics)
- An investigation into Klimt's use of gold. (Visual Arts)

Creativity, Action and Service (CAS)

Core Content:	For the award of a Diploma, students are required to spend 150 hours in pursuit of activities which can be classed as Creativity, Action or Service (CAS). These 150 hours are completed over the two years of the Diploma Programme.
Assessment:	Schools monitor students' progress. Students who fail to complete the requirements are not awarded Diplomas. The IB samples school records on a random basis.

The Creativity, Action, Service (CAS) requirement takes seriously the importance of life outside the world of scholarship, providing a counterbalance to the academic self-absorption some students may feel within a demanding school curriculum. Participation in CAS encourages students to share their energies and special talents while developing awareness, concern and the ability to work cooperatively with others. The Diploma goal of educating the whole person and fostering more caring and socially responsible attitudes comes alive in an immediate way when students reach beyond themselves and their books. The educational benefits of CAS apply in the school community, and in the local, national and international communities.

CAS should extend the students. It should challenge them to develop a value system by which they enhance their personal growth. It should develop a spirit of open-mindedness, lifelong learning, discovery and self-reliance. It should encourage the development of new skills on many levels: for example, creative skills, physical skills and social skills. It should inspire a sense of responsibility towards all members of the community. It should also encourage the development of attitudes and traits that will be respected by others, such as determination and commitment, initiative and empathy.

Although there are three elements to CAS, it is important not to consider them as mutually exclusive. CAS is about the education of the whole person, and the three elements are therefore interwoven. Together, they enable a student to recognize that there are many opportunities in life, away from formal academic study, to grow in knowledge of life, self and others. Creative and physical activities are particularly important for adolescents (probably more so than for any other age group) because popular culture informs and shapes their desires and values. There are also pursuits which offer much opportunity for fun and enjoyment at a time which is, for many young people, full of stress and uncertainty. The service element of CAS is, in itself, the most significant, but the two other elements are also very important, as they provide access, balance, and flexibility to meet individual students' interests and preferences. However, even more important in the model is that it is not just a matter of three individual parts: uniquely in the IB Diploma Programme it is the interaction of them all that creates the richness of CAS. The whole of CAS is greater than the sum of its parts.

Source: *IBO CAS Guide (2003)*

Theory of Knowledge (ToK)

Core Content:	Students are required to consider the nature of knowledge in general and, in particular, the knowledge issues that arise in the study of the arts, ethics, history, the human sciences, mathematics and the natural sciences. In doing so, students will encounter the various methodologies within these areas and the roles played by emotion, language, reasoning and sense perception.
Internal Assessment:	33% presentation (10 minutes) on knowledge issues arising in a topic of students' own choice. Not externally moderated.
External Assessment:	67% essay (1200 - 1600 words) from list of ten prescribed titles.

May 2008 Results	A	B	C	D	E
% awarded grade	6.72	32.58	43.44	16.32	0.93

The Theory of Knowledge course is the only course that all IB Diploma Programme students take; as such it embodies the spirit and approach of the DP as a whole. With the Extended Essay and Creativity, Action, Service components, it provides the cement that makes the Diploma a coherent and integrated qualification.

Theory of Knowledge (TOK) challenges students to question the bases of knowledge, to be aware of subjective and ideological biases and to develop the ability to analyse evidence that is expressed in rational argument. Based within the six subjects that the students study, it compares and contrasts them, allowing students to develop a more mature view of them, in preparation for deeper study. TOK seeks to develop, for example, the abilities to distinguish between good and poor reasoning; to spot intentional or accidental bias (in oneself and in others), and to spot inconsistencies. The application of these skills varies according to subject, and students might examine, for example, how reasoning in Mathematics is similar to, and different from, that in the Natural Sciences; or the emotional and/or rational bases for ethical decision making.

In addition to this *critical thinking* aspect, the course recognises that intellectual tools are double-edged, and encourage certain *dispositions* such as a willingness to challenge one's own deeply-held convictions, a willingness to hold ourselves to the same standards to which we hold others, and a willingness to entertain opposing views charitably. In this way the course encourages an openness, intellectual honesty and, where appropriate, an intellectual humility.

Examples of Prescribed Titles for May 2009

- "Science is built of facts the way a house is built of bricks: but an accumulation of facts is no more science than a pile of bricks is a house" (Henri Poincaré). Discuss in relation to science and at least one other area of knowledge.
- When should we trust our senses to give us truth?
- Compare and contrast our approach to knowledge about the past with our approach to knowledge about the future.
- "There can be no knowledge without emotion.... until we have felt the force of the knowledge, it is not ours" (adapted from Arnold Bennett). Discuss this vision of the relationship between knowledge and emotion.

GROUP 1: Language A1

Aims

The aims of the Language A1 programme at both Higher and Standard Levels are:

- To encourage a personal appreciation of literature and develop an understanding of the techniques involved in literary criticism
- To develop students' powers of expression, both in oral and written communication, and provide the opportunity for practising and developing the skills involved in writing and speaking in a variety of styles and situations
- To introduce students to a range of literary works of different periods, genres, styles and contexts
- To broaden students' perspectives through the study of works from other cultures and languages
- To introduce the student to ways of approaching and studying literature, leading to the development of an understanding and appreciation of the relationships between different works
- To develop the ability to engage in close, detailed analysis of written text
- To promote in the students an enjoyment of, and lifelong interest in, literature

Languages A1

Higher Level

Core Content:	15 texts studied, 5 of which are World Literature texts normally studied in translation. All genres are covered, including literary non-fiction. In English A1, Shakespeare is compulsory.
Option Topics:	None.
Internal Assessment:	30% oral coursework externally moderated <ul style="list-style-type: none"> • Formal presentation (15%) • Commentary on an unprepared extract from one of the texts previously studied (15%)
External Assessment:	50% examination: <ul style="list-style-type: none"> • Paper 1: Unseen commentary (25%) • Paper 2: Essay based on a group of 4 texts; poetry, prose, non-fiction or drama (25%) 20% written coursework (maximum 3000 words): <ul style="list-style-type: none"> • Comparative essay on World Literature texts (10%) • Analytical or creative response to one World Literature text and a possible second text (10%)

There are over 80 languages available for study in Group 1. The summary above applies to all languages; however, what follows refers specifically to English A1.

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	0	5	33	45	15	3	<u>4.77</u>

Comparison between this course and A Level

There are several distinguishing features of English A1:

- **World literature:** the availability of texts such as *Madame Bovary*, *One Hundred Years of Solitude*, *Anna Karenina* and *The Trial*, in addition to 10 English texts, makes this a genuinely international literature course
- **Oral coursework:** this is in line with other European Baccalaureate exams and is a demanding and imaginative aspect of the course
- **Comparative literature:** both the written coursework and one of the final examinations are essentially exercises in comparative literature
- **Emphasis on the text:** unlike A Level, where the study of socio-historical background is mandatory, such study is undertaken only where relevant with English A1

Notwithstanding the above, the chief difference between English A1 and A Level remains, we believe, one of sensibility. Teachers and students enjoy the freedom to study a vast range of texts and, within these texts, a freedom to pursue their own passions. Unlike A Level, where most students undertake the same coursework essay, with English A1, pupils must undertake individual coursework projects that are unique to them (though perhaps based on the same texts). This, we believe, inculcates a love of the subject in a way that the A Level's emphasis on repeated examination does not. While we may study Victorian fiction and Elizabethan poetry, we can also study South American novels and Russian plays, which is a delight. The freedom of the text list allows for demanding texts to be studied which stretch and challenge. The comparative element of the course is demanding and requires considerable sophistication on the part of the students. Ultimately we believe that a student securing a 6 or better at English A1 HL is a candidate who would gain an 'A' grade in the current A Level.

Languages A1 Standard Level

Core Content:	11 texts studied, 5 of which are World Literature texts normally studied in translation. All genres are covered, including literary non-fiction. In English A1, Shakespeare is compulsory.
Option Topics:	None.
Internal Assessment:	30% oral coursework externally moderated <ul style="list-style-type: none"> • Formal presentation (15%) • Commentary on an unprepared extract from one of the texts previously studied (15%)
External Assessment:	50% examination: <ul style="list-style-type: none"> • Paper 1: Unseen commentary (25%) • Paper 2: Essay based on a group of 4 texts; poetry, prose, non-fiction or drama (25%) 20% written coursework (maximum 1500 words): <ul style="list-style-type: none"> • Comparative essay on World Literature texts

There are over 80 languages available for study in Group 1. The summary above applies to all languages; however, what follows refers specifically to English A1.

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	0	3	26	43	24	4	<u>5.00</u>

Comparison between this course and A Level

There are several distinguishing features of IB English A1:

- **World literature:** the availability of texts such as *The Outsider*, *The Unbearable Lightness of Being* and *One Hundred Years of Solitude*, in addition to 6 English texts, makes this a genuinely international literature course
- **Oral coursework:** this is in line with other European Baccalaureate exams and is a demanding and imaginative aspect of the course
- **Comparative literature:** both the written coursework and one of the final examinations are essentially exercises in comparative literature
- **Emphasis on the text:** unlike A Level, where the study of socio-historical background is mandatory, such study is undertaken only where relevant with English A1

Notwithstanding the above, the chief difference between English A1 and A Level remains, we believe, one of sensibility. Teachers and students enjoy the freedom to study a vast range of texts and, within these texts, a freedom to pursue their own passions. Unlike A Level, where most students undertake the same coursework essay, with English A1, pupils must undertake an individual coursework project that is unique to them (though perhaps based on the same texts). This, we believe, inculcates a love of the subject in a way that the A Level's emphasis on repeated examination does not. We are convinced that pupils who pursue English A1 will continue to read once they leave school. Indeed, this is one of the triumphs of the Standard Level course. The texts are fewer in number, and can be less complex at Standard Level but the freedom of the text list allows for demanding texts to be studied which stretch and challenge. The comparative element of the course is demanding and requires considerable sophistication of the students. Ultimately we believe that a student securing a 7 at English A1 SL is a candidate who would comfortably achieve an 'A' grade in the current A Level.

Text and Performance

Standard Level

This course is not available at Higher Level

Core Content:	6 texts: 2 play texts, 2 poetry texts and two prose texts from an extensive list. The texts must vary across theatre traditions, cultures, language and period.
Option Topics:	None.
Internal Assessment:	40% for a "transformative" performance and discursive oral presentation justifying and evaluating the performance
External Assessment:	35% examination: <ul style="list-style-type: none"> Poetry and Prose Examination; 2 essays on one of each genre, and at least one of which is a comparative essay 25% written coursework (maximum 2000 words): <ul style="list-style-type: none"> Two essays based on the study of dramatic texts

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	0	0	14	34	48	4	<u>5.42</u>

Comparison between this course and A Level

The IB Text and Performance syllabus is a trans-disciplinary synthesis of English and Drama, but fulfils the requirements for Language A1 Standard Level – so students taking this course are not required to study their mother tongue language in addition to Text and Performance, though some do. There is no direct parallel in the A Level system. However, requiring as it does the study of a minimum of six texts, Text and Performance at least matches the Literature content at AS Level. The texts studied are an even balance of Prose, Poetry and Drama, and students must study texts from at least two different centuries, and from three different cultures of origin. The course incorporates the essential elements of literature and performance and aims to explore the dynamic relationship between the two. At the heart of the course is this interaction between a conventional literary emphasis on close reading, critical writing and discussion, and the practical, aesthetic and symbolic elements of performance. A distinctive outcome of this “marriage” is the performance of a piece *transformed* from poetry or prose. In this exciting, creative process text is viewed from different angles in a way that goes beyond what is characteristic of either literary or theatre studies as single disciplines.

GROUP 2: Second Language

Aims

Group 2 consists of a range of language courses accommodating the different levels of linguistic proficiency that students have already gained by the time that they begin. There is a single set of Group 2 aims, common to all the courses, but the objectives are differentiated according to what students are expected to be able to demonstrate at the end of each course. The aims of Group 2 are:

- To enable students to understand and use the language they have studied in a range of contexts and for a variety of purposes
- To enable students to use the language appropriately
- To encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures
- To develop students' awareness of the role of language in relation to other areas of knowledge
- To provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of a language
- To provide students with a basis for further study, work and leisure through language
- To develop students' awareness of the relationship between the languages and cultures with which they are familiar

Overview

Language A2 HL	is for fluent language users who intends to study the language at this level for a future career or to meet a Diploma Programme requirement, and who: <ul style="list-style-type: none"> ▪ are native or near-native speakers wishing to study a different language as their language A1 ▪ are bilingual students (in reading or writing or both) ▪ live in a country where the target language is spoken ▪ are taught other subjects in the target language
Language A2 SL	is for fluent language users who may not intend continuing study of the language beyond the Diploma Programme, and who: <ul style="list-style-type: none"> ▪ are native or near-native speakers wishing to study a different language as their language A1 ▪ are almost bilingual student (in reading or writing or both) ▪ live in a country where the target language is spoken ▪ are taught other subjects in the target language
Language B HL	is for language learners who intend to study the language at this level for a future career, or to meet a Diploma Programme requirement, and who: <ul style="list-style-type: none"> ▪ have 4 to 5 years experience of the target language ▪ are not taught other subjects in the target language ▪ are normally taught outside a country where the language is spoken
Language B SL	is for language learners who may not intend continuing study of the language beyond the Diploma Programme and who: <ul style="list-style-type: none"> ▪ have 2 to 5 years experience of the target language ▪ are not taught other subjects in the target language ▪ are normally taught outside a country where the language is spoken ▪ are beginners or near-beginners who live in a country where the language is spoken
Ab Initio	is for beginners who: <ul style="list-style-type: none"> ▪ have little or no previous experience of the language ▪ are taught outside the country or countries where the language is spoken
Classical languages HL & SL	are for students who wish to study either Latin or Classical Greek as well as, or instead of, following one of the above courses

Languages A2

Higher and Standard Level

Core Content:	The course presupposes a near native mastery of the language in question. Thus it is not a language acquisition course. Students study oral and written forms of the language in a range of styles, registers, and situations; how to structure arguments in a focused, coherent and persuasive way; how to engage in detailed, critical examinations of a wide range of texts in different forms, styles, and registers and how to compare different texts.
Option Topics:	Language and Culture, Media and Culture (one of the two aforementioned is compulsory), Future Issues, Global Issues, Social Issues and Literary Options (compulsory).
Internal Assessment:	30% oral coursework externally moderated <ul style="list-style-type: none"> • Individual oral (15%) • Group oral (15%) One based on a cultural option, and the other on a literary option.
External Assessment:	50% Examination <ul style="list-style-type: none"> • Paper 1: Comparative commentary written on a pair of texts (25%) • Paper 2: One essay question from a choice of 10 on the option topics above (25%) 20% written coursework (maximum 1500 words) <ul style="list-style-type: none"> • One based on a cultural option - e.g.: letter to a newspaper about advertising (10%) • One based on a literary option - e.g.: pastiche (10%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - English	0	0	0	10	47.5	36.5	5.5	<u>5.38</u>
% awarded grade - French	0	0	0.5	11.5	40	83	6	<u>5.42</u>
% awarded grade - German	0	0	0.5	8.5	23.5	42.5	24.5	<u>5.82</u>
% awarded grade - Spanish	0	0.5	5	17	36.5	35	6	<u>5.20</u>

Statistics for other languages are available on request

Comparison between this course and A Level

The crucial difference between A Level and the IB Language A2 courses resides in the fact that in order to be able to do the latter one has almost to have the linguistic competence of a native speaker of the language in question. It would be fair to say that the course tries to emulate what pupils of the country where the language is spoken are facing in terms of syllabus. Thus, the Language A2 course always remains at least one step ahead of its A Level counterpart, and allows the student to work towards a Bilingual Diploma. It goes without saying that it is exceedingly difficult for a bilingual, let alone a non-native learner of the language to gain a top mark.

The HL and SL courses have very similar syllabuses and examinations, though the HL students examine topics in more depth and study one more literature option than SL students, so while the same principles underlie both courses, HL examinations mark schemes are naturally more rigorous.

Languages B

Higher and Standard Level

Core Content:	<p>Speaking: Students aim to become fluent in the target language. By the end of the course they should be able to use a range of tenses, vocabulary and registers in spontaneous formal and informal conversation.</p> <p>Reading: Students need to interpret a variety of authentic texts and show understanding of specific language items. Students must also understand the overall meaning of texts, for example by writing a letter in response to a given text.</p> <p>Writing: Students must be able to convey ideas clearly, grammatically and coherently.</p>
Option Topics:	None.
Internal Assessment:	30% oral coursework externally moderated <ul style="list-style-type: none"> • Individual oral (15%) • Group oral (15%)
External Assessment:	70% Examination <ul style="list-style-type: none"> • Paper 1: Text handling and written response in target language (40%) • Paper 2: One piece of writing in the target language from a choice of 6/4 HL/SL requiring different registers (30%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - French	0	1.5	8	21.5	29	26.5	13	<u>5.08</u>
% awarded grade - German	0	0.5	5	18	24.5	31.5	20.5	<u>5.42</u>
% awarded grade - Spanish	0	0.5	6	21	28.5	32	11.5	<u>5.18</u>

Statistics for other languages are available on request

Comparison between this course and A Level

We believe that the IB Language B courses at both Standard and Higher Levels are significantly different to A Level courses, and are more challenging. In terms of assessment, A Level students may choose to complete coursework and may have no testing essay-based paper to complete, whereas the Language B exam lacks the listening comprehension test. The Language B Text-Handling exercises at both HL and, notably, SL are more difficult than some of those encountered on A2 Advanced Level papers, though depending on precise examination board and paper chosen the A Level students may be required to write more than Language B students.

The Language B course is not based on topics but on registers (e.g.: formal and informal letters, diary, editorial, brochure, essay) and so the standard of writing is higher here. Topics studied in class are very varied and will vary from school to school, but could include issues such as immigration, education, media, and literature. Students should get an insight into, and an appreciation of, the target culture.

The HL and SL courses have identical syllabuses and examinations, though the HL students examine topics in more depth and would study more literature than SL students. Thus while the same principles underlie both courses, HL examinations mark schemes are naturally more rigorous. Nevertheless those comparing Language B SL course to A Level should certainly not equate them to AS-levels; they are at a more advanced level.

Languages *ab initio*

Standard Level

(these courses are not available at Higher Level)

Core Content:	<p>Listening: understanding straightforward conversational and colloquial exchanges.</p> <p>Speaking: conveying straightforward, factual information and responding appropriately in spontaneous discussion.</p> <p>Reading: understanding straightforward information, distinguishing between key points and supporting detail, identifying basic elements of genre, purpose and audience.</p> <p>Writing: conveying information and concepts clearly, organising key points and providing supporting detail, indicating personal attitudes competently.</p>
Option Topics:	None.
Internal Assessment:	30% oral coursework externally moderated <ul style="list-style-type: none"> • Individual oral - 15% • Group oral - 15%
External Assessment:	70% Examination <ul style="list-style-type: none"> • Paper 1: Text handling and written response in target language (40%) • Paper 2: Two pieces of writing in the target language using a variety of registers (30%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - French	0	5	11	19	24	27	14	<u>4.98</u>
% awarded grade - Italian	0	9	16	24	21	21	9	<u>4.54</u>
% awarded grade - Spanish	0	3	14	25	28	21	10	<u>4.81</u>

These are the most popular of the ab initio languages; statistics for other languages are available on request

Comparison between this course and A Level

The *ab initio* courses are designed for students who have no prior knowledge of the language. Though it is a course for beginners, in just two years students reach standards significantly beyond GCSE. Emphasis is on *real*, not simplified language, and that is what appears in the examinations. Thus the vocabulary base is far wider than that required for GCSE and is, as its name suggests, only a base. Students regularly encounter other words / phrases, and are expected to "work out" the meaning from the context. The expectation is that, by the end of the course, students will be equipped to go to the country, converse and be understood, as well as understanding what they see around them, with a basic knowledge of everyday life in that country. Although students are not expected to master the full grammatical structure of a language, in practice, those that achieve the top grades have often done so. In addition, in the cases of Russian, Japanese, Mandarin and Arabic, they are also required to master new scripts.

It should also be noted that as an international qualification, the IB Diploma Programme standards by which students are judged are based on international expectations of language learning which are significantly higher than our own national standards. Thus, even though they may have been studying the language for only 2 years, we believe that a DP grade 6 or 7 equates to an A grade at AS-level.

Latin and Classical Greek

Higher and Standard Level

Core Content:	Skills in translation are developed through the preparation of the texts from a prescribed author: Greek HL/SL: Xenophon Latin HL: Livy Latin SL: Ovid
Option Topics:	Students prepare two topics from the following list: Greek: <ul style="list-style-type: none"> The Homeric epic (The Iliad and the Odyssey); Tragedy (Medea, Hecuba, Electra); Comedy (Wasps, Acharnians, Lysistrata); Herodotus and the beginnings of History (Histories Book 1 and Thucydides Book 7); Socrates portrayed by Plato (Apology, Euthyphro, Crito and Phaedo) Latin: <ul style="list-style-type: none"> Roman Epic (Aeneid); Tacitus' presentation of imperial policy (Annals); Cicero's political speeches (Pro Caelio and Pro Milone); Love poetry (Horace's 'Odes'; Catullus; Ovid 'Amores'; Propertius); Roman Satire (Juvenal, Petronius)
Paper 1	Greek - Xenophon (HL and SL); Latin - Livy (HL); Ovid (SL)
Paper 2	Three context questions, from a choice of four, on two prescribed topics, selected from a total of five topics; one essay on one prescribed topic. Greek prescribed topics: Latin prescribed topics:
Internal Assessment:	HL only = 20% Research Dossier (maximum 1000 words)
External Assessment:	HL = 80% Examination SL = 100% Examination <ul style="list-style-type: none"> Paper 1: Unseen translation from prescribed author (40% HL/SL) Paper 2: Three context questions from a choice of four on two prescribed topics and one essay on one prescribed topic (40% HL/60% SL)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - Latin HL/SL	0	13	15	13	9	19	31	<u>4.04</u>
% awarded grade - Greek HL/SL	0	0	0	0	0	4.5	95.5	<u>6.96</u>

Comparison between this course and A Level

For the language element, candidates are required only to translate from one set author; hence, unlike at A Level, candidates do not experience both prose and verse unseen translation. DP candidates may take dictionaries into the exam and so are expected to be able to cope with almost any passage from the set author without glossing. The DP language paper is therefore considerably more challenging than anything in the A Level course.

There is considerably less examination of the set texts than at A Level: both for Higher and Standard Level, there is only one two hour literature paper. With the current format of the paper it is possible for a candidate only to answer one context question on one of the two set texts. The set texts, particularly those taken from prose works, tend to be longer than the A Level equivalents. The format of the context questions tends to be somewhat formulaic: of the standard four sections to a context question, for one section a candidate will be required to translate a few lines of the passage given, for another the candidate will be required to set the

passage within the context of the work as a whole, and, with verse texts, for a third section a candidate will normally be required to scan two lines. This then only leaves one or two sections for the candidate to show their literary appreciation of the passage.

The HL research dossier is a 1000 word commentary on a selection of primary source material (quotations, inscriptions, photographs etc.) illustrating a particular theme (e.g.: a slave's living conditions; the portrayal of Cleopatra; local elections, using the evidence from Pompeii).

For both languages we feel that a 7 at DP level is of a considerably higher standard than an A at A Level; this is particularly true for Latin, which currently has an extremely challenging choice of set texts for the language paper.

GROUP 3: Individuals & Societies

Aims

The aims for the programme for Group 3 - Individuals and Societies are:

- To promote the systematic and critical study of human experience and behaviour through the varieties of physical, economic and social environments in which students live and of the history and development of the social and cultural institutions which we have created
- To develop the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments concerning the nature and activities of the individual and society
- To enhance the understanding of the various methods of data collection, description and analysis used in studies of society, and the ways in which hypotheses are tested and complex data and source material interpreted
- To appreciate the way in which what has been learned is relevant to both the culture in which the students live and those of other societies
- To recognise that human attitudes and opinions are widely diverse and that a study of society requires appreciation of such diversity
- To recognise that the subject matter of the disciplines in this group is contestable and that their study requires the toleration of uncertainty

Business and Management Higher Level

Core Content:	Business organization and environment, Human resources, Accounts and finance, Marketing, Operations Management; Business Strategy.
Option Topics:	None
Internal Assessment:	25% on one 2000 word report that either addresses an issue facing organisation or an analysis of a decision made by an organisation
External Assessment:	75% Examination <ul style="list-style-type: none"> • Paper 1: Pre-seen case study with two responses from three structured questions; one compulsory extended response question; one compulsory structured question (40%) • Paper 2: one response from two structured questions; two from three structured questions (35%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	3	17	34	31	13	2	<u>4.40</u>

Comparison between this course and A Level

Comparison with the OCR A Level syllabus shows that both the IB Business and Management and A Level courses cover the same major theoretical content. The DP course offers no choice, whereas the A Level offers choices in the second year. The AS units tend to provide a grounding in key areas of business and are essentially quite straightforward, with A2 units offering extension and some repetition of key areas, depending on the optional units chosen. Coursework is a smaller 15% of the overall A2 result. Exam papers at A Level also use a mixture of pre-seen and unseen case studies depending on the unit. We have tended to find that results can be more unpredictable at A Level but that there is often a wider range of marks than at with IB Business and Management where results have been more grouped around an average. As the DP is only examined at the end of the course, it is often easier to build an integrated approach to the subject whereas the A Level course, despite having integrated units, tends to generate a more compartmentalised learning.

IB Business & Management average grades have been consistently below those for Economics.

Business and Management Standard Level

Core Content:	Business organization and environment, Human resources, Accounts and finance, Marketing, Operations Management.
Option Topics:	None.
Internal Assessment:	25% on one 1500 word commentary demonstrating the application of tools, techniques and theories to a real business issue or problem.
External Assessment:	75% Examination <ul style="list-style-type: none"> • Paper 1: Pre-seen case study with two responses from three structured questions; one compulsory structured question (35%) • Paper 2: one response from two structured questions; two responses from three structured questions (40%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	4	13	23	31	21	8	<u>4.75</u>

Comparison between this course and A Level

Comparison is against the AQA A Level syllabus where both the IB Business and Management and A Level cover similar major theoretical concepts. Most of the core content in both the Higher and Standard Level is the same (only External Influences and Operations Management are absent). Standard Level is taught and assessed to similar depths of knowledge, analysis, application and evaluation as Higher Level in a number of the topics.

The coursework requirements are more concise than Higher Level and the two exams consist of fewer questions. The demands of Standard Level are such that it is more demanding than AS level, but reasonably below that of IB Higher Level.

IB Business & Management average grades have been consistently below those for Economics.

Economics

Higher Level

Core Content:	Introduction to economics, micro-economics, macro-economics, international trade, development economics.
Option Topics:	None.
Internal Assessment:	20% on a portfolio of four commentaries on news articles.
External Assessment:	80% Examination <ul style="list-style-type: none"> • Paper 1: One essay from four (20%). • Paper 2: three from six short essays (20%) • Paper 3: three from five data response questions (40%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	1	12	20	29	25	13	<u>5.04</u>

Comparison between this course and A Level

Comparison with the Edexcel A Level syllabus shows that both IB Economics and A Level cover the same major theoretical content, but with some difference in emphasis and in assessment.

The emphases in the IB Economics syllabus and assessment are global and international, whereas the A Level requires specific knowledge of the UK economy and UK government economic policy. The AS units tend to provide a grounding in key areas of micro and macro economic theory, with A2 units offering some extension and application of the core theory into a more international context. The A Level course has no coursework, and exams involve a mix of supported choice, essay and data response questions, whereas IB Economics emphasises the importance of coursework to provide practical applications for theory, and requires mainly essay writing and data response skills for exams.

Economics

Standard Level

Core Content:	Introduction to economics, micro-economics, macro-economics, international trade, development economics.
Option Topics:	None.
Internal Assessment:	25% on a portfolio of four commentaries on news articles.
External Assessment:	75% Examination <ul style="list-style-type: none"> • Paper 1: One essay from four (25%) • Paper 2: three questions from five data response questions (50%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	2	10	17	32	26	12	<u>5.07</u>

Comparison between this course and A Level

Comparison is against the Edexcel A Level syllabus. Most of the core content of both IB Higher and Standard Level is the same, with Standard not including the Theory of the Firm, some more advanced macro-economics such as the Expectations Augmented Phillips Curve and a few other smaller topics. With the omission of these topics, the Standard Level is taught and assessed to the same depth of knowledge, analysis, application and evaluation as Higher Level.

The coursework requirements are identical to Higher Level, but the exams consist of only two rather than three papers for Higher. The demands of Standard Level are such that it is certainly more demanding than AS level, and only just below that of IB Economics Higher Level.

Geography

Higher and Standard Level

Core Content:	Higher Level and Standard Level: Population, Resources and Development, as inter-related topics.
Option Topics:	Higher Level: Four topics to be studied: At least two from list A; at least one from list B. <ul style="list-style-type: none"> • <i>List A:</i> Drainage basins and their management; Coasts and their management; Arid environments and their management; Lithospheric processes and hazards; Ecosystems and human activity; Climatic hazards and change • <i>List B:</i> Contemporary issues in geographical regions; Settlements; Productive activities: aspects of change; Globalization • <i>List C:</i> Topographic mapping Standard Level: Any two topics from the Higher Level lists.
Internal Assessment:	HL = 25% SL = 20% Fieldwork Report (HL maximum 2500 words, SL maximum 1500 words) externally moderated.
External Assessment:	HL = 75% Examination SL = 80% Examination <ul style="list-style-type: none"> • Paper 1: Core syllabus of 3 structured questions. This paper is common between HL and SL (25% HL/40% SL) • Paper 2: Options with choice between essay and structured questions. For HL: 4 questions, each on a different topic. For SL: 2 questions, each on a different topic. This paper is common between HL and SL (50% HL/40% SL)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	2	8	22	34	23	11	<u>5.00</u>
% awarded grade - SL	0	6	15	28	27	17	7	<u>4.55</u>

Comparison between this course and A Level

The requirements of the syllabus and the standard of the exam are broadly comparable to A2. However, the IB is keen to stress the inter-relationships between the Core and the different modules. The IB course is an "international" syllabus, drawing on the experiences and methodologies of teachers from many parts of the world.

The aims of the IB course are:

- Develop a global perspective and a sense of world interdependence
- Understanding between people, places and environments
- Concern for quality of the environment; sustainable development
- Recognise the need for social justice, equity, combat bias, prejudice, appreciate diversity

It is important to recognise that Standard Level is not inherently easier than Higher Level, and it is in no way comparable to AS level in terms of difficulty. Students study the same Core as at Higher Level, and only 2 of the Option Themes. The examination questions are the same for both HL and SL.

History

Higher and Standard Level

Core Content:	Paper 1: USSR 1924-1941; China 1946-1964; Cold War 1960-1979 Paper 2: Cause, practices and effects of war; nationalist and independence movements; the rise and rule of single party states; international organisations; the Cold War; religion and minorities
Option Topics:	Selected from the Core.
Paper 1	1 of 3 document topics.
Paper 2	Six thematic topics.
Paper 3	(HL only) Regional options offered: <i>Africa; Americas; East and South East Asia and Oceania; Europe; South Asia and the Middle East.</i>
Internal Assessment:	HL = 20% SL = 25% Research Project (maximum 2000 words)
External Assessment:	HL = 80% Examination SL = 75% Examination <ul style="list-style-type: none"> • Paper 1: Document paper on one of three topics (20% HL/30% SL) • Paper 2: Two compulsory essays from five on six thematic topics (25% HL/45% SL) • Paper 3 (HL only): three questions from 25 covering six topics (35% HL/40% SL)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	2	12	31	34	16	5	<u>4.66</u>
% awarded grade - SL	0	2	9	28	37	20	5	<u>4.79</u>

HL results are based on the History of Europe option

Comparison between this course and A Level

Comparison between IB History and A Level is difficult. The former covers themes from around the world whilst the latter is far more Euro-centric. There are some similarities in that there is a document paper and a coursework requirement. However in Paper 2 and Paper 3, the style of assessment is very different.

Paper 2 is a thematic paper requiring the candidates to answer over time and over region. An example might be 'Compare and contrast the forces that brought two dictators to power in different regions of the world'. This type of question requires the candidate to be able to move through macro style themes very rapidly while at the same time having precise knowledge to illustrate an idea. In the A Level course the students do a synoptic paper on a theme over a hundred year period - for example 'The Rise of German Nationalism 1815-1919' but here the focus is kept tight on one region. As such it is difficult to compare the papers. Paper 3 on the IB course is a survey paper of a given region (for example, Europe 1815-1945) requiring the candidates to have an overview of the key themes and process of the period and the ability to answer very focused questions such as 'Assess the impact of Alexander II's reforms on C19 Russia'. The AS British paper has a much tighter timeframe focus and so one could argue that the students do not get a sense of historical process over a lengthy time period.

The coursework assignments are structurally different: IB History coursework is mechanical in its structure and requires the candidates to structure their argument into a number of very clearly defined sections: with A Level it is much more in the traditional research essay form.

Information Technology in a Global Society (ITGS)

Higher and Standard Level

Core Content:	Social and Ethical Issues <ul style="list-style-type: none"> Reliability, Integrity, Security, Privacy, Intellectual Property, Equality of Access, Control, Globalisation and Cultural Diversity, Policies and Standards, People and Machines IT Systems in a Social Context <ul style="list-style-type: none"> Hardware and Networks, Applications, Communication Systems, and Integrated Systems Areas of Impact <ul style="list-style-type: none"> Business and Employment, Education, Health, Arts, Entertainment and Leisure, Science and the Environment, and Politics and Government
Option Topics:	None.
HL Internal Assessment:	20% for a Portfolio and Extension <ul style="list-style-type: none"> Three pieces of written work on social and ethical issues based on three different Areas of Impact, each 800-1000 words Extension of one of the Portfolio pieces of 800-1000 words.
SL Internal Assessment:	30% Project <ul style="list-style-type: none"> An IT solution to a problem set in a social context consisting of a product developed through the integration of IT skills; a written report (2500 words) and a log book.
External Assessment:	HL = 80% Examination SL = 70% Examination <ul style="list-style-type: none"> Paper 1: Four short answer questions (20% HL/25% SL) Paper 2: Six (HL) or three (SL) long structured questions – 35% HL/45% SL Paper 3 (HL only): Three case study questions (25%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	5	19	37	28	9	1	<u>4.23</u>
% awarded grade - SL	0	4	16	34	27	16	3	<u>4.44</u>

Comparison between this course and A Level

There is no direct comparison between IB Information technology in a Global Society and an A Level specification.

The main focus of the subject is a consideration of the social significance and the ethical considerations arising from the use of IT, and how these influence individuals, communities, institutions and organisations. Although important, there is relatively little emphasis on IT tools such as word processing, desktop publishing, databases, graphics and multi-media presentations.

Peace and Conflict Studies

Standard Level

School Based Syllabus; not available at Higher Level

Core Content:	Concepts of Peace, Violence and Aggression; Conflicts within Society (prejudice, discrimination, minorities); Conflict around the Globe (development, globalisation, armed conflict); Transforming Conflict (violent and non-violent protest, reconstruction, reconciliation)
Option Topics:	None.
Internal Assessment:	24% on a written investigative report with recommendations on <u>either</u> prejudice and discrimination within society <u>or</u> an ongoing armed conflict 8% Presentation in class
External Assessment:	60% Examination <ul style="list-style-type: none"> • Paper 1: Document-based questions (20%) • Paper 2: Six essay questions, of which students select two (40%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	0	3	16	38	25	19	<u>5.43</u>

Comparison between this course and A Level

There is no direct comparison between IB Peace and Conflict Studies and an A Level specification.

Philosophy

Higher and Standard Level

Core Content:	What is a human being? This consists of considerations of what it means to be a person in the social world. While there is considerable freedom for schools to choose an approach, topics such as mind-body, free will, and the self are included, and both analytic and existential approaches are encouraged.
Option Topics:	Higher Level: Two from following list. Standard Level: One from following list. <ul style="list-style-type: none"> • Grounds of epistemology; Theories and problems of ethics; Philosophy of religion; Philosophy of art; Political philosophy; Non-western traditions and perspectives; Contemporary social issues; Peoples, nations and cultures. Higher Level: Unseen text – exploring philosophical activity
Texts:	Higher Level and Standard Level: One from a list. The text list ranges from Plato and Lao Tzu to Simone de Beauvoir.
Internal Assessment:	HL = 20% SL = 30% A philosophical analysis of non-philosophical material between 1,600 and 2,000 words
External Assessment:	HL = 80% Examination SL = 70% Examination <ul style="list-style-type: none"> • Paper 1: Core and Options (40%) • Paper 2: on the Prescribed Text (20% HL/30% SL) • Paper 3 (HL only): Unseen Text (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	0	5	20	31	35	10	<u>5.25</u>
% awarded grade - SL	0	3	14	25	27	22	9	<u>4.79</u>

Comparison between this course and A Level

The most radical difference is in the emphasis on the pupil developing a philosophical approach and a philosophical attitude rather than learning others' philosophical ideas. Thus, in the Core and Option Themes, little credit is given for the simple recall of what philosophers have said concerning a particular problem. Much more credit is given to pupils who demonstrate an active appreciation of the problems themselves, plus the willingness to engage with them thoughtfully. Studying the Prescribed Text, on the other hand, allows a pupil to master the ideas as expressed in the words of the philosopher, and then to engage critically with them.

With regard to assessing equivalence of standards it is therefore hard to make a comparison given the different emphases between IB Philosophy and A Level: effectiveness of recall would gain more marks at A Level and not count for much with IB Philosophy; effectiveness of independent thought is regarded as more merit-worthy in the Diploma Programme.

Political Thought Standard Level

School Based Syllabus; not available at Higher Level

Core Content:	Political philosophy: text based study of Marx, Mill, Burke and Anarchist writers and of key political concepts.
Option Topics:	None.
Internal Assessment:	30% on an Investigation of a contemporary political issue of a student's choice.
External Assessment:	70% Examination <ul style="list-style-type: none"> • Paper 1: Three compulsory questions on the set texts (30%) • Paper 2: Section A: compulsory essay question on political concepts using unseen texts. Section B: one essay from a choice of three on political concepts (40%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	0	3	16	38	25	19	<u>5.43</u>

Comparison between this course and A Level

Comparison is against the Edexcel Government and Politics A Level syllabus. There is no comparison with the AS course as this is specifically about British government and politics with only a limited amount of political philosophy in it. The closest comparison would be with A2 Route B, Introducing Political Ideologies, where there is some similarity in the treatment of political concepts. However, the IB Political Thought course requires close textual analysis of key political philosophers and is not so tied to ideological development in the UK.

This course could easily be a Higher Level course both in terms of its conceptual difficulty, which is considerable, and its content as four set texts are studied in great detail and all the key political concepts (liberty and toleration, equality and social justice, rights and obligations, democracy and representation) are also studied via original thinkers.

Psychology

Higher and Standard Level

Core Content:	Higher Level: Four perspectives: learning, cognitive, biological and humanistic. Standard Level: Three perspectives: learning, cognitive and biological.
Option Topics:	Higher Level: Two from following list. Standard Level: One from following list. <ul style="list-style-type: none"> Comparative psychology, cultural psychology, dysfunctional psychology, health psychology, lifespan psychology, psychodynamic psychology and social psychology.
Internal Assessment:	20% on one experimental study of 2000 (HL) or 1500 words (SL)
External Assessment:	80% Examination <ul style="list-style-type: none"> Paper 1: Core material: 4 HL / 3 SL compulsory short-answer questions; one extended-response question from a choice of four questions (30% HL / 50% SL) Paper 2: Option topics: For each option topic studied (2 for HL, 1 for SL) students choose one essay from three titles (30% / 50% SL) Paper 3 (HL only): Three compulsory questions of research methods (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	3	13	26	38	15	4	<u>4.61</u>
% awarded grade - SL	1	6	19	31	26	13	5	<u>4.33</u>

Comparison between this course and A Level

A Level courses differ significantly in psychology. IB Psychology adopts an exclusively 'perspectives' approach. This involves studying the different approaches psychologists use in an attempt to gain an understanding of the underlying assumptions held by disparate groups of psychologists. The ultimate intention is to gain a holistic vision for how psychology fits together into a unit. Coursework is similar to A Level but has a compulsory experimental approach. In terms of assessment the IB Psychology course places more far more emphasis on essays than on structured questions.

World Politics & International Relations

Standard Level

School Based Syllabus; not available at Higher Level

Core Content:	The framework for understanding the perspectives, behaviours and decision-making processes of state governments, international organisations and national and sub-national groups. The actions of states and organisations studied focuses on international relations and the motivation for political decisions. <ul style="list-style-type: none"> • I Underlying Principles of Modern World Order and Power • II World and Regional Integration and Governance • VI Selected contemporary geopolitical issues
Option Topics:	Choice of two out of the following: <ul style="list-style-type: none"> • III Human Rights and International Law • IV Development and Trade • V Conflict, Peace and Reconstruction
Internal Assessment:	25% Coursework based on Topic Area VI.
External Assessment:	75% Examinations <ul style="list-style-type: none"> • Paper 1: Four extended response questions in two parts - Part A from Topic Area I and Part B from Topic Area II. Candidates must attempt one question from each part. • Paper 2: An excerpt response paper that may contain political cartoons and data. Six structured response questions will be based on the excerpts. Two questions will be set for each of Topic Areas II, III and IV. Candidates must attempt answers from two questions, each from a different topic area.

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	0	0	15	31	26	28	<u>5.67</u>

Comparison between this course and A Level

Comparison is against the Edexcel Government and Politics A Level syllabus. As this course deals with British government and politics at AS Level, there is little comparison here. At A2 Level, there is some comparison with Route D (International Politics), where there is some similarity in the treatment of political concepts and processes.

This course could easily be a Higher Level course both in terms of its conceptual difficulty, which is considerable, and its content and application. There is a wide volume of material studied and alluded to and an advanced range of understanding and analysis is required.

GROUP 4: Experimental Sciences

Aims

Through studying any of the Group 4 subjects, students should become aware of how scientists work and communicate with one another. While the “scientific method” may take on a wide variety of forms, it will generally involve the formation, testing and modification of hypotheses through observation and measurement, under the controlled conditions of an experiment. It is this approach, along with the falsifiability of scientific hypotheses that distinguishes the experimental sciences from other disciplines and characterizes each of the subjects within Group 4.

It is in this context that all the Diploma Programme Experimental Science courses should aim:

- To provide opportunities for scientific study and creativity within a global context that will stimulate and challenge students
- To provide a body of knowledge, methods and techniques that characterize science and technology
- To enable students to apply and use a body of knowledge, methods and techniques that characterize science and technology
- To develop an ability to analyse, evaluate and synthesize scientific information
- To engender an awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- To develop experimental and investigative scientific skills
- To develop and apply the students’ information and communication technology skills in the study of science
- To raise awareness of the moral, ethical, social, economic and environmental implications of using science and technology
- To develop an appreciation of the possibilities and limitations associated with science and scientists
- To encourage an understanding of the relationships between scientific disciplines and the overarching nature of the scientific method.

Biology

Higher Level

Core Content:	Statistical analysis; Cells; The chemistry of life; Genetics; Ecology and evolution; Human health and physiology; Nucleic acids and proteins; Cell respiration and photosynthesis; Plant science; Genetics; Extended human health and physiology
Option Topics:	Two from Evolution; Neurobiology and behaviour; Microbiology and biotechnology; Ecology and conservation; Further human physiology
Internal Assessment:	24% of Practical Work with a minimum requirement of 60 hours
External Assessment:	76% Examinations <ul style="list-style-type: none"> • Paper 1: 40 multiple choice questions on the Core and Options (20%) • Paper 2: Structured and extended response questions on the Core and Options (36%) • Paper 3: Structured and extended response questions on two Options (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	12	23	26	20	15	4	<u>4.15</u>

Comparison between this course and A Level

The IB Biology HL course covers approximately the same ground as A2. The A2 course includes more on ecology and conservation in its core but these topics are available to IB Biology HL students in the Options. More information on defence is covered in the IB's course than on the A2.

The main difference is in assessment of practical work. Whereas AS and A2 students usually complete two internally assessed projects of some length IB Biology students carry out practical work throughout the course with a requirement for a scheme of work that covers the whole syllabus. Work is internally assessed, and selected students' work is submitted for external moderation. A2 candidates do have the option of sitting a practical exam in place of the A2 coursework.

All DP students are required to complete a "Group 4 Project" during which they must work with other scientists on a collaborative task. Throughout the practical programme their personal skills, working alone, working with others, and their awareness of environmental impact are assessed, unlike A Level.

Examination questions differ in style with the whole core of the IB Biology syllabus being tested in the multiple choice paper. Structured data response questions and essays are similar, although the synoptic module of the A2 paper is not separately addressed on an IB Biology paper.

We feel that the A2 synoptic module allows for discrimination between strong and weaker candidates. Also, A Level students can revise a few topics in some detail to succeed whereas IB Biology students must have a thorough knowledge of the whole course to do well.

Biology

Standard Level

Core Content:	Statistical analysis; Cells; The chemistry of life; Genetics; Ecology and evolution; Human health and physiology
Option Topics:	Two from Human nutrition and health; Physiology of exercise; Cells and energy; Evolution; Neurobiology and behaviour; Microbiology and biotechnology; Ecology and conservation
Internal Assessment:	24% of Practical Work with a minimum requirement of 40 hours
External Assessment:	76% Examinations. <ul style="list-style-type: none"> • Paper 1: 30 multiple choice questions on the Core (20%) • Paper 2: Structured and extended response questions on the Core (32%) • Paper 3: Structured and extended response questions on two option topics (24%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	1	9	22	26	23	15	5	<u>4.26</u>

Comparison between this course and A Level

The IB Biology SL course covers some similar ground to AS level although some of the topics for SL are covered in A2 modules whilst some in the AS course do not appear in SL. The SL course focuses mainly on human biology with opportunities to study plant science being available in the selected Options. The SL course provides a basis for students to understand the workings of their own bodies and important biological concepts, such as applied genetics which they will come into contact with in life after school.

One important difference is in assessment of practical work. Whereas AS students complete an internally assessed project of some length, IB Biology students carry out practical work throughout the course with a requirement for a Scheme of Work that covers the whole syllabus. Work is internally assessed and selected students' work is submitted for external moderation.

All DP students are required to complete a "Group 4 Project" during which they must work with other scientists on a collaborative task. Throughout the practical programme their personal skills, working alone, working with others, and their awareness of environmental impact are assessed, unlike A Level.

Examination questions differ in style with the whole core of the IB Biology syllabus being tested in the multiple choice paper. Structured data response questions and essays are similar. Significantly, there are no essays in many AS papers but these are required for IB Biology SL, and test candidates' ability to structure an extended response or argument.

Chemistry

Higher Level

Core Content:	Quantitative chemistry; Atomic structure; Periodicity; Bonding; Energetics; Kinetics; Equilibrium; Acids and bases; Oxidation and reduction; Organic Chemistry; Measurement and data processing
Option Topics:	Two from: Modern analytical chemistry; Human biochemistry, Chemistry in industry and technology; Medicine and drugs; Environmental chemistry; Food chemistry; Further organic chemistry.
Internal Assessment:	24% of Practical Work with a minimum requirement of 60 hours
External Assessment:	76% Examinations <ul style="list-style-type: none"> • Paper 1: 40 multiple choice questions on the Core and Options (20%) • Paper 2: Structured and extended response questions on the Core and Options (36%) • Paper 3: Structured and extended response questions on two Options (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	1	8	17	20	21	22	10	<u>4.59</u>

Comparison between this course and A Level

The overall Chemical content between IB Chemistry and A Level is broadly similar. If a comparison is made between OCR A Level and IB Chemistry HL the following differences are noted:

- The following topics are examples of topics that are included in the Core part of the course for IB Chemistry HL but are optional or not included at all at A Level: the ideal gas equation, the Arrhenius equation, hybridisation, entropy and Gibbs Free Energy, limiting reactants, standard electrode potentials, Lewis acids and bases (this list is not exhaustive).
- Unless the Further Organic Chemistry options are studied, the Organic Chemistry is more extensive at A Level. Nitrogen-containing compounds are studied in more depth at A Level as are test-tube reactions to differentiate between aldehydes and ketones. IB Chemistry places more emphasis on the use of modern analytical techniques such as NMR and IR spectroscopy to distinguish between compounds.
- We believe that the level of sophistication required to solve calculation problems at IB Chemistry HL is substantially beyond that required at A Level. The calculations for IB Chemistry are more difficult and much less structured than at A Level.
- The practical programme at A Level is much more prescriptive and practicals, other than those supplied for the board, are not usually looked favourably upon for assessment. The IB Chemistry practical scheme of work is designed by the teacher, who is free to use any practicals for assessment, and the IB encourages more open practicals.
- We believe that the linear nature of the IB Chemistry course gives students a much better overview of the inter-connectedness of Chemistry. The modular nature of the A Level course means that students compartmentalise their knowledge too much.
- All DP students are required to complete a 'Group 4' project during which they must work with other scientists on a collaborative task. Throughout the practical programme their personal skills, working alone, working with others, and their awareness of environmental impact are assessed.

Chemistry

Standard Level

Core Content:	Quantitative chemistry; Atomic structure; Periodicity; Bonding; Energetics; Kinetics; Equilibrium; Acids and bases; Oxidation and reduction; Organic Chemistry; Measurement and data processing
Option Topics:	Two from: Modern analytical chemistry; Human biochemistry, Chemistry in industry and technology; Medicine and drugs; Environmental chemistry; Food chemistry; Further organic chemistry.
Internal Assessment:	24% of Practical Work with a minimum requirement of 40 hours
External Assessment:	76% Examinations <ul style="list-style-type: none"> • Paper 1: 30 multiple choice questions on the Core (20%) • Paper 2: Structured and extended response questions on the Core (32%) • Paper 3: Structured and extended response questions on two option topics (24%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	2	15	23	24	19	13	5	<u>4.03</u>

Comparison between this course and AS-level

The overall Chemical content of IB Chemistry SL is beyond that of AS level.

- The following topics are examples of topics that are included in the core part of the course for IB Chemistry SL but are optional or not included at all at AS level: the ideal gas equation, entropy and Gibbs Free Energy, equilibrium constants, limiting reactants, pH, buffer solutions, titration curves, electrolysis, voltaic cells.
- The Organic Chemistry is more extensive at AS level. Electronic configurations are only studied to calcium at IB Chemistry SL and no mention of orbitals and sub shells is made.
- We believe that the level of sophistication required to solve calculation problems at IB Chemistry SL is beyond that required at AS level. Many questions at SL on Moles are common with HL.
- The practical program at AS level is much more prescriptive, and practicals other than those supplied for the board are not usually looked favourably upon for assessment. With IB Chemistry the practical scheme of work is designed by the teacher, who is free to use any practicals for assessment. More open practicals are encouraged by the IB.
- We believe that by the end of the course IB Chemistry SL students have a much better overview of Chemistry than their AS counterparts. They have studied a wider range of topics, including two optional topics.
- All DP students are required to complete a 'Group 4' project during which they must work with other scientists on a collaborative task. Throughout the practical programme their personal skills, working alone, working with others, and their awareness of environmental impact are assessed.

Design and Technology

Higher and Standard Level

Core Content:	Design process; Product innovation; Green design; Materials; Product development; Product design; Evaluation. HL additional topics: Energy; Structures; Mechanical design; Advanced manufacturing techniques; Sustainable development.
Option Topics:	One from: Food science and technology; Electronic product design; CAD/CAM; Textiles; Human factors design.
Internal Assessment:	36% on Coursework <ul style="list-style-type: none"> • Investigations (18%) • Design project (18%)
External Assessment:	64% Examination <ul style="list-style-type: none"> • Paper 1: 40 HL / 30 SL multiple choice questions (20%) • Paper 2: Structured and extended response questions on core topics and HL additional topics (24%) • Paper 3: Structured and extended response questions on two option topics (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	5	11	28	26	23	7	<u>4.42</u>
% awarded grade - SL	0	4	18	29	32	15	2	<u>4.75</u>

Comparison between this course and A Level

The IB Design and Technology syllabus is much more wide ranging than the A Level. With the choice of options it is possible for IB Design and Technology students to focus in more detail on particular aspects of technology. The IB's written papers contain a more varied type of question than A Level examinations and include an unseen data-based question which is not syllabus specific. There are no multiple choice questions at A Level.

A major difference is in the balance between coursework and examinations - for some A Level boards the coursework counts for 65% of the final grade awarded. The nature of A Level coursework is also very different to that of IB Design and Technology with 30% for the major project; 20% for a minor project and 15% for a case study. IB Design and Technology coursework awards 18% to a mixture of small scale projects and lab based investigations. There is no equivalent in A Level courses.

There is commonality between the IB Design and Technology SL and HL courses with extension material of the Core and Options for HL students. This means that SL students answer fewer questions to the same depth as HL students but on a restricted range of topics.

Ecosystems and Societies

Standard Level

This course is not available at Higher Level

Core Content:	Systems and models, The Ecosystem (Structure and Functioning, Biomes, Productivity, Change), Human population, Carrying capacity and Resource Use (Population dynamics, Energy, Soil, Food and Water resources, Limits to growth and Environmental demands of human populations), Conservation and Biodiversity (Evaluation and Conservation of Biodiversity), Pollution Management (Detection and monitoring, Approaches to management, Eutrophication, Domestic waste, Ozone, Acid Deposition), Global Warming (Causes, Consequences, Contrasting approaches), Environmental Philosophies (History of environmental movement, Contrasting Environmental paradigms)
Option Topics:	None
Internal Assessment:	20% Practical and Fieldwork assignments
External Assessment:	80% Examination <ul style="list-style-type: none"> • Paper 1: Short answer and data analysis questions (35%) • Paper 2: Case study and two structured essay questions (45%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	5	14	31	26	16	8	<u>4.60</u>

Comparison between this course and A Level

There is no direct comparison between Ecosystems and Societies and an A Level specification. It is a Transdisciplinary Standard Level subject, offered at SL only.

The prime intent of this course is to provide students with a coherent perspective on the interrelationships between ecosystems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. As a Transdisciplinary Standard Level subject which satisfies the requirements for both group 4 (science) and group 3 (individuals in societies) this course involves a rigorous and scientific approach to Ecosystems, in which practical investigative skills are developed, but it also demands that students develop an understanding of how socio-economic, cultural and political factors help to shape environmental paradigms and behaviours. The very nature of environmental issues demands that issues are studied holistically and the systems approach is the central conceptual framework which integrates the perspectives of different disciplines. The course naturally leads students to an appreciation of the nature and values of international-mindedness since the resolution of the major environmental issues relies heavily upon international relationships. The concept of sustainability is also central to an understanding of the nature of interactions between ecosystems and societies and to resource management.

Physics

Higher Level

Core Content:	Physics and physical measurement; Mechanics, Thermal physics, Oscillations and waves; Electric currents; Fields and forces; Atomic and Nuclear Physics; Energy, power and climate change; Motion in fields; Thermal physics; Wave phenomena; Electromagnetic induction; Quantum physics and nuclear physics; Digital technology.
Option Topics:	Two from: Astrophysics; Communications; Electromagnetic waves; Relativity; Medical physics; Particle physics.
Internal Assessment:	24% of Practical Work with a minimum requirement of 60 hours.
External Assessment:	76% Examinations <ul style="list-style-type: none"> • Paper 1: 40 multiple choice questions on the Core and Options (20%) • Paper 2: Structured and extended response questions on the Core and Options (36%) • Paper 3: Structured and extended response questions on two Options (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	5	21	26	22	18	8	<u>4.49</u>

Comparison between this course and A Level

Both the IB Physics and the A Level courses cover essentially the same material with perhaps generally a greater coverage at IB Physics than A2 (though there is no materials science in the IB's course). The main difference between the two comes in the style of questioning. Greater mathematical sophistication is required by IB Physics; calculations are more extended and they often require algebraic skill not needed at A Level. The problem-solving is tougher and mathematical. Formal questions, which rely on algebraic skill as well as on an understanding of the Physics concepts, are common. We therefore believe that a student securing a 6 or better at IB Physics HL is a candidate who would gain an 'A' grade in the current A Level.

Since the A Level exam is modular, candidates can target revision on certain topics for certain papers. By virtue of the assessment structure, DP candidates cannot do this but must be in command of all the subject in each exam. Having said that, there is some choice of question and there are fewer specifically "synoptic" questions, demanding knowledge from more than one area, on the IB Physics exam. The style of the IB's course is more traditional and the exam papers reflect this.

All DP students are required to complete a "Group 4" project, during which they collaborate with other scientists from the full range of subjects. Throughout the programme, their personal skills, ability to work independently and awareness of wider ethical aspects of the subject are assessed.

Both IB Physics and A Level assess practical skills through coursework submitted for external moderation. The students complete several activities over the course which are written up formally. There is no practical exam.

Physics

Standard Level

Core Content:	Physics and physical measurement; Mechanics, Thermal physics, Oscillations and waves; Electric currents; Fields and forces; Atomic and Nuclear Physics; Energy, power and climate change.
Option Topics:	Two from Sight and wave phenomena; Quantum physics and nuclear physics; Digital technology; Relativity and particle physics; Astrophysics; Communications; Electromagnetic waves.
Internal Assessment:	24% of Practical Work with a minimum requirement of 40 hours.
External Assessment:	76% Examinations. <ul style="list-style-type: none"> • Paper 1: 30 multiple choice questions on the Core (20%) • Paper 2: Structured and extended response questions on the Core (32%) • Paper 3: Structured and extended response questions on two option topics (24%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	1	11	26	25	19	13	6	<u>4.13</u>

Comparison between this course and A Level

The nature of IB Physics SL is different from AS Level. The IB Physics SL is often nearly as demanding conceptually as Higher Level, but there is less material. The AS course is very definitely a lower sixth course, the first half of A Level, whereas SL covers in two academic years the range of course topics. Thus we believe that those studying IB Physics SL get a much richer grounding in Physics than those studying AS, though there is no materials science in the IB's course.

Since the A Level exam is modular, candidates can target revision on certain topics for certain papers. By virtue of the assessment structure, DP candidates cannot do this but must be in command of all the subject in each exam. Having said that, there are fewer specifically synoptic questions, demanding knowledge from more than one area, on the IB's exam.

All DP students are required to complete a "Group 4" project, during which they collaborate with other scientists from the full range of subjects. Throughout the programme, their personal skills, ability to work independently and awareness of wider ethical aspects of the subject are assessed.

Both IB Physics and A Level assess practical skills through coursework submitted for external moderation. The students complete several activities over the course which are written up formally. There is no practical exam.

GROUP 5: Mathematics

Aims

The aims of all courses in Group 5 are:

- To appreciate the multicultural and historical perspectives of the subject
- To enjoy the courses and develop an appreciation of the elegance, power and usefulness of the subject
- To develop logical, critical and creative thinking
- To develop students' understanding of the principles and nature of the subject
- To employ and refine students' powers of abstraction and generalization
- To develop patience and persistence in problem solving
- To appreciate the consequences arising from technological developments
- To transfer skills to alternative situations and to future developments
- To communicate clearly and confidently in a variety of contexts.

Overview

All students studying on the IB Diploma Programme must take a course in Mathematics. The different courses offered reflect the differing needs of students and we believe that it is right that the IB should offer all of the courses (Mathematical Studies, Mathematics SL, Mathematics HL and Further Mathematics SL), in order to meet those different needs.

Mathematical Studies SL	This course is available at SL only. It caters for students with varied backgrounds and abilities. More specifically, it is designed to build confidence and encourage an appreciation of mathematics in students who do not anticipate a need for mathematics in their future studies. Students taking this course need to be already equipped with fundamental skills and a rudimentary knowledge of basic processes.
Mathematics SL	This course caters for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration.
Mathematics HL	This course caters for students with a good background in mathematics who are competent in a range of analytical and technical skills. The majority of these students will be expecting to include mathematics as a major component of their university studies, either as a subject in its own right or within courses such as physics, engineering and technology. Others may take this subject because they have a strong interest in mathematics and enjoy meeting its challenges and engaging with its problems.
Further Mathematics SL	This course is available at SL only. Worldwide there is extremely limited availability of this subject in schools. It caters for students with a good background in mathematics who have attained a high degree of competence in a range of analytical and technical skills, and who display considerable interest in the subject. Most of these students will intend to study mathematics at university, either as a subject in its own right or as a major component of a related subject. The course is designed specifically to allow students to learn about a variety of branches of mathematics in depth and also to appreciate practical applications. This course is a complement to the Mathematics HL course in that it is constituted of the entire Options range of the Mathematics HL course. Where it is occasionally offered by schools, it thus caters for the most able section of the Mathematics HL constituency who are able to show a very high degree of mathematical flexibility.

Mathematics

Higher Level

Core Content:	Algebra; Functions, Equations, Trigonometry, 2d and 3d Vectors, Matrices, Statistics and Probability, Calculus and Differential Equations; Complex numbers; Induction.
Option Topics:	One from (a) Further Statistics and Probability (b) Sets, Relations and Groups, (c) Series and Differential Equations (d) Discrete Mathematics.
Internal Assessment:	20% on one Investigation and one Modelling Piece.
External Assessment:	80% Terminal Examinations. <ul style="list-style-type: none"> • Paper 1: compulsory short and extended response questions on the Core – non-calculator (30%) • Paper 2: compulsory short and extended response questions on the Core – calculator required (30%) • Paper 3: extended response questions mainly on the Options – calculator required (20%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	1	9	16	22	27	18	8	<u>4.52</u>

Comparison between this course and A Level

Comparison is difficult, especially given the IB Mathematics HL options topics and the lack of mechanics in the IB's course (mechanics is studied though Physics in the IB Diploma Programme model). However as a rule of thumb we would regard the content of IB Mathematics HL as more than A Level and perhaps similar to A Level + AS Further.

The main difference is in assessment. Each individual examination question can be, and often is, set on ideas from across the syllabus, and students need to select the appropriate tool from their entire repertoire of skills. The IB Mathematics HL course and exam also require confident use of a graphical calculator, although they cannot be used for Paper 1. We feel that the IB Mathematics HL examinations discriminate well at the top end 7/6/upper 5 grades; from our experience a student with a top '5' at IB Mathematics HL might well be capable of an 'A' at A Level, and that a student with a '7' at IB Mathematics HL is one with genuine insight and ability in the subject. With the recurring theme of proof in the IB's course, students are exposed to a different, arguably more abstract, kind of overview of the subject.

Further Mathematics

Standard Level

This course is not available at Higher Level

Core Content:	Euclidean Geometry; Statistics and Probability; Sets, Relations and Groups; Series and Differential Equations; Discrete Mathematics. In addition, the syllabus states that 'proof forms a common thread throughout the five topics; contrapositive and proof by contradiction; and induction.'
Option Topics:	None.
Internal Assessment:	None.
External Assessment:	100% Examination <ul style="list-style-type: none"> • Paper 1: Four to six compulsory short-response questions based on the whole syllabus (35%) • Paper 2: Four to six compulsory extended-response questions based on the whole syllabus (65%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	13	16	24	25	14	8	<u>4.33</u>

Comparison between this course and A Level

The differences in structure make a comparison with Further Mathematics A Level very difficult to make.

The IB Further Mathematics SL course focuses on different branches of mathematics in order to encourage students to appreciate the diversity of the subject. Students are required to begin to form an overview of the characteristics that are common to all mathematical thinking, independent of topic or branch. The emphasis on proof is particularly challenging for students and this level.

The syllabus is the entire option range for IB Mathematics HL, with the addition of Euclidean Geometry. Examination questions are comparable in difficulty with those set on the four options in the IB Mathematics HL course. The challenge for students is to reach an equivalent level of understanding across these five topics; achieving this requires significant mathematical maturity.

It should be noted that very few schools worldwide offer Further Mathematics (in May 2008 there were 105 candidates worldwide). Many that do offer the subject require students to take it in addition to the regular Diploma – that is, as a *seventh* subject.

Mathematics

Standard Level

This course was formerly called Mathematical Methods

Core Content:	Algebra; Functions, Equations, Trigonometry, 2d and 3d Vectors, Matrices, Statistics and Probability, Introductory Differential Calculus.
Option Topics:	None.
Internal Assessment:	20% on one Investigation and one Modelling piece.
External Assessment:	80% Examination <ul style="list-style-type: none"> • Paper 1: compulsory short and extended response questions – non-calculator (40%) • Paper 2: compulsory short and extended response questions – calculator required (40%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	1	7	19	21	25	18	9	<u>4.53</u>

Comparison between this course and A Level

Comparison is difficult, especially given the lack of mechanics in the IB's mathematics course (mechanics is studied though Physics in the IB's model). However as a rule of thumb we would regard the content of IB Mathematics SL as being somewhere between AS and A2 level Mathematics, with the added advantage of being studied over two years continuously, rather than dropped at the end of the Lower Sixth year.

In terms of assessment, IB Mathematics SL and A Level papers are similar in style. Half the time is spent on short questions, and half on the longer type. The IB's course and exam also require confident use of a graphical calculator although they cannot be used for Paper 1.

It is worth noting that students opting for IB Mathematics SL cover far more mathematics, and to much greater depth than those choosing IB Mathematical Studies SL – for the same number of Diploma Programme points.

Mathematical Studies

Standard Level

Core Content:	Number and Algebra; Sets, Logic and Probability, Functions, Geometry and Trigonometry, Statistics, Introductory Differential Calculus, Financial Mathematics
Option Topics:	None.
Internal Assessment:	20% on a Project involving the generation/collection, interpretation, analysis and evaluation of information and data
External Assessment:	80% Examination <ul style="list-style-type: none"> • Paper 1: 15 short questions (40%) • Paper 2: 5 extended response questions (40%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	4	13	28	32	17	4	<u>4.57</u>

Comparison between this course and A Level

This is a mathematics course designed for those students not formally needing mathematics beyond the school level. A primary aim is to ensure that students retain, or if necessary develop, a solid understanding of those simple numerical and algebraic techniques which will be of use to them in future life, and the project element allows students to follow their own interests. A high degree of accuracy and fluency is required – as evidenced by the need to answer fifteen questions (no choice) from across the syllabus in ninety minutes for paper one.

Though some of the course is at high-GCSE level, several topics are found in A Level syllabuses. Arithmetic and geometric series, differential calculus, conditional probability, exponential functions, regression lines, correlation coefficients and chi-squared test for independence are found in A Level syllabuses. The study of truth-tables and logic is not found on GCSE or A Level syllabuses, but supports inferential reasoning across the curriculum. The IB Mathematical Studies SL course and exams also require confident use of advanced statistical and graphing functions on a graphical calculator, although they cannot be used for Paper 1.

With its emphasis on applications rather than on conceptual analysis, a comparison of grades with AS or A2 level is difficult; we believe that while the course is certainly no preparation for a technical subject at university, its breadth and selective depth make it an excellent support for non-technical subjects. Students emerging with a top grade in IB Mathematical Studies SL will have a practiced range of skills far superior to one coming from a top GCSE grade. Conversely, those entering the course with a top GCSE grade need to work diligently to achieve a top IB Mathematical Studies grade.

GROUP 6: Arts

Overview

The "Arts" section of Group 6 includes Music, Theatre Arts and Visual Arts. The delivery of these subjects emphasises practical production by the student and the exploration of a range of creative work in a global context.

Each of the individual subjects has its own explicit aims.

Art History

Standard Level

School Based Syllabus; not available at Higher Level

Core Content:	Close study of the heritage of visual representation, ranging from painting, architecture, sculpture and the applied arts, including consideration of function and iconography, techniques and materials, training of painters, social and economic relationships of patronage, aesthetics, and social and political context.
Option Topics:	Two from the following: Art and Architecture of Ancient Greece; Rome – Republic and Empire; Rise of Christianity – Rome and Constantinople; Romanesque and Gothic Art and Architecture; The Art of the Renaissance; Baroque painting, sculpture and architecture; The Age of Reason to Romanticism; Experiments in 19 th and early 20 th century Art;
Internal Assessment:	43% on a Project (3,000 word assignment on topic chosen by student)
External Assessment:	57% Examination <ul style="list-style-type: none"> • Paper 1: Short answer paper (15%) • Paper 2: Essay paper (42%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade	0	3	20	30	32	10	4	<u>4.41</u>

Comparison between this course and A Level

A comparison between the courses is not possible as there are no schools offering both IB Art History SL and A Level.

IB Art History allows for the study of the rich heritage of visual arts produced by human societies. This production, ranging from painting, sculpture, architecture, design and applied arts, to costume and body art, has found expression in human cultures from the earliest times. The art historian is concerned with the formal appreciation of these works and the understanding of their meaning within the culture that produced them.

A wide range of study options are available, an extended essay task is undertaken on any appropriate topic and there is a close focus on the social, economic and political context of art.

Music

Higher and Standard Level

Core Content:	Musical perception and analysis paper, involving study of a set work and critical analysis of unprepared excerpts; musical investigation; for Higher Level also solo performance and composition.
Option Topics:	Higher Level: None. Standard Level: One of solo performance or composition or group performance.
Internal Assessment:	HL = 50% <ul style="list-style-type: none"> • Solo performance (25%) • Composition (25%) SL = 50% on solo performance, composition or group performance
External Assessment:	HL 50% / SL 30% Examination <ul style="list-style-type: none"> • Paper 1: Prescribed work analysis and study of genre and style 20% Musical investigation comparing two genres (maximum 1500 words)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	2	16	34	31	15	2	<u>4.46</u>
% awarded grade - SL	0	3	15	26	36	18	3	<u>4.59</u>

SL results are the average of the three options mentioned above

Comparison between this course and A Level

A key difference between IB Music and A Level is that the former has no specific examination in harmony and counterpoint or in aural perception; however, it is possible to incorporate the study of such within the framework of the IB's course. IB Music does not contain a specific curriculum content, which A Level does, although it makes it clear in the scheme of assessment what it is required in the listening paper. It requires some knowledge of written music from 1500 to present day, and also non-Western music from around the world. There is also only the study of one set work in detail with IB Music rather than several set works in less detail. IB Music involves writing 25-minute critical responses on music which has not previously been specifically prepared or studied by the candidate whereas A Level asks similar questions on unprepared extracts within the context of the aural perception papers but from a prescribed area of study.

This all serves to make the IB Music course one which truly embraces a wide range of cultures and perspectives and encourages candidates to posit their own musical heritage within the international context. Equally, the freedom that this allows students and teachers to pursue areas of interest is of much benefit, indeed, it is an obligation given the variety of what might be encountered in the examination.

Theatre

Higher and Standard Level

Core Content:	Theatre in the making; Theatre in the world; Theatre in performance; Journal studies.
Option Topics:	HL only: One from Devising practice; Exploring practice. SL only: Any independent aspect of interest in theatre
Internal Assessment:	50% on spoken, research and reflective tasks. <ul style="list-style-type: none"> Theatre performance and production presentation: An oral presentation of 30mins with 7-10 HL/5-7 SL images (25%) Portfolio of 3000 HL / 2000 SL on their independent project and its connection to experiences of the Core (25%)
External Assessment:	50% on research and written tasks. <ul style="list-style-type: none"> Research investigation: A 2000-2500 HL / 1500-1750 SL word study with supporting visual materials (25%) Practical performance proposal of 250 words with supporting visual materials and a report of 1000-1250 words (25%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	2	19	36	31	10	1	<u>4.31</u>
% awarded grade - SL	1	15	41	27	12	4	0	<u>3.48</u>

The aims of the Theatre course are to provide students with the opportunity:

- To experience and participate in a wide and varied range of theatre activities and develop proficiency in more than one area of theatre technique
- To become familiar with forms of theatre from their own and different cultures
- To explore different theatre traditions in their historical contexts
- To develop academic skills appropriate for the study and understanding of theatre
- To become reflective and critical practitioners in theatre
- To develop the confidence to explore, to experiment and to work individually and collaboratively on innovative projects, which should involve challenging established notions and conventions of theatre
- To understand the dynamic, holistic and evolving nature of theatre and the interdependencies of all aspects of this art form.

Comparison between this course and A Level

The IB Theatre Arts course seeks to integrate practical approaches to performance with a study of important theatrical theories, texts and practices from a range of cultures and periods. At both HL and SL, students engage with a variety of production work, participating in a minimum of two productions in different capacities at HL and one at SL. In class they develop ensemble performance skills, have opportunities to direct, and learn to write informed critiques of live performances. Regular theatre visits are a key component of the course. A variety of World Theatre practices or traditions and play texts from different cultures are studied. The areas of study involved, the number of texts covered, and the emphasis on integrating theory and practice make the course directly comparable to A Level Drama and Theatre Studies, although HL students will invariably gain greater practical and non-performance experience, encounter a wider range of production roles, and have a broader sense of international theatre than A Level students. (At SL the course similarly extends beyond AS Level). The crucial difference from A Level lies in the more flexible and varied approach to the curriculum and methods of assessment, and we believe that a 7 at HL is significantly more difficult to attain than an 'A' grade at A Level Drama and Theatre Studies.

Visual Arts

Higher and Standard Level

Core Content:	Personal themes explored and expressed in an appropriate context.
Option Topics:	No prescribed content.
Internal Assessment:	Option A: 25-30 HL/15-20 SL A4-size copies of pages from the investigation workbook (40%) Option B: 8-12 HL/6-8 SL photographs representing the works produced for studio work (40%)
External Assessment:	Option A: 12-18 HL/8-12 photographs representing the works produced for studio work (60%) Option B: 30-40 HL/25-30 SL A4-size copies of pages from the investigation workbook (60%)

May 2008 Results	1	2	3	4	5	6	7	Mean
% awarded grade - HL	0	3	8	29	35	20	6	<u>4.78</u>
% awarded grade - SL	0	6	14	33	31	12	3	<u>4.38</u>

SL results are the average of the two options

The aims of the Visual Arts course are to provide students with the opportunity:

- To investigate past, present and emerging forms of visual arts and engage in producing, appreciating and evaluating these
- To develop an understanding of visual arts from a local, national and international perspective
- To build confidence in responding visually and creatively to personal and cultural experiences
- To develop skills in, and sensitivity to, the creation of works that reflect active and individual involvement
- To take responsibility for the direction of their learning through the acquisition of effective working practices.

Comparison between this course and A Level

A Level is assessed by teacher examiner and moderated by external moderator with the student absent. IB Visual Art is examined as above and by the examiner interviewing the candidate. With A Level the balance of marks favours research and development. The IB Visual Arts course favours the Studio Work.

Assessment criteria are quite different. A Level favours fine artists; IB is more open and inclusive of craft skills and personal visual vocabularies. One of the IB's requirements is that students exhibit their work at the end of the two year course. This is an opportunity for others to see the studio work and research work book, and the occasion upon which the individual interview between external examiner and student is undertaken. A Level has effective moderator training and supervision/moderation built in to the assessment system; IB has none of this and relies heavily on standardisation of work samples by senior examiners.

APPENDIX 1:

The UCAS and QCA Tariffs

IB Diploma Points	UCAS Tariff Points For 2009	UCAS Tariff Points For 2010 onwards	QCA Tariff
24	280	260	750
25	303	282	780
26	326	304	810
27	350	326	840
28	373	348	870
29	396	370	900
30	419	392	930
31	442	413	960
32	466	435	990
33	489	457	1,020
34	512	479	1,050
35	535	501	1,080
36	559	523	1,110
37	582	545	1,140
38	605	567	1,170
39	628	589	1,200
40	652	611	1,230
41	675	632	1,260
42	698	654	1,290
43	722	676	1,320
44	744	698	1,350
45	768	720	1,380

Note that an A-grade at A2-level counts as 120 UCAS points and 270 QCA points.

Sources: http://www.ucas.com/students/ucas_tariff/tariff tables/
(accessed 1 December 2008)
<http://www.accreditedqualifications.org.uk/qualification/50034157.seo.aspx>
(accessed 1 December 2008)

The UCAS tariff has been amended for 2010 onwards and both versions are published above – the comments that follow are concerned with the tariff that is relevant for this academic year, namely the tariff for 2009.

All of these tariffs have been the subject of much controversy which cannot be resolved here; however, it is clear that both of the UCAS tariffs and the QCA tariff recognise the value of the IB Diploma Programme.

While levels of conditional offers are rightly left to awarding institutions, we note that the UCAS tariffs are based on wide consultation with expert groups of teachers of both systems and detailed comparisons of syllabuses and exam papers. We believe that the QCA tariff substantially undervalues the IB Diploma Programme at scores of more than 35 points. Aware that we may be perceived to be partial on this matter, we draw your attention to two specific observations to support this perspective.

Individual subject equivalences

The QCA documents are based on the assertion that "there was broad consistency in the findings to suggest that no great injustice would be done to either qualification if the grade A

were aligned to 7 points and the grade E to 4" (QCA, 2004 p2). We believe that this is incorrect for two reasons. Firstly it contradicts the overwhelming experience of teachers who teach both courses, as outlined throughout this document. Secondly, it is impossible to square this assertion with the relative proportions of students attaining top grades in individual subjects. In Mathematics, English, Physics and Economics for example, the proportion of students attaining A grades at A Level in 2008 was 44.0% and 22.8%, 31.8 and 33.1% (see Appendix 3) whereas the proportions of students attaining a '7' in the equivalent HL subject with the IB Diploma were 8%, 3%, 8% and 13% respectively (see the specific pages where each subject is described). While there is variation from subject to subject, the general pattern is clear, and this certainly suggests that equating a '7' with an 'A' is not a fair equivalence.

The differing aims and methodologies of QCA and UCAS in determining the tariff

The UCAS tariff aims to offer "comparisons between applicants with different types and volumes of achievement" (UCAS, 2006, p7) and new qualifications "are benchmarked against an existing qualification in the Tariff by an Expert Group using a protocol designed specifically for this purpose by the University of Oxford Department of Educational Studies" (http://www.ucas.com/students/ucas_tariff/tariffags/ucastariff/newquals/). UCAS is thus concerned with the measurements made in order to provide access to Higher Education, and UCAS naturally values the academic skills developed by, for example, Theory of Knowledge and the Extended Essay. QCA, on the other hand, naturally has a much wider perspective and is equally concerned with, for example, vocational qualifications as with academic ones; QCA does not, therefore give as much credit to the academic nature of the IB Diploma Programme. In addition, QCA must legitimately balance social and financial factors in addition to educational considerations. Their own documents state:

Perhaps the most important consideration in any proposed scale is its possible implications for centres. A scale that undervalues the IB would be unfair to centres who offer it – and would open the proposed scale to the charge of manipulation by the DfES. Conversely, any scale which gave the IB undue recognition could have the effect of driving centres to adopting it (or at least those which could afford it) and its expense could thus become a problematic issue for the Department).

(QCA, 2004 p3)

These differing aims are reflected in differing methodologies, and while a comparative review is beyond the scope of this document, we note two points:

- The QCA tariff was based on data from 450 IB Diploma Programme students (QCA, 2004); the UCAS tariff was based on all May 2004 IB Diploma Programme students - some 25,000 students (UCAS,2006).
- The UCAS methodology involved extensive consultation of Senior A Level Examiners, Senior IB Diploma Programme Examiners, Higher Education Representatives¹ and IB School Representatives (UCAS,2006). The QCA tariff appears to lack this basis in expert judgment. While there is a previous QCA report which did involve experts from IB and A Level backgrounds (QCA,2003), it is by its own admission a methodologically limited report which itself notes as one of its own limitations "the failure to address the nature of the IB Diploma as an umbrella qualification" (QCA,2003 p13). As it is precisely this overarching value of the IB Diploma Programme that any tariff must address, the QCA tariff cannot be soundly based on this report and appears to lack support from experts.

We strongly urge interested parties to examine two documents which explain matters in far more detail:

UCAS, 2006: http://www.ucas.com/website/documents/tariff/tariff_reports/ib.doc

QCA, 2004: www.qca.org.uk/14-19/developments/downloads/annex_6_IB.pdf

Both sites are active at time of writing (1 December 2008).

¹ Dr Stephen Roser (Admissions Tutor, Department of Chemistry, University of Bath), Dr Anthony Hoare (Admissions tutor, School of Geographical Sciences, University of Bristol), Dr James Blowey (Department of Mathematical Sciences, University of Durham), Mr Hywel Davies (Head of Admissions & Recruitment, University of Aberystwyth), Ana Hidalgo-Kingston (Head of Admissions, Student Recruitment & Admissions Office, University of Sheffield), Ms Jane Minto (Director of Admissions, University of Oxford)

Recognition of Certificates

The revisions to the UCAS Tariff *for 2010 onwards* allow for Certificates to be recognised. Previously, there was no formal recognition of those candidates who had been awarded Certificates, although many institutions recognise the demanding study that such candidates undertake and acknowledge their achievements:

IB Certificate Points	UCAS Tariff Points For Higher Level	UCAS Tariff Points For Standard Level
1	0	0
2	0	0
3	20	11
4	50	27
5	80	43
6	110	59
7	130	70

IB Core Points	UCAS Tariff Points
0	10
1	40
2	80
3	120

The individual Certificates are recognised at an equivalent level to those candidates who have completed the IB Diploma Programme successfully. Ergo, a Diploma candidate who studied 3 HL, 3 SL and had completed a course in Theory of Knowledge and the Extended Essay at A Grades in both, as well as the requirements for CAS, would be awarded 720 points (from 2010 onwards) and a Diploma – and the points for the individual certificates and IB Core Points are correspondingly 3HL (130 x 3) + 3SL (70 x 3) + Core (120) = 720.

However, those candidates who are not Diploma candidates cannot be registered for Theory of Knowledge or the Extended Essay because of the IB Diploma Programme regulations. Nonetheless, many of these candidates will have been obliged by a school to attend Theory of Knowledge sessions and may have been required to complete an Extended Essay (especially if they are studying amongst a cohort that includes a high proportion of IB Diploma candidates): they are unable to be assessed formally. Ultimately, Certificate candidates are unable to be awarded the Core points and are thus unable to access the tariff scores to recognise their involvement with Core studies. Therefore, the UCAS Tariff for IB Core Points (from 2010 onwards) is only applicable to those IB Diploma candidates who fail the IB Diploma.

References

Tariffs

National Database of Accredited Qualifications (NDAQ, 2008) *Qualification Details: IBO Level 3 International Baccalaureate Diploma*

<http://www.accreditedqualifications.org.uk/qualification/50034157.seo.aspx>

(accessed 1 December 2008)

University and Colleges Admissions Services (UCAS 2008) *The UCAS Tariff*

http://www.ucas.com/students/ucas_tariff/

(accessed 1 December 2008)

Reports

Qualifications and Curriculum Authority (QCA 2003) *Report on Comparability between GCE and International Baccalaureate Examinations*

http://www.qca.org.uk/libraryAssets/media/alevels_vs_ib.pdf

(accessed 1 December 2008)

Qualifications and Curriculum Authority (QCA, 2004) *Annex 6 – IB Comparability and Inclusion in the Performance tables*

www.qca.org.uk/14-19/developments/downloads/annex_6_IB.pdf

(accessed 1 December 2008)

University and Colleges Admissions Services (UCAS, 2006) *Expert Group Report for Awards Seeking Admission to the UCAS Tariff: The International Baccalaureate*

http://www.ucas.com/website/documents/tariff/tariff_reports/ib.doc

(accessed 1 December 2008)

APPENDIX 2: Diploma Points Distribution May 2008

These data include only those 31,285 candidates who were awarded a Diploma, which was 79.17% of all Diploma candidates.

IB Diploma Points	Number of Candidates	% achieving Diploma point score
24	1,071	2.71
25	1,439	3.64
26	1,896	4.80
27	2,118	5.36
28	2,470	6.25
29	2,485	6.29
30	2,516	6.37
31	2,418	6.12
32	2,263	5.73
33	2,082	5.27
34	1,847	4.67
35	1,657	4.19
36	1,485	3.76
37	1,278	3.23
38	1,155	2.92
39	954	2.41
40	750	1.90
41	548	1.39
42	372	0.94
43	262	0.66
44	145	0.37
45	74	0.19

Source: Statistical Bulletin (IBO 2008)
<http://www.ibo.org/facts/statbulletin/dpstats/documents/May2008StatisticalBulletin.pdf>
 (accessed 1 December 2008)

APPENDIX 3:

A Level Results by Subject

2008

SUBJECTS	PERCENTAGES BY GRADE					
	A	B	C	D	E	U
Art and Design Subjects¹	30.8	24.8	22.8	14.2	5.6	1.8
Biology	26.7	22.2	20.3	16.0	10.5	4.3
Business Studies	17.9	27.7	28.3	18.0	6.5	1.6
Chemistry	33.7	24.5	18.1	12.6	7.6	3.5
Classical Subjects¹	22.5	27.7	29.2	15.6	4.5	0.5
Computing	16.1	20.5	22.4	21.9	13.9	5.2
Economics	35.1	27.2	20.1	11.8	4.5	1.3
English¹	22.8	26.7	27.7	16.8	5.1	0.9
Drama	21.1	31.8	29.6	13.5	3.4	0.6
French	37.3	27.7	18.9	10.6	4.3	1.2
Geography	28.6	27.7	23.7	13.7	5.1	1.2
German	38.4	26.3	18.9	10.8	4.7	0.9
History	25.0	28.7	24.9	14.6	5.5	1.3
ICT	9.7	20.3	25.8	23.8	15.0	5.4
Irish	57.3	25.4	12.9	3.6	0.4	0.4
Law	20.7	22.6	24.1	18.3	9.9	4.4
Mathematics	44.0	22.1	15.2	10.1	5.8	2.8
Mathematics (Further)	57.5	20.3	11.1	5.8	3.0	2.3
Media/Film/TV Studies¹	13.7	31.3	33.5	16.3	4.2	1.0
Music	18.1	23.6	24.4	21.0	10.1	2.8
Other Modern Languages³	47.7	29.3	12.2	5.4	3.2	2.2
Performing/Expressive Arts	16.7	27.4	28.8	19.1	6.3	1.7
Physics	31.8	20.8	18.0	14.8	10.1	4.5
Political Studies	32.7	28.3	21.1	11.1	5.0	1.8
Psychology	19.3	23.8	24.6	18.6	10.3	3.4
Religious Studies	26.7	30.0	24.2	13.1	4.6	1.4
Science Subjects²	23.7	21.3	21.2	18.2	11.9	3.7
Sociology	21.8	27.1	25.3	16.5	7.0	2.3
Spanish	38.7	28.3	18.6	9.8	3.7	0.9
Sports / PE Studies	16.0	22.1	25.3	21.2	12.1	3.3
Technology Subjects¹	18.2	24.1	26.3	19.2	9.4	2.8
Welsh⁴	18.7	27.0	27.9	18.8	6.2	1.4
All Other Subjects	18.2	23.2	24.2	18.6	11.2	4.6
All Subjects	25.9	24.9	23.1	15.7	7.6	2.8

- 1 These titles cover a range of related subjects
- 2 Science includes all science subjects except Biology, Chemistry and Physics
- 3 Other Modern Languages includes all languages except Irish, French, German, Spanish and Welsh
- 4 Welsh includes Welsh (First Language) and Welsh (Second Language)

Source:
<http://www.guardian.co.uk/education/table/2008/aug/14/alevels.schooltables>
 (accessed 1 December 2008)

APPENDIX 4: IB Diploma Grade Inflation Analysis

We believe that the data below shows that the IB Diploma has not suffered from grade inflation.

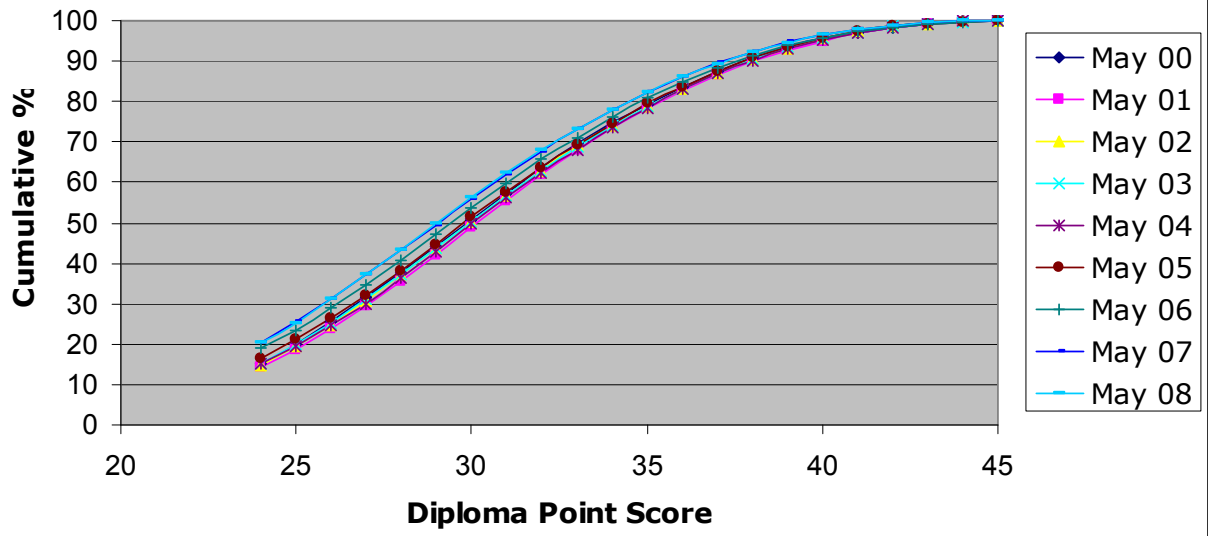
Mean score per examination session	May 2002	May 2003	May 2004	May 2005	May 2006	May 2007	May 2008
	30.29	30.26	30.41	30.09	29.89	29.56	29.57

Mean grade per examination session	May 2002	May 2003	May 2004	May 2005	May 2006	May 2007	May 2008
	4.82	4.81	4.82	4.78	4.74	4.68	4.69

Pass rate (%) per examination session	May 2002	May 2003	May 2004	May 2005	May 2006	May 2007	May 2008
	82.37	81.99	83.07	81.40	80.35	78.78	79.02

Cumulative % Achieving Diploma Points Total									
Diploma Point Total	May 2000	May 2001	May 2002	May 2003	May 2004	May 2005	May 2006	May 2007	May 2008
24	15.13	14.12	14.83	15.10	15.12	16.41	18.84	20.47	20.25
25	20.07	18.66	19.40	19.81	19.55	21.11	23.56	25.46	25.29
26	25.64	23.75	24.79	25.12	24.50	26.46	28.81	31.08	31.06
27	31.42	29.39	30.95	31.22	29.99	32.06	34.70	37.16	37.13
28	37.47	35.62	37.31	37.40	36.20	38.22	40.88	43.22	43.45
29	44.09	42.16	43.76	43.92	42.65	44.71	47.37	49.50	49.78
30	50.76	49.06	50.32	50.30	49.62	51.30	53.72	56.00	56.19
31	57.27	55.43	56.69	56.63	56.13	57.60	59.82	62.03	62.34
32	63.73	61.89	62.89	62.97	62.17	63.46	65.70	67.64	68.08
33	69.60	67.98	69.09	68.71	67.93	69.38	71.17	73.04	73.36
34	74.79	73.70	74.12	74.19	73.39	74.61	76.29	77.78	78.04
35	79.42	78.44	78.98	78.90	78.38	79.44	80.86	82.23	82.23
36	83.70	82.84	83.26	83.32	82.95	83.74	85.01	86.14	86.00
37	87.61	86.62	87.18	87.16	86.93	87.49	88.52	89.42	89.23
38	90.96	90.04	90.57	90.66	90.23	90.87	91.50	92.26	92.15
39	93.37	92.79	93.26	93.31	92.88	93.54	93.99	94.60	94.56
40	95.55	95.02	95.47	95.50	95.31	95.53	95.75	96.38	96.46
41	97.15	97.01	97.31	97.17	97.00	97.27	97.31	97.75	97.85
42	98.45	98.26	98.53	98.49	98.42	98.53	98.48	98.71	98.79
43	99.26	99.23	99.30	99.33	99.29	99.33	99.29	99.40	99.45
44	99.81	99.77	99.79	99.78	99.79	99.76	99.72	99.82	99.82
45	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Cumulative % Diploma Points 2000 - 2008



Sources:
Statistical Bulletins (IBO 2000 - 2008)