



Ecole Internationale de Genève
International School of Geneva

Campus des Nations

INTERNATIONAL BACCALAUREATE CAREER-RELATED PROGRAMME CURRICULUM GUIDE



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Foreword

Our campus represents the oldest international school in the world and the IBCP (which, until recently, was the IBCC) is the newest of the four IB programmes. The IBCP is a qualification for learners who want the freedom to specialize in ways that the IB Diploma Programme does not allow. The IBCP prepares students for further studies, such as university degrees, but it also looks beyond that horizon and focuses students on skills and habits necessary for their careers. Students who obtain the IBCP also receive a High School Diploma.

The IBCP encourages students and teachers to live out every aspect of the International School of Geneva's mission statement. One measure of this is the reflective project, which requires students to come up with creative ways of investigating complex problems. This is a chance for students to engage in independent research and present their conclusions in the most persuasive and creative manner which they can devise. The possibilities are endless and they certainly help develop each student into an independent learner. Another integral part of the student's life will be the community and service programme, which stresses humanitarian values and building community through service based learning experiences. The Nations Careers Course will allow students to develop interdisciplinary skills ranging from ICT know-how to ethical thought to teamwork.

Guidance

The classes students select to study should not only be their strongest and their favourite subjects; classes should also be selected in line with what students want to study later and where students are hoping to pursue these studies.

It is crucial that students meet with university guidance counsellors at the outset of their choices in order to determine how the subject package may affect your preliminary university choices. This is particularly important for any student wishing to study in Europe or the United Kingdom. Regular contact with the counsellors is essential for all students.

Students are permitted to change subjects if necessary until October, and changes from higher to standard levels can be considered after this point, but the earlier you choose the right package the easier it will be to consolidate the knowledge gained. Students should also seek advice from your homeroom teacher as well as their subject teachers. Our mission is not only to help students achieve their dreams, but also to provide them with opportunities to enjoy their education.

Subject Choices

All students of the IBCP will have to choose either a business level 3 BTEC or an art and design level 3 BTEC. Once you have chosen this, you are free to choose your Diploma Programme courses.

The following are the subjects (at higher and standard level) available at Campus des Nations. Students must choose 2 to 4 of these subjects. Students may choose either higher or standard level courses or a combination of the two.

These are the subjects (at Higher and Standard level) available at Campus des Nations:

GROUP 1:	English A; French A; self-taught A Standard level
GROUP 2:	French B; Spanish B; French ab-initio; Spanish ab-initio; other B language
GROUP 3:	Geography; History; History in French; Psychology; Economics
GROUP 4:	Biology; Chemistry; Physics: Design Technology, Nature of Science
GROUP 5:	Mathematics Higher; Standard or Studies (Standard)
GROUP 6:	Visual Arts; Film; Theatre Arts

(Please note that courses can only run with a minimal enrolment number and some subject combinations may need to be revised due to timetabling constraints: you may need to review your initial choices.)

This booklet is intended to give you information on the subjects offered at Nations as well as the nature of assessment in the IBCP. Please look through it in detail and refer to the last page on which you can find e-mail addresses and websites which will help you to answer any questions you may have.

Alexandra Juniper, IBCP Coordinator

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The IB Career-related Programme

The International Baccalaureate Career-related Programme is both a two year curriculum which prepares students for work and a university admissions qualification.

The IBCP is an umbrella qualification which, at Nations, includes a BTEC level 3 qualification, the IBCP core and a minimum of 2 IB Diploma Programme subjects.

The IBCP is a very exciting applied learning course. Students will be learning skills that many people don't learn until university or the first years of their career. They will be able to specialise in **Business** or in **Art and Design** and they should feel their expertise grow in these areas. Students who work hard in school and build connections with industry outside of school will be able to build flourishing careers in areas they are passionate about. There are few greater rewards in life than loving your work.

For further information, please contact Alexandra Juniper, the IBCP coordinator:
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The BTEC Career Qualification

Below are excerpts from <http://www.edexcel.com/btec>. At Nations we will offer a level 3 BTEC diploma. Depending on students, they will be able to attain a 90 credit diploma or the full 120 credit diploma. Both allow students to continue with University or specialised study.

Please refer to the above site for further information or contact the IBCP coordinator.

What is a BTEC?

BTECs are work-related qualifications suitable for a wide range of students.

They're **built to accommodate the needs of employers** and allow progression to university.

They provide a **practical, real-world approach** to learning without sacrificing any of the essential subject theory.

Available across a **wide range of industry sectors**, they're continually developed and updated to meet the needs of employers and learners.

Where can a BTEC take you?

BTECs have been around for nearly 30 years and their reputation is second to none. They're **recognised by schools, colleges, universities, employers and professional bodies** across the UK and in over 100 countries worldwide.

The BTEC Art and Design curriculum:

Students choosing the art and design BTEC will likely study the following units:

Unit 1: Visual Recording in Art and Design

Unit 2: Materials, Techniques and Processes in Art and Design

Unit 3: Ideas and Concepts in Art and Design

Unit 4: Communication through Art and Design

Unit 5: Contextual Influences in Art and Design
Unit 10: Personal and Professional Development in Art and Design (taught in PPS)
Unit 24: Studio Photographic Techniques
Unit 30: Location Photography
Unit 32: Experimental images in photography
Unit 34: Image Manipulation Using Computer Applications
Unit 41: Word and Images in Graphic Design
Unit 75: Drawing from observation.

The BTEC Business curriculum:

Students choosing the art and design BTEC will likely study the following units:

Unit 1: The Business environment
Unit 2: Business resources
Unit 3: Introduction to marketing
Unit 4: Business communication
Unit 36: Starting a Small Business
Unit 37: Business ethics
Unit 9: Creative Product Promotion
Unit 10: Market Research in Business
Unit 18: Managing a Business Event
Unit 15: Planning a Career in Business (taught in PPS)
Unit 34: Website Design Strategy
Unit 19: Developing teams in business

(A detailed description of the content and assessment of each of these units can be found at: <http://www.edexcel.com/btec>)

The Core of the IBCP

Service Learning

Service Learning is one fourth of the CP Core (Personal and Professional Skills, Language Development, Service Learning, and Reflective Project) and is intended to help students develop personally and professionally through meaningful experiences in their communities. Through Service Learning, students have the chance to utilize their knowledge and skills in real-life situations. All students identify a need, address that need through service activities, and reflect on their experiences.

"Service Learning provides students with opportunities to develop new skills and knowledge in real life situations. Students work with community members to undertake service activities that satisfy identified needs; the emphasis is on developing local knowledge, civic responsibility, social aptitude, and personal growth," (www.ibo.org/ibcc).

In order to complete the Service Learning component of the CP at Campus des Nations, students are expected to:

- Identify a need in the community (we recommend that their project be related to their career pathway)
- Set goals for service learning
- Make a detailed plan for service learning activities and have the plan approved by the Community and Service coordinator
- Set up initial meetings with community contacts
- Plan and manage their own service learning plan
- Work with the community to achieve predetermined goals
- Reflect on the experience on ManageBac

All students in CP must complete at least **50 hours** for their Service Learning experience, including planning, doing, and reflecting. Students will utilize the MYP Design Cycle to develop a Community and Service Plan. All students will keep a log of hours and reflect on their experience through entries ManageBac.

Assessment: Nations monitors students' progress. Students who fail to complete the requirements are not awarded the CP.

The educational benefits of service learning apply in the school community, and in the local, national and international communities. Service learning 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. Service Learning enables 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.

Students are encouraged to design their service projects to enhance skills linked to their career-track.

Please note that all Nations students are required to follow the Service Learning programme.

The Reflective Project

A teacher or member of staff will supervise your reflective project, but it is first and foremost an independent project undertaken by the learner. The supervisor provides general guidance on time management and the overall structure and presentation of the paper, and ensures that the project is the candidate's own work.

Students are required to present on a subject of interest to them. The reflective project may be original research or it may be a creative expression of some aspect of their

career track that particularly interests them. A student might build a website or create a video or launch a marketing campaign.

All projects are marked externally.

All IBCP students must undertake a reflective project.

The Careers Course:

The Campus des Nations careers course teaches skills and knowledge which will help students in their future careers. More generally, it should also encourage reflection on how students approach learning.

The course will include units on critical and ethical thinking as well as foreign language acquisition. Students will also learn hard skills such as ICT skills and entrepreneurship.

The course is developed around an interdisciplinary model and business students will work with art and design students on projects throughout the course of their study. The Nations careers course is a taught course and students will be required to attend six periods a week for this course, as an essential part of the IBCP.

Language Development

Language development aims to provide students with the necessary skills and intercultural understanding to enable them to communicate in an environment where the language studied is spoken. This process encourages students to go beyond the confines of the classroom, expanding their awareness of the world and fostering respect for cultural diversity.

Requirements

All CP students are required to complete the language development core component and the language portfolio, including those students studying a Diploma Programme (DP) language acquisition course.

Should a student undertake a DP language acquisition course in addition to the minimum requirement of two DP courses for the CP, the language development requirement is satisfied. However, the language portfolio must still be completed to the satisfaction of the school.

The minimum requirement for satisfactory completion of language development is that students have developed their language ability when mapped against the language phases. There is no requirement for students to move from one phase to the next, only that they have evidence of language development in the target language, it should represent at least 50 hours of study.

The options for language development are:

- an extension to a DP language course
- an online language course
- a school-monitored self-directed language study.

Global Affairs

At the Campus des Nations, we run a weekly course called “Global Affairs”. The main objectives of the course are for students to develop an awareness of world events, to learn basic debating skills, to explore and learn to live with ideological differences and to be able to view the media critically. The course is mandatory for all year 12 students and is entirely student-led. A typical session will include:

1. The local and international news read by students as well as at least one article from one of the countries represented by one of the presenters.
2. A debate on one of those issues chaired and facilitated by students

The rationale behind this specific student-led format is to allow students to take ownership of the transmission of information, hereby making it less disembodied and (in the form of a debate) more dynamic.

The students who lead “Global Affairs” are selected rigorously and their responsibilities go further than merely scheduling news readers each week and chairing debates: the leaders have to update an information window on a regular basis and encourage their peers to prepare for the following debate.

The student leaders are awarded community and service credit for this activity. awarded community and service credit for this activity.

GROUP 1: Language A

Higher level: English A Literature
French A Language and Literature

Standard Level: English A Language and Literature
French A Language and Literature
Self-taught Language A literature

NB: Almost any "Self-taught" Language A Literature course can be studied at Standard Level outside of the school's timetabling for an extra fee.

More than 80 different first languages have been offered for examination as part of the IBO's policy of encouraging students to maintain strong ties to their own cultures. Students ideally develop strong written and oral skills, respect for the literary heritage of their first languages, and an international perspective. Every diploma candidate is required to include a group 1 language, either HL or SL. Where no teacher is available, a student may be allowed to study language A as a self-taught candidate at SL only. The range of texts studied in language A courses is broad: students grow to appreciate a language's complexity, wealth and subtleties in a variety of contexts. Confidence and competence in oral and written communication skills are fostered. One of the explicit aims of the language A1 group is to engender a lifelong interest in literature and a love for the elegance and richness of human expression.

The aims of language A: language and literature at SL and HL are:

- To introduce students to a range of texts from different periods, styles and genres
- To develop in students the ability to engage in close, detailed analysis of individual texts and make relevant connections
- To develop the students' powers of expression, both in oral and written communication
- To encourage students to recognize the importance of the contexts in which texts are written and received
- To encourage, through the study of texts, an appreciation of the different perspectives of people from other cultures, and how these perspectives construct meaning
- To encourage students to appreciate the formal, stylistic and aesthetic qualities of texts
- To promote in students and enjoyment of, and lifelong interest in, language and literature.

English A Higher Level Literature (HL)

Core Content: 13 texts studied, 3 of which are World Literature texts studied in translation. At least 4 genres are covered. In English A, Shakespeare is compulsory. Internal Assessment:

Option Topics: None

Internal Assessment (30%):

- Oral coursework (externally moderated) composed of
 - Individual Oral Presentation (15%)
 - Formal oral commentary on poetry studied in part 2 with subsequent questions followed by a discussion based on one of the other part 2 works - (15%)

External Assessment (70%):

- 25% written coursework composed of
 - Reflective statement (300 – 400 words)
 - Literary essay on one work studied in part 1(1200 -1500 words)
- Paper 1: Literary commentary of unseen text (20%)
- Paper 2: Essay based on a at least 2 texts previously studied (25%)

English A Standard Level Literature (SL)

Core Content: 10 texts studied, 2 of which are World Literature texts studied in translation. At least 3 genres are covered. In English A, Shakespeare is compulsory.

Option Topics: None.

Internal Assessment (30%):

- Oral coursework (externally moderated) composed of
 - Individual Oral Presentation (15%)
 - Individual Oral Commentary on an unprepared extract from one of the texts previously studied (15%)

External Assessment (70%):

- 25% written coursework composed of
 - Reflective statement (300 – 400 words)
 - Literary essay on one work studied in part 1(1200 -1500 words)
- Paper 1: Guided literary analysis of unseen text (20%)
- Paper 2: Essay based on a at least 2 texts previously studied (25%)

French Higher Level Language and Literature (HL)

Core Content

- Parts 1 and 2 - Language in cultural context, and language and mass communication
- Part 3: - Literature—texts and contexts (3 texts studied)
- Part 4 - Literature—critical study (3 texts studied)

Language and literature comprises four parts—two relate to the study of language and two to the study of literature.

The study of the texts produced in a language is central to an active engagement with language and culture and, by extension, to how we see and understand the world in which we live. A key aim of the language A: language and literature course is to encourage students to question the meaning generated by language and texts, which, it can be argued, is rarely straightforward and unambiguous. Helping students to focus closely on the language of the texts they study and to become aware of the role of each text's wider context in shaping its meaning is central to the course.

The language A: language and literature course aims to develop in students skills of textual analysis and the understanding that texts, both literary and non-literary, can be seen as autonomous yet simultaneously related to culturally determined reading practices.

External assessment (4 hours) 70%

- Paper 1: Comparative analysis (2 hours)
The paper consists of two pairs of unseen texts. Students write a comparative analysis on one of the two pairs (20 marks) 25%
- Paper 2: Essay (2 hours)
In response to one of six questions students write an essay based on both the literary texts studied in part 3. The questions are the same at HL but the assessment criteria are different. (25 marks) 25%

Written task

Students produce at least four written tasks based on material studied in the course. Students submit two written tasks for external assessment. (20 marks) Each task must be 800–1,000 words in length plus a rationale of 200–300 words. 20%

Internal assessment – 30%

This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Individual oral commentary

Students comment on an extract from a literary text studied in part 4 of the course. (30 marks)
Students are given two guiding questions. 15%

Further oral activity

Students complete at least two further oral activities, one based on part 1 and one based on part 2 of the course. The mark of one further oral activity is submitted for final assessment. (30 marks)
15%

English A and French A Standard Level Language and Literature (SL)

Core Content

- Parts 1 and 2 - Language in cultural context, and language and mass communication
- Part 3: - Literature—texts and contexts (2 texts studied)
- Part 4 - Literature—critical study (2 texts studied)

Language and literature comprises four parts—two relate to the study of language and two to the study of literature.

The study of the texts produced in a language is central to an active engagement with language and culture and, by extension, to how we see and understand the world in which we live. A key aim of the language A: language and literature course is to encourage students to question the meaning generated by language and texts, which, it can be argued, is rarely straightforward and unambiguous. Helping students to focus closely on the language of the texts they study and to become aware of the role of each text's wider context in shaping its meaning is central to the course.

The language A: language and literature course aims to develop in students skills of textual analysis and the understanding that texts, both literary and non-literary, can be seen as autonomous yet simultaneously related to culturally determined reading practices.

External assessment (3 hours) 70%

- Paper 1: Textual analysis (1 hour 30 minutes)
The paper consists of two unseen texts. Students write an analysis of one of these texts. (20 marks) 25%
- Paper 2: Essay (1 hour 30 minutes)
In response to one of six questions students write an essay based on both the literary texts studied in part 3. The questions are the same at HL but the assessment criteria are different. (25 marks) 25%

Written task

Students produce at least three written tasks based on material studied in the course. Students submit one written task for external assessment. (20 marks) This task must be 800–1,000 words in length plus a rationale of 200–300 words. 20%

Internal assessment – 30%

This component is internally assessed by the teacher and externally moderated by the IB at the end of the course.

Individual oral commentary

Students comment on an extract from a literary text studied in part 4 of the course. (30 marks)
Students are given two guiding questions. 15%

Further oral activity

Students complete at least two further oral activities, one based on part 1 and one based on part 2 of the course. The mark of one further oral activity is submitted for final assessment. (30 marks)
15%

GROUP 2: Second Language

Languages Offered: Higher and Standard level: French B; Spanish B; English B

Standard level only: French ab initio

Any other language choices can be taken through the WLP at an additional cost.

Contact: catherine.david-raphoz@ecolint.ch

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 of which course is appropriate

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:

- have 4 to 5 years' experience of 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:

- have 2 to 5 years' experience of the target language

Ab Initio is for beginners who:

- have little or no previous experience of the language (e.g. who have studied the language in phases 1 and 2 in the MYP)

Language B Higher and Standard Level

Language B SL and HL are language acquisition courses for students with some background in the target language. While learning this additional language, students also explore the culture(s) connected to it.

Core Content: The core is common to both HL and SL consists of three topics (Social relationships, Communications and media, and Global Issues) and is a required area of study. At HL and SL teachers select two further options from a choice of five

At Higher level, two works of literature are studied.

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.

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.

Writing: Students must be able to convey ideas clearly, grammatically and coherently.

Language B Assessment HL*

Internal Assessment: 30% oral coursework externally moderated

- Individual oral (20%). Individual oral presentation followed by conversation with the teacher.
- Group oral (10%). Classroom interaction: three tasks including one listening task.

External Assessment: 70% Examination

- Paper 1- Receptive Skills: Text handling and written response in target language (25%)
- Paper 2: Two pieces of writing in the target language using a variety of registers (25%). One creative response (250-400 words) and one argumentative response (150-200 words).
- Written assignment: 400-700 words creative response to literature. (20%)

Language B Assessment SL*

Internal Assessment: 30% oral coursework externally moderated

- Individual oral (20%). Individual oral presentation followed by conversation with the teacher.
- Group oral (10%). Classroom interaction: three tasks including one listening task.

External Assessment: 70% Examination

- Paper 1- Receptive Skills: Text handling and written response in target language (25%)
- Paper 2: One piece of writing in the target language using a variety of registers (25%). One Task (250-400 words) .
- Written assignment: 300-400 words creative response to literature (20%)

Ab initio (*NB – available as a standard level subject only*)

Who is this course for?

The language ab initio course is designed for students with little or no prior experience of the language they wish to study. All final decisions on the appropriateness of the course for which students are entered are taken by coordinators in liaison with teachers, using their experience and professional judgment to guide them. The most important consideration is that the language ab initio course should be a challenging educational experience for the student.

Course outline

The language ab initio course is organized into three themes.

- Individual and society
- Leisure and work
- Urban and rural environment

Each theme has a list of topics that provide the students with opportunities to practise and explore the language as well as to develop intercultural understanding. Through the development of receptive, productive and interactive skills, students should be able to respond and interact appropriately in a defined range of everyday situations.

Furthermore, the course seeks to enhance intercultural understanding. While learning the target language, the student becomes aware of the similarities and differences between his or her own culture(s) and those of the target culture(s). With this awareness, a greater respect for other peoples and the way in which they lead their lives is fostered.

Within the course framework, through the study of authentic texts, students investigate and reflect on cultural values and behaviours. The language ab initio course, albeit at a basic level, seeks to develop intercultural understanding and foster a concern for global issues, as well as to raise students' awareness of their own responsibility at a local level.

Assessment*:

There are five assessment objectives for the language ab initio course. Students will be assessed on their ability to:

1. demonstrate an awareness and understanding of the intercultural elements related to the prescribed topics
2. communicate clearly and effectively in a range of situations
3. understand and use accurately the basic structures of the language
4. understand and use an appropriate range of vocabulary
5. use a register and a format that are appropriate to the situation.

Paper 1 (1h30) 30% - understanding of 4 written texts through text-handling exercises.

Paper 2 (1h) 25% - 2 compulsory writing tasks (1: minimum 50 words;2: minimum 100 words)

Written assignment (2h) 20% - a piece of writing, 200–300 words, in the target language carried out in class under teacher supervision

Individual oral (10 minutes with 15 minutes preparation time) 25% in 3 parts:

- Part 1: Presentation of a visual stimulus (from a choice of two) by the student
- Part 2: Follow-up questions on the visual stimulus
- Part 3: General conversation including at least two questions on the written assignment

*According to the new subject guides, these requirements may change in the future.

Group 3 : Individuals and Societies

The subjects offered are all taught at the Higher and Standard Level:

- Economics
- Geography
- History in English
- History in French
- Psychology

Aims

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

1. Encourage the systematic and critical study of: human experience and behavior; physical, economic and social environments; and the history and development of social and cultural institutions.
2. Develop in the student the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments about the nature and activities of the individual and society.
3. Enable the student to collect, describe and analyse data used in studies of society, to test hypotheses, and to interpret complex data and source material.
4. Promote the appreciation of the way in which learning is relevant both to the culture in which the student lives, and the culture of other societies.
5. Develop an awareness in the student that human attitudes and beliefs are widely diverse and that the study of society requires an appreciation of such diversity.
6. Enable the student to recognize that the content and methodologies of the subject in group 3 are contestable and that their study requires the toleration of uncertainty.

Economics

Aims

7. To develop an understanding of microeconomic and macroeconomic theories and concepts and their real-world application
8. To develop an appreciation of the impact on individuals and societies of economic interactions between nations
9. To develop an awareness of development issues facing nations as they undergo the process of change

Syllabus Component	Description
Microeconomics	Competitive markets: demand and supply Elasticity Government intervention Market failure Theory of the firm and market structures (HL only)
Macroeconomics	The level of overall economic activity Aggregate demand and aggregate supply Macroeconomic objectives Fiscal policy Monetary policy Supply side policies

Syllabus Component	Description
International Economics	International trade Exchange rates The balance of payments Economic integration Terms of trade (HL only)
Development economics	Economic development Measuring development The role of domestic factors The role of international trade The role of foreign direct investment The roles of foreign aid and multilateral development assistance The role of international debt The balance between markets and intervention

Assessment

Higher Level

External Assessment

- Paper 1 - Extended Response (1 hour 30 minutes) on microeconomics and macroeconomics. (30% of final grade)
- Paper 2 - Data Response (1 hour 30 minutes) on international economics and development economics. (30% of final grade)
- Paper 3 - Extension Paper (1 hour) on HL extension material from the whole syllabus. (20% of final grade)

Internal Assessment

Three economic commentaries, based on different sections of the syllabus and on published extracts from the news media. (3 x 750 words max.) (20% of final grade)

Standard Level

External Assessment

- Paper 1 - Extended Response (1 hour 30 minutes) on microeconomics and macroeconomics. (40% of final grade)
- Paper 2 - Data Response (1 hour 30 minutes) on international economics and development economics. (40% of final grade)

Internal Assessment

Three economic commentaries, based on different sections of the syllabus and on published extracts from the news media. (3 x 750 words max.) (20% of final grade)

Geography

Aims

1. To develop an understanding of the dynamic interrelationships between people, places, spaces and the environment at different scales.
2. To develop a critical awareness and consider complexity thinking in the context of the nexus of geographic issues, including:
 - Acquiring an in-depth understanding of how geographic issues, or wicked problems, have been shaped by powerful human and physical processes
 - Synthesizing diverse geographic knowledge in order to form viewpoints about how these issues could be resolved
3. To understand and evaluate the need for planning and sustainable development through the management of resources at varying scales.

Geographic Themes: Standard level students will complete two of the option units and higher level students will complete three of the options units from the list below:

- Freshwater – drainage basins
- Oceans and coastal margins
- Extreme environments
- Geophysical hazards
- Leisure, tourism and sport
- Food and health
- Urban environments

Geographic Perspectives - global change: There are three compulsory units for both Higher and Standard Level students:

- Population distribution - changing population
- Global climate - vulnerability and resilience
- Global resource consumption and security

Geographic Perspectives - global interactions: Higher level students will also complete a third paper and it includes three compulsory units:

- Power, places and networks
- Human development and diversity
- Global risks and resilience

Internal Assessment: This is based on a piece of fieldwork that is completed in the local environment. It is internally assessed by the teacher and externally moderated by the IB at the end of the course.

- Higher Level – 20%
- Standard Level – 25%
- Both are written reports of 2500 words.

External Assessment: Examinations at the end of year 13.

Higher Level Students:

- Paper One consists of a structured question and one extended answer question from a choice of two for each unit studied. It is worth 35% of the final grade.
- Paper Two has three sections; section one consists of three structured questions based on each unit, section two focuses on an infographic or visual stimulus with structured questions and section three is an extended answer question from a choice of two. It is worth 25% of the final grade.
- Paper Three consists of two extended answer questions from a choice of three. It is worth 20% of the final grade.

Standard Level Students:

- Paper One consists of a structured question and one extended answer question from a choice of two for each unit studied. It is worth 35% of the final grade.
- Paper Two has three sections; section one consists of three structured questions based on each unit, section two focuses on an infographic or visual stimulus with structured questions and section three is an extended answer question from a choice of two. It is worth 40% of the final grade.

Extra-Curricular Trips

The Geography Department firmly believe in giving the students the opportunity to link the theoretical knowledge learnt in the classroom to practical examples. There is an 'awe and wonder' eight day to visit to Morocco in which students investigate extreme environments, the pressures placed on fresh water, the changes in population structure and globalisation. There is also a day trip to the river L'asse in which students undertake the fieldwork for their Internal Assessment.

History in English

Aims

1. To develop an understanding of, and continuing interest in, the past
2. To encourage students to engage with multiple perspectives and to appreciate the complex nature of historical concepts, issues, events and developments.
3. To promote international-mindedness through the study of history from more than one region of the world.
4. To develop an understanding of history as a discipline and to develop historical consciousness including a sense of chronology and context, and an understanding of different historical perspectives.
5. To develop key historical skills, including engaging effectively with sources.
6. To increase students' understanding of themselves and of contemporary society by encouraging reflection on the past.

Prescribed subject for Higher Level and Standard Level:	<p>The following option will be explored through two case studies from different regions of the world.</p> <ul style="list-style-type: none"> • Military leaders (Genghis Khan and Richard I) <p>(Paper One)</p>
World History Topics for Higher Level and Standard Level:	<p>The following TWO topics will be chosen with examples used from at least two regions of the world.</p> <ul style="list-style-type: none"> • Causes and effects of medieval wars (750–1500) (The Norman Conquest of England 1066-1070: England and France at war 1154-1214: The Early Crusades 1096-1192: Mongol Conquests: The Hundred Years War 1337-1453) • Dynasties and rulers (750–1500) (The Norman dynasty in England: Capetian France: Mongol rulers: The Byzantine Empire 1081-1180) <p>(Paper Two)</p>
Higher level Options: Depth Studies:	<p>One of the regional options will be explored in depth.</p> <ul style="list-style-type: none"> • History of Europe (Monarchy 1042-1223: Jews and Muslims in Medieval Europe 1095-1492: Late Medieval Political Crises 1300-1485) <p>(Paper Three)</p>
Internal assessment:	<p>This is a historical investigation that students undertake into a subject of their own choice. The investigation is based on the analysis of two sources, which are then explored and reflected on. It is internally assessed and externally moderated by the IB at the end of the course.</p> <ul style="list-style-type: none"> • Higher level – 20% • Standard level – 25% • It is a written report of 2200 words
External assessment:	<p>Examinations are at the end of Year 13.</p> <p>Standard level students:</p> <ul style="list-style-type: none"> • Paper One consists of four structured questions. It is worth 30% of the final grade. • Paper Two consists of two essays. It is worth 45% of the final grade. <p>Higher level students:</p> <ul style="list-style-type: none"> • Paper One consists of four structured questions. It is worth 20% of the final grade.

	<ul style="list-style-type: none"> • Paper Two consists of two essays. It is worth 25% of the final grade. • Paper Three consists of three essays. It is worth 35% of the final grade.
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Note

The structure of the course curriculum is the same for those students who choose to study History in English or in French. However, the subject matter and the the options chosen vary according to the specialisms of the teacher. See section on DP history in French for more details.

Extra-curricular activities

The History section of the Individuals and Societies department is a dynamic group of teachers that use a variety of methods to teach the course! In the past we have welcomed some internationally recognized historians for an all-day conference on the crusades and we have an extensive collection of resources on our class wiki.

Histoire en français

Les objectifs globaux du cours d'histoire au NM et au NS sont :

1. de développer la compréhension du passé et un intérêt permanent pour celui-ci ;
2. d'inciter les élèves à examiner des perspectives multiples et de les amener à comprendre la nature complexe des concepts, questions, événements et évolutions historiques ;
3. de développer la sensibilité internationale par le biais de l'étude de l'histoire de plusieurs régions du monde ;
4. de comprendre l'histoire en tant que discipline et de développer une conscience historique, y compris un sens de la chronologie et du contexte ainsi qu'une compréhension de différentes perspectives historiques ;
5. d'acquérir des compétences clés en histoire, y compris la capacité d'étudier efficacement les sources ;
6. d'amener les élèves à mieux se comprendre eux-mêmes et à mieux comprendre la société contemporaine en les encourageant à réfléchir sur le passé.

Étude de cas - sujets pour le niveau supérieur et moyen année 12 et 13 (Papier un)	<p>L'option suivante sera explorée au travers de deux études portant sur deux régions différentes du monde.</p> <ul style="list-style-type: none"> • 12e: L'expansion allemande et italienne (1933 - 1940) • 13e: L'expansion japonaise en Asie orientale (1931 - 1941)
Histoire mondiale - sujets pour le niveau supérieur et moyen année 12 et 13 (Papier deux)	<p>Deux thèmes d'histoire contemporaine ont été choisis pour l'histoire mondiale:</p> <ul style="list-style-type: none"> • 12e: Causes et effets des guerres du XXe siècle: Première et Seconde Guerre mondiale / guerre civile chinoise (1927 -1937) / guerre civile Espagnole (1936 - 1939) • 13e: La guerre froide: tensions et rivalités entre les superpuissances (XXe S.): crise des missiles de Cuba (1962) / crise de Suez (1956) / Guerre de Corée (1950) / blocus de Berlin (1948 - 1949) / mur de Berlin (1958 -1961)
Options niveau supérieur: Étude de cas (Papier trois)	<p>Les options suivantes seront explorées en profondeur.</p> <ul style="list-style-type: none"> • 12e: L'Europe et la Première Guerre mondiale (1871 - 1918) • 13e: L'URSS et la Russie postsoviétique (1924 - 2000) • 13e: L'Europe occidentale et l'Europe du Nord après la guerre (1945 - 2000)

Evaluation interne:	<p>Il s'agit d'une enquête historique que les étudiants entreprennent sur un sujet de leur choix. L'enquête est basée sur l'analyse de deux sources qui sont ensuite analysée et interprétée. Elle est évaluée en interne et en externe par l'IB à la fin du cours.</p> <ul style="list-style-type: none"> • Niveau supérieur - 20 % • Niveau Standard - 25% • Rapport écrit de 2200 mots
Examens externes:	<p>Les examens sont en fin d'année 13.</p> <p>Niveau moyen:</p> <ul style="list-style-type: none"> • Le papier 1 se compose de quatre questions structurées. Il compte pour 30% de la note finale. • Le papier 2 se compose de deux essais. Il compte pour 45% de la note finale . <p>Niveau supérieur:</p> <ul style="list-style-type: none"> • Le papier 1 se compose de quatre questions structurées . Il compte pour 20 % de la note finale. • Le papier deux se compose de deux essais. Il compte pour 25% de la note finale. • Le papier 3 se compose de trois essais . Il compte pour 35% de la note finale.

Note

La structure du programme de cours est la même pour les étudiants qui choisissent d'étudier l'histoire en anglais ou en français. Cependant, les sujets et les options choisies varient selon les spécialités de l'enseignant.

Psychology

Aims

The aims of the psychology course at Standard Level (SL) and at Higher Level (HL) are to:

- Develop an awareness of how psychological research can be applied for the benefit of human beings.
- Ensure that ethical practices are upheld in psychological inquiry
- Develop an understanding of the biological, cognitive and sociocultural influences on human Behaviour.
- Develop an understanding of alternative explanations of behaviour.
- Understand and use diverse methods of psychological inquiry.

Part 1: Core (SL/HL)

- The biological approach to understanding behavior
- The cognitive approach to understanding behavior
- The sociocultural approach to understanding behavior

Part 2: Options (SL/HL)

HL - 2 options

SL - 1 option

- Abnormal psychology
- Developmental psychology
- Health psychology
- Psychology of human relationships

Part 3: Qualitative research methodology (HL only)

- Qualitative research in psychology

Part 4: Internal Assessment - simple experimental study (SL/HL)

- Introduction to experimental research methodology
 - Students design and carry out their own experimental study
- HL – 20% of grade
SL – 25% of grade

Part 5: External Assessment

Examinations at the end of year 13.

Higher Level – 80% of grade:

- **Paper One:** consists of a series of 3 compulsory short-answer questions and one extended response question.
- **Paper Two:** consists of two extended response questions. Each from a different option. For each option there is a choice of 3 questions and you choose one.
- **Paper Three:** consists of three short-answer questions.

Standard Level – 75% of grade:

- **Paper One:** consists of a series of 3 compulsory short-answer questions and one extended response question.
- **Paper Two:** consists of one extended response questions from your chosen option. There is a choice of 3 questions and you choose one.

GROUP 4: Experimental Sciences

Subjects Offered: Higher and Standard level: Biology, Chemistry, Physics
Standard level only: Design Technology

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

Biology

Higher Level

Core Content: Cells, Chemistry of Life, Genetics, Ecology and Evolution, Human Health and Physiology, Nucleic Acids and Proteins, Cell respiration and Photosynthesis, Genetics, Human Reproduction, Defence against disease, Nerves Muscles and Movement, Excretion and Plant Science.

Option Topics: Two from Evolution, Neurobiology and Behaviour, Applied Plant and Animal Science, Ecology and Conservation, Further Human Physiology.

Internal Assessment: 24% of Practical Work with a minimum requirement of 60 hours

External Assessment: 76% Examinations

- Paper 1: 40 multiple choice questions (20%)
- Paper 2: Structured and extended response questions on option topics (36%)
- Paper 3: Structured and extended response questions on two option topics (20%)

Standard Level

Core Content: Cells, Chemistry of Life, Genetics, Ecology and Evolution, Human Health and Physiology

Option Topics: Two from Diet and Nutrition, Cells and Energy, Physiology of Exercise, Evolution, Neurobiology and Behaviour, Applied Plant and Animal Science, Ecology and Conservation.

Internal Assessment: 24% of Practical Work with a minimum requirement of 40 hours

External Assessment: 76% Examinations.

- Paper 1: 30 multiple choice questions (20%)
- Paper 2: Structured and extended response questions on option topics (32%)
- Paper 3: Structured and extended response questions on two option topics (24%)

Chemistry

Higher Level

Core Content: Stoichiometry, Atomic Theory, Periodicity, Bonding, States of Matter, Energetics, Kinetics, Equilibrium, Acids and Bases, Oxidation and Reduction, Organic Chemistry.

Option Topics: Two from: Medicines and Drugs, Human Biochemistry, Environmental Chemistry, Chemical Industries, Fuels and Energy, Modern Analytical Chemistry, Further Organic Chemistry.

Internal Assessment: 24% of Practical Work with a minimum requirement of 60 hours

External Assessment: 76% Examinations

- Paper 1: 40 multiple choice questions (20%)
- Paper 2: Structured and extended response questions on option topics (36%)
- Paper 3: Structured and extended response questions on two option topics (20%)

Standard Level

Core Content: Stoichiometry, Atomic Theory, Periodicity, Bonding, States of Matter, Energetics, Kinetics, Equilibrium, Acids and Bases, Oxidation and Reduction, Organic Chemistry.

Option Topics: Two from: Medicines and Drugs, Human Biochemistry, Environmental Chemistry, Chemical Industries, Fuels and Energy, Higher Physical Organic Chemistry.

Internal Assessment: 24% of Practical Work with a minimum requirement of 40 hours

External Assessment: 76% Examinations

- Paper 1: 30 multiple choice questions (20%)
- Paper 2: Structured and extended response questions on option topics (32%)
- Paper 3: Structured and extended response questions on two option topics (24%)

Physics

Higher Level

Core Content: Physical Measurement, Mechanics, Thermal Physics, Wave Phenomena, Electromagnetism, Atomic and Nuclear Physics and Quantum Physics.

Option Topics: Two from: Biomedical Physics, Historical Physics, Astrophysics, Relativity, Optics.

Internal Assessment: 24% of Practical Work with a minimum requirement of 60 hours.

External Assessment: 76% Examinations

- Paper 1: 40 multiple choice questions (20%)
- Paper 2: Structured and extended response questions on option topics (36%)
- Paper 3: Structured and extended response questions on two option topics (20%)

Standard Level

Core Content: Physical Measurement, Mechanics, Thermal Physics, Waves, Electricity and Magnetism, Atomic and Nuclear Physics.

Option Topics: One from Higher Level extension materials of Mechanics, Quantum Physics and Nuclear Physics and Energy (thermodynamics). Also one from Biomedical Physics, History of Development of Physics, Astrophysics, Relativity, Optics.

Internal Assessment: 24% of Practical Work with a minimum requirement of 40 hours.

External Assessment: 76% Examinations.

- Paper 1: 30 multiple choice questions (20%)
- Paper 2: Structured and extended response questions on option topics (32%)

- Paper 3: Structured and extended response questions on two option topics (24%)

Design Technology

Standard Level

Introduction

Diploma Programme design technology is presently available at standard level only at Nations. It is based on a model of learning that incorporates knowledge, skills and design principles in problem-solving contexts. It aims to develop internationally minded people whose enhanced understanding of the technological world can facilitate our shared guardianship of the planet and create a better world. Diploma Programme design technology achieves a high level of technological literacy by enabling students to develop critical-thinking and design skills, which they can apply in a practical context. While designing may take various forms, it will involve the selective application of knowledge within an ethical framework.

It will focus on the design, development, analysis, synthesis and evaluation of problems, and their solution through practical activities. The creative tension between theory and practice is what characterizes design technology within the Diploma Programme experimental sciences.

It is in this context that the design technology course aims to develop in students:

- a sense of curiosity as they acquire the skills necessary for independent and lifelong learning and action through inquiry into the technological world around them
- an ability to explore concepts, ideas and issues with personal, local and global significance to acquire in-depth knowledge and understanding of design and technology
- initiative in applying thinking skills critically and creatively to identify and resolve complex social and technological problems through reasoned ethical decision-making
- an ability to understand and express ideas confidently and creatively using a variety of communication techniques through collaboration with others
- a propensity to act with integrity and honesty, and take responsibility for their own actions in designing technological solutions to problems
- an understanding and appreciation of cultures in terms of global technological development, seeking and evaluating a range of perspectives
- a willingness to approach unfamiliar situations in an informed manner and explore new roles, ideas and strategies so they can articulate and defend their proposals with confidence
- an understanding of the contribution of design and technology to the promotion of intellectual, physical and emotional balance and the achievement of personal and social well-being
- empathy, compassion and respect for the needs and feelings of others in order to make a positive difference to the lives of others and to the environment
- skills that enable them to reflect on the impacts of design and technology on society and the environment in order to develop their own learning and enhanced solutions to technological problems.

Course Structure

Core syllabus topics are based on the study of course concepts such as the design process, product design, green design and product innovation, as well as knowledge of materials, product development and evaluation strategies. Through their study of the core topics, students will appreciate how these topics interact and overlap with each other depending on the design context and the viewpoints of the designer, manufacturer and consumer.

Students are only required to study one option topic for examination in paper 3. At Nations we offer the CAD/CAM option, which covers the impact of CAD on the design process, CAM systems, the impact of CAD/CAM on manufacturing, rapid prototype manufacture, and CAD/CAM products.

Assessment

Three written examinations, which account for 64% of the total marks available, will be taken at the end of the second year. The internal assessments (IA), worth 36% of the final assessment are completed throughout the duration of the course.

External assessment

Paper 1 is made up of multiple-choice questions that test knowledge of the core. Paper 2 tests knowledge of the core and includes a data-based analysis question, other short-answer questions and a longer-answer question related to design situations. Paper 3 tests knowledge of the CAD/CAM option.

Internal Assessment

The internal assessment (IA) element consists of an interdisciplinary project (the group 4 project completed within a week at the end of the first year), a mixture of short and long-term investigations and the design project. The design project is an individually determined project that students will do in the first term of the second year. It allows students to explore a design problem that matches their ability, is related to the topics covered in the course and holds a personal interest for them.

Prerequisites for the course

Although students starting the DP design technology course do not require any previous specialist technology experience, the MYP course in year 11 at Nations has been carefully designed to be a good preparation for the DP course; whilst still maintaining the requirements of the MYP. In MYP 5 students experience projects with resistant materials and CAD outcomes in the framework of the MYP design cycle. This prepares students for some of the core topics, the CAD/CAM option and the IB design cycle model at DP level.

DP design technology is relevant to students who are considering university or college courses in science, applied science, technology, product design, engineering or art.

Nature of Science (SL only)

Nature of Science – Concepts and methodologies (*how does science work?*)

The course begins with a module that outlines the Nature of science, the overarching theme that guides, and is embedded within, the rest of the course. The Nature of Science will be based on the document presented in heading 2 in this bundle. The detail in this bundle of documents will illustrate the approach to be used by pilot schools in the delivery of this material.

Nature of Science -The quest for understanding (*What do we know about the first 3.7 billion years of the universe before man's existence and how do we know it?*)

This module illustrates the philosophical methods that science uses to answer questions about our origins and the origins of the universe. The basic question to be addressed will be: How do we know about the past origins of ourselves and our environment even though we cannot observe them directly? This approach will require students to have a working knowledge of what it is to be a scientist in the 21st century, but also to examine the nature of science as practised in past times (e.g. the dispute between Galileo and the Catholic Church, the tension between Newton's work as a "scientist" and his belief in alchemy, the Huxley–Wilberforce debate that followed the publication of Darwin's work, and so on).

In general, the lens used in this module for student focus will be essentially retrospective and at a scientific level to correspond closely to the experiences and standards expected of SL students in the experimental sciences of the group.

Nature of Science - The impact of science (*What science has contributed to human development since man's appearance and what are the global challenges to ourselves and the environment?*)

In this module, contexts will be used to examine unfolding sciences and technologies of the 21st century. Contexts include: food science (a broad area that includes deep ethical considerations, eg genetic modification), modern materials (an area that can include areas such as the use of technology to build on the output of pure science), transport issues (modelling, etc), and a number of others.

Nature of Science - Challenges and The Future (*What global problems can science 26 solve?*)

The final module will allow students to consolidate their work in the subject by focussing on the nature of science in the broad area of sustainability issues.

In summary

This course will be the last exposure to formal science teaching for many who graduate from it. The over-riding concern is that these students should emerge as individuals fully aware of the power of the scientific process, of the ethical issues that surround its practice, and of the wider interaction of science with society in general.

Assessment Component	<i>Time</i>	<i>Weighting</i>	<i>To be examined</i>
<i>Paper 1</i>	<i>1.5h</i>	<i>35%</i>	<i>An understanding of NOS through contextual elements (scientific subject matter). 50% of marks for NOS and 50% for subject knowledge.</i>
<i>Paper 2</i>	<i>1hr</i>	<i>25%</i>	<i>An understanding of NOS independent of scientific subject matter</i>
<i>Internal Assessment</i>		<i>40%</i>	

GROUP 5: Mathematics

Levels Offered: Higher level, Standard level or Studies standard level

Aims

The aims of all mathematics courses in group 5 are to enable students to:

- enjoy mathematics, and develop an appreciation of the elegance and power of mathematics
- develop an understanding of the principles and nature of mathematics
- communicate clearly and confidently in a variety of contexts
- develop logical, critical and creative thinking, and patience and persistence in problem-solving
- employ and refine their powers of abstraction and generalization
- apply and transfer skills to alternative situations, to other areas of knowledge and to future developments
- appreciate how developments in technology and mathematics have influenced each other
- appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
- appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
- appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” in the TOK course.

Summary of courses available

Because individual students have different needs, interests and abilities, there are three different courses in mathematics offered here. These courses are designed for different types of students: those who wish to study mathematics in depth, either as a subject in its own right or to pursue their interests in areas related to mathematics; those who wish to gain a degree of understanding and competence to understand better their approach to other subjects; and those who may not as yet be aware how mathematics may be relevant to their studies and in their daily lives.

Each course is designed to meet the needs of a particular group of students. Therefore, great care should be taken to select the course that is most appropriate for an individual student. In making this selection, individual students should be advised to take account of the following factors:

- their own abilities in mathematics and the type of mathematics in which they can be successful
- their own interest in mathematics, and those particular areas of the subject that may hold the most interest for them
- their other choices of subjects within the framework of the Diploma Programme
- their academic plans, in particular the subjects they wish to study in future
- their choice of career.

NB: there are often some myths surrounding the level of mathematics required for university courses. There is a letter regarding this issue from the Mathematics Department together with the Guidance Department at the end of this section.

Mathematical studies SL

This course is available only at standard level, and is equivalent in status to mathematics SL, but addresses different needs. It has an emphasis on applications of mathematics, and the largest section is on statistical techniques. It is designed for students with varied mathematical backgrounds and abilities. It offers students opportunities to learn important concepts and techniques and to gain an understanding of a wide variety of mathematical topics. It prepares students to be able to solve problems in a variety of settings, to develop more sophisticated mathematical reasoning and to enhance their critical thinking. The individual project is an extended piece of work based on personal research involving the collection, analysis and evaluation of data. Students taking this course are well prepared for a career in social sciences, humanities, languages or arts. These students may need to utilize the statistics and logical

reasoning that they have learned as part of the mathematical studies SL course in their future studies.

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 and economics.

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.

Mathematical Studies Standard Level

Core Content: Number and algebra, Descriptive statistics, Logic, sets and probability, Statistical applications, Geometry and trigonometry, Mathematical models, Introduction to differential calculus.

Internal assessment (20%): Project

The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements.

External assessment (80%): Examinations

- Paper 1 = 40% (1 hour 30 minutes): Graphic display calculator required. 15 compulsory short-response questions based on the whole syllabus.
- Paper 2 = 40% (1 hour 30 minutes): Graphic display calculator required. 6 compulsory extended-response questions based on the whole syllabus.

Mathematics Standard Level

Core Content: Algebra, Functions and equations, Circular functions and trigonometry, Vectors, Statistics and probability, Calculus

Internal assessment (20%): Mathematical exploration.

This is a piece of written work that involves investigating an area of mathematics.

External assessment (80%): Examinations

- Paper 1 = 40% (1 hour 30 minutes): No calculator allowed.
Section A: Compulsory short-response questions based on the whole syllabus.
Section B: Compulsory extended-response questions based on the whole syllabus.
- Paper 2 = 40% (1 hour 30 minutes): Graphic display calculator required.
Section A: Compulsory short-response questions based on the whole syllabus.
Section B: Compulsory extended-response questions based on the whole syllabus.

Mathematics Higher Level

Core Content: Algebra, Functions and equations, Circular functions and trigonometry, Vectors, Statistics and probability, Calculus

Option syllabus content

One of the following: Statistics and probability, Sets, relations and groups, Calculus, Discrete mathematics

Internal assessment (20%): Mathematical exploration.

This is a piece of written work that involves investigating an area of mathematics.

External assessment (80%): Examinations

- Paper 1 = 30% (2 hours): No calculator allowed.
Section A: Compulsory short-response questions based on the core syllabus.
Section B: Compulsory extended-response questions based on the core syllabus.
- Paper 2 = 30% (2 hours): Graphic display calculator (GDC) required.
Section A: Compulsory short-response questions based on the core syllabus.
Section B: Compulsory extended-response questions based on the core syllabus.
- Paper 3 = 20% (1 hour): Graphic display calculator (GDC) required.
Compulsory extended-response questions based mainly on the syllabus options.

Some notes from the Mathematics Department:

- Your child's mathematics teacher is the best person to advise on which level a student is capable of achieving success. The definition of success of course depends on tertiary wishes and the individual student. The teachers in the mathematics department are not experts on guidance and will always refer students to the guidance department.
- The decision making process for choosing the correct level should include Mrs Juniper (Diploma Program Coordinator), Dr Grant, Mrs Levin, (Guidance Counsellors), a student's mathematics teacher, a student's parents and most importantly the student.
- The rules for tertiary entrance vary widely depending on a student's wishes, the country of application and the tertiary institution. These rules are also constantly evolving.
- The bottom line is that students must stay in regular contact with the Guidance Counsellors in order to maximise their tertiary prospects.
- Of course discipline and commitment are the keys to maximising tertiary prospects.

GROUP 6: Arts

Subjects Offered: Higher level: Visual Arts, Film
Standard level: Visual Arts; Film

Overview

The “Arts” section of Group 6 includes Visual Arts and Film. 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.

Visual Art

Nature of the subject

Visual arts range from traditional forms embedded in societies and cultures to the varied and dispersed practices associated with contemporary and emerging forms of visual language. Visual arts are an integral part of everyday life which permeate all levels of human expression, communication and understanding. In addition to exploring visual arts from different historical perspectives, Diploma Programme visual arts students are expected to engage with and reflect upon a wide range of local and global, as well as familiar and unfamiliar, living artistic traditions.

The study of visual arts allows students to challenge their pre-existing creative and cultural expectations and boundaries in new and surprising ways. The processes of designing and making art require a high level of cognitive activity that is both intellectual and affective. This is evident not only in the way we create art and objects, but also in the way we understand, and respond to, the practices of art, design and craft from around the world. Theory and practice in visual arts are dynamic and ever-changing, and connect many areas of study and human experience through individual and collaborative production and interpretation.

The Diploma Programme visual arts course enables students to engage in both exploration and production. It is furthermore a challenging and thought-provoking area of study in which a student can develop analytical skills such as problem-solving and divergent thinking which will prove useful in many walks of life. A balanced visual arts education extends beyond practical “doing and making” activities to “reflecting on and responding to” visual images and artifacts.

This course is designed to enable students to go on to study visual arts in higher education and also welcomes those students who seek life enrichment through visual arts. Supporting the principles of the International Baccalaureate mission statement and learner profile, the course encourages an active exploration of visual arts within the students’ own and other cultural contexts. Through creative problem solving and critical thinking, visual arts students develop respect for the cultural and aesthetic diversity in the world around us.

Aims

The aims of all subjects in group 6, the arts, are to enable students to:

- enjoy lifelong engagement with the arts
- become informed, reflective and critical practitioners in the arts
- understand the dynamic and changing nature of the arts
- explore and value the diversity of the arts across time, place and cultures
- express ideas with confidence and competence
- develop perceptual and analytical skills.
- visually communicate ideas through the exploration and development of appropriate skills and media
- respond visually and creatively to personal and cultural experiences
- use visual literacy to explore the visual arts within diverse cultural contexts
- develop the ability to articulate the meanings and messages communicated in images and objects
- develop visual thinking.

Visual arts syllabus outline

Higher level Option A (HLA, 240 hours)

- Studio work (practical exploration and artistic production): 60%
- Investigation workbooks (independent contextual, visual and critical investigation and reflection, both visual and written): 40%

Standard level Option A (SLA, 150 hours)

- Studio work: 60%
- Investigation workbooks: 40%

Assessment in DP visual art

External assessment (60%): studio

Each student prepares an exhibition of work undertaken during the course. There is an interview with each student about their exhibition (about 20 minutes) which is video-recorded and this is included in the package of work uploaded to the IB for external examination. The purpose of the interview is to assess the student's studio work. During the interview, the student will be encouraged to talk about the technical aspects of the studio works, his or her own aims or intentions, and the relationship between the studio works and the investigation workbooks. The discussion should focus on the student's experiences in making the studio works exhibited and how these relate to the investigation work undertaken. The student is not expected to make a prepared speech.

The exhibition should include works that have been developed to their complete and final form as well as investigative work carried out during the development phase (for example, sketches, notes, preliminary studies). A rough sketch may have considerable relevance when explained by the student.

The quantity of work included in the exhibition is not prescribed. The main factors influencing the quantity of work produced are the:

- technical characteristics of the media and the production processes required
- complexity and scale of the art pieces
- nature of the art pieces and the process of their development
- various combinations of media chosen
- time available at either HL or SL.

For example, a student working in photography or computer graphics may complete a hundred or more pieces for exhibition. However, a student working with labour-intensive sculptural pieces, particularly if on a large scale, would probably produce fewer finished works.

Internal assessment (40%): investigation

Each student produces investigation workbooks during the course of study that support, inform, develop and help to refine the studio work. For assessment purposes, the student must select carefully the stated number of copied investigation workbook pages and ensure that they clearly meet the requirements of the assessment criteria. All internal assessment marks are moderated on what is presented in the candidate record booklets.

Assessment in visual arts consists of an evaluation of each student's body of work as a whole—both the finished products and the processes of artistic investigation and development. In each case, the component contributing the larger proportion to the total assessment is externally assessed: for option A this is studio; for option B it is investigation.

Digital Candidate record

Students must present their externally assessed work (studio for option A; investigation for option B) in the digital candidate record, which must contain:

- a statement by the student
- a short written comment by the teacher
- a digital photographic record of the selected studio works
- Digital copies of the selected investigation workbook pages.
 - Video recording of the oral examination interview

In the statement, the student must describe briefly, in no more than 300 words, his or her artistic growth and development throughout the course. He or she should illustrate these insights with specific examples related to studio work and the investigation workbooks.

The student must select carefully the stated number of copied investigation workbook pages (see the following tables) and ensure that the work meets all the assessment criteria. It is important that the student includes pages that demonstrate how his or her investigation led to the development of some of the studio works photographed for inclusion in the candidate record booklet. The selection can include some consecutive pages. It is also important that students demonstrate evidence of:

- their investigation and strategies for organizing its content
- first-hand responses to such content
- exploration of ideas both visually and in writing.

Quantity of work

The quantity of work expected of students for both studio and investigation work is not prescribed, and should be what is “reasonable” in the time available during the course. The following indicates the quantity of work required for inclusion in the digital candidate record booklet for both studio and investigation. The selection of photographs may include, where appropriate, such details as close-ups or different angles, or a series of stills.

Internal assessment Investigation 40%

25–30 digital copies of workbook pages

External assessment Studio 60%

Selection of 12–18 photographs representing the works produced

Film

Nature of the Subject

Film is both a powerful communication medium and an art form. The Diploma Programme film course aims to develop students’ skills so that they become adept in both interpreting and making film texts.

Through the study and analysis of film texts and exercises in film-making, the Diploma Programme film course explores film history, theory and socio-economic background. The course develops students’ critical abilities, enabling them to appreciate the multiplicity of cultural and historical perspectives in film. To achieve an international understanding within the world of film, students are taught to consider film texts, theories and ideas from the points of view of different individuals, nations and cultures.

The IB film course emphasizes the importance of working individually and as a member of a group. Students are encouraged to develop the professional and technical skills (including organizational skills) needed to express themselves creatively in film. A challenge for students following this course is to become aware of their own perspectives and biases and to learn to respect those of others. This requires willingness to attempt to understand alternative views, to respect and appreciate cultural diversity, and to have an open and critical mind. Thus, the IB film course can become a way for the student to celebrate the international and intercultural dynamic that inspires and sustains a type of contemporary film, while appreciating specifically local origins that have given rise to cinematic production in many parts of the world.

For any student to create, to present and to study film requires courage, passion and curiosity: courage to create individually and as part of a team, to explore ideas through action and harness the imagination, and to experiment; passion to communicate and to act communally, and to research and formulate ideas eloquently; curiosity about self and others and the world around them, about different traditions, techniques and knowledge, about the past and the future, and about the limitless possibilities of human expression through film.

At the core of the IB film course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement and imaginative synthesis that is achieved through practical engagement in the art and craft of film.

Film Aims and Objectives:

The film course at the standard and higher level aims to develop in students the skills necessary to achieve creative and critical independence in their knowledge, experience and enjoyment of film.

The aims are to promote:

- an appreciation and understanding of film as a complex art form
- an ability to formulate stories and ideas in film terms
- the practical and technical skills of production
- critical evaluation of film productions by the student and by others
- a knowledge of film-making traditions in more than one country.

Having followed the film course at SL or HL, students are expected to demonstrate:

an understanding of the variety of ways in which film creates meaning

- an understanding and effective use of appropriate film language
- originality and creativity in developing an idea through the various stages of film-making, from conception to finished production
- technical skills and an appropriate use of available technology
- the ability to draw together knowledge, skills, research and experience, and apply them analytically to evaluate film texts
- a critical understanding of the historical, theoretical, sociocultural, economic and institutional contexts of film in more than one country
- the ability to research, plan and organize working processes
- the ability to reflect upon and evaluate film production processes and completed film texts.

Syllabus Components:

The IB Film course is broken into three study areas:

Part 1: Textual Analysis - The detailed study of film sequences

Part 2: Film Theory and History - The study of films and film-making traditions from more than one country.

Part 3: Creative Process - Techniques and organization of production, the development of creative, analytical and production skills within film-making

Assessment Outline:

External Assessments (50%):

Independent Study (25%) Rationale, script and list of sources for a short documentary production of 8-10 pages (12-15 for HL) on an aspect of film theory and/or film history, based on a study of a minimum of two films (4 films for HL)

Presentation (25%) An oral presentation of a detailed critical analysis of a continuous extract from a prescribed film. The extract must not be longer than 5 minutes. Presentations are 10 minutes (15 minutes for HL)

Internal Assessment (50%):

Production Portfolio. One complete film project with accompanying written documentation: no more than 1,200 words (1,750 words for HL) (50 marks) Length of film project: 4-5 minutes including titles (6-7 minutes for HL). HL students also do a trailer of 40-60 seconds. Length of individual rationale for the film: no more than 100 words (HL length of trailer rationale: no more than 100 words. Students will be assessed on only one role (must be one of these roles: director, writer, cinematographer, editor)

**Group work: The film project may be undertaken as a group project (up to four students who will be assessed with an unlimited number of performers or assistants who aren't assessed), but all accompanying documentation must be individually produced.

Theatre Arts

Nature of the Subject

Theatre is a dynamic, collaborative and live art form. It is a practical subject that encourages discovery through experimentation, the taking of risks and the presentation of ideas to others. It results in the development of both theatre and life skills; the building of confidence, creativity and working collaboratively.

The IB Diploma Programme theatre course is a multifaceted theatremaking course of study. It gives students the opportunity to make theatre as creators, designers, directors and performers. It emphasizes the importance of working both individually and collaboratively as part of an ensemble. It offers the opportunity to engage actively in the creative process, transforming ideas into action as inquisitive and productive artists. Students experience the course from contrasting artistic perspectives. They learn to apply research and theory to inform and to contextualize their work. The theatre course encourages students to appreciate that through the processes of researching, creating, preparing, presenting and critically reflecting on theatre— as participants and audience members—they gain a richer understanding of themselves, their community and the world.

Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices, their processes and their modes of presentation. It enables students to discover and engage with different forms of theatre across time, place and culture and promotes international mindedness.

Aims

The aims of the arts subjects are to enable students to:

1. enjoy lifelong engagement with the arts
2. become informed, reflective and critical practitioners in the arts
3. understand the dynamic and changing nature of the arts
4. explore and value the diversity of the arts across time, place and cultures
5. express ideas with confidence and competence, develop perceptual and analytical skills.

Furthermore, the study of theatre specifically aims to enable students to:

7. explore theatre in a variety of contexts and understand how these contexts inform practice (theatre in context)
8. understand and engage in the processes of transforming ideas into action (theatre processes)
9. develop and apply theatre production, presentation and performance skills, working both independently and collaboratively (presenting theatre)

For HL only:

10. understand and appreciate the relationship between theory and practice (theatre in context, theatre processes, presenting theatre).

Assessment External assessment tasks		SL	HL
Task 1	Solo theatre piece (HL only) Students at HL research a theatre theorist they have not previously studied, identify an aspect(s) of their theory and create and present a solo theatre piece (4–8 minutes) based on this aspect(s) of theory.	N/A	35 %

Task 2	Director's notebook (SL and HL) Students at SL and HL choose a published play text they have not previously studied and develop ideas regarding how it could be staged for an audience	35 %	20 %
Task 3	Research presentation (SL and HL) Students at SL and HL plan and deliver an individual presentation (15 minutes maximum) to their peers in which they outline and physically demonstrate their research into a convention of a theatre tradition they have not previously studied.	30 %	20 %
Internal assessment task			
Task 4:	Collaborative project (SL and HL)	35 %	25 %

Assessment in the IBCP- Internal assessment and other non-examination components

Criterion-based grading

The BTEC and IB courses practice criterion-based assessment. As a result students can be clear as to their objectives and the assessment system is transparent.

Validity, reliability and *fairness* are the watchwords of the assessment strategy. Senior examiners convene to oversee assessment in their subjects and to award grades.

Subject criteria will be made available to students when they begin a course.

The examinations

BTEC subjects are assessed through portfolios and there are no examinations.

The IB course examinations for each session take place over a period of approximately three weeks in May and November. Given the number of subjects to be examined, this can only be done if two or three different subjects are sometimes examined in the same slot in the schedule. The choice of subjects to be blocked together in this way is made so as to reduce to a minimum the number of clashes that are likely to occur for individual candidates. However, a small number of such clashes are inevitable and procedures for dealing with these are described in the *Vade Mecum* (the procedures manual for Diploma Programme [DP] coordinators and teachers).

Examinations are scheduled to avoid more than six hours of examining in a single day where possible, under normal circumstances. Friday afternoons are kept free from examinations as a means of extending at least some consideration to those schools whose working week is not Monday to Friday. The normal pattern for the examinations relating to a particular course is to schedule the two or three papers consecutively, starting one afternoon and finishing the next morning.

To complete the schedule over three weeks, without using Friday afternoons, not all examinations can follow the above sequence. Language A examinations are sometimes held so that paper 1 and paper 2 are separated by a period of days. Since these papers are quite independent of each other in terms of content, and the language involved is one in which the candidate is highly fluent, it is considered that the separation of papers will have less of an impact than in other subjects.

Publication of results

IB results are published to schools and university admission systems on 5 January and 5 July each year for the two examination sessions. The results are sent electronically, as are many other administrative processes relating to the examination system, such as candidate registration and most mark entry. Candidates are issued with a numeric grade from 1 to 7 for each subject entered. Candidates can access their results electronically on July 6th.

BTEC results will be published in mid-July.

The End of Course Examinations at Nations

By following the IBCP students will reduce the number of examinations they have to sit. Students should have worked hard throughout the course and their portfolios will reflect their capabilities. Nevertheless, students will still probably have at least 2 examinations at the end of year 13 linked to their IBDP subjects.

Useful Contacts

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International Baccalaureate website:	www.ibo.org
Edexcel website for BTECs	www.edexcel.com
(Almost) all the universities in the world:	www.braintrack.com
UK universities:	www.ucas.com
US universities:	www.usnews.com
	www.collegequest.com
	www.collegeboard.com
	www.embark.com
Canadian universities:	www.studyincanada.com
French universities:	www.letudiant.fr