Grade 11 and 12 Academic Learning Programme 2015/2016
UWCSEA Academic Learning Programme pathways

The Academic Learning Programme at UWCSEA is one of the five elements of the UWCSEA Learning Programme. At UWCSEA our students follow the full International Baccalaureate Diploma Programme. This provides an excellent and internationally recognised pathway to higher education across the globe at all levels including world-renowned universities. This is the expected pathway for our students.

A few students each year follow an IB Diploma Programme Course (IBDPC). These students typically follow a slightly restricted programme of IB Diploma subjects. This allows access to higher education at all levels, although there are some restrictions. This option may be offered after consultation with the Vice Principal.

Selecting an IB Diploma package

An academically and personally challenging two-year pre-university course, the IB Diploma Programme (IBDP) is designed to provide students of different linguistic, cultural and educational backgrounds with the intellectual, social and critical perspectives necessary for the adult world that lies ahead. Respected by schools and universities throughout the world, it is a high-quality educational programme designed and monitored by educationalists with the aim of encouraging international awareness.

One of its greatest strengths is its independence from politically motivated interference by any national government.

The IBDP involves choosing three subjects to study in detail at higher level (HL) and three subjects at standard level (SL). Students must select six subjects by choosing one from each of the following groups:

**Group 1—Studies in Language and Literature**

Language A (first language)

Both 'Literature' and 'Language and Literature' are offered in English and Chinese. Either 'Literature' or 'Language and Literature' are offered in other languages.

**Group 2—Language Acquisition**

Language B (foreign language) or Ab Initio (beginners)

**Group 3—Individuals and Society**

Business and Management; Economics; Geography; History; Science, Technology and Society; Philosophy; Psychology; Environmental Systems and Societies; Information Technology in a Global Society.

*Important: Information Technology in a Global Society is an online course only, and subject to an additional fee.*

**Group 4—Sciences**

Biology; Chemistry; Physics; Science, Technology and Society; Design Technology; Environmental Systems and Societies; Sports, Exercise and Health Science; Computer Science.

Students selecting Environmental Systems and Societies are deemed to have satisfied the requirements of both Group 3 and Group 4. Hence they have the possibility of choosing a second subject from Groups 1–4 or 6.

**Group 5—Mathematics**

**Group 6—The Arts**

One of the following Dance, Film, Music, Theatre Arts, Visual Arts or a second subject from one of Groups 1–4.

Notes

- Further Mathematics may be offered as a seventh subject at HL
- When planning an IBDP course, students should bear the following in mind:
  - the same subject cannot be taken at both HL and SL
  - the same language cannot be taken in both Group 1 and Group 2
  - bilingual students may take two Language A courses
  - the IB, at its discretion, occasionally gives special permission for three sciences to be taken if the student concerned has no choice but to do this for university entrance. Documentary evidence of such a requirement must be given to the IBDP Coordinator who will forward it to the IB Office and request permission. The IBDP will not allow three sciences to be taken without this written evidence
- SL subjects are not guaranteed. If insufficient numbers of students opt for a subject it may not be offered, or if the class is already full, students may not be able to choose the subject.
- The subject recommendations are the best indicator of a student’s ability level in each subject, and should be used as a guiding principle when deciding what IBDP subjects to select.

Further requirements—IB core elements

Three further requirements contribute to the unique nature of the IB Diploma, with compulsory participation in:

1. **CAS** (Creativity, Action, Service)
2. **Extended Essay**, which demands independent research under appropriate guidance
3. **Theory of Knowledge** course, which explores the relationship between the disciplines and ensures that students engage in critical reflection about knowledge and experience acquired both within and beyond the classroom

The combination of subjects and requirements is a deliberate compromise between the preference for specialisation in some countries and the emphasis on breadth often preferred in others.

The intent is that students learn how to learn, how to analyse, how to reach considered conclusions about humanity, our languages and literature, our ways in society, and the scientific forces of our global environment.

Assessment

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

**IB Diploma score**

The IB Diploma has a maximum total score of 45 points:

- 3 HL subjects, each with 7 points maximum
- 3 SL subjects, each with 7 points maximum
- IB Core (Theory of Knowledge and Extended Essay), 3 points maximum
IB Core Elements

Theory of Knowledge (ToK)

The Theory of Knowledge (ToK) aims to provide a grounding in critical thinking so that students can assess how certain they can be of the knowledge they acquire in the different subject areas of the IBDP. It also aims to show the links between the subjects so that the key skills of synthesis can be developed in order to help our students become more holistic learners. It is a fundamental part of the IB approach and thus a required course for all students.

The course, which runs through Grade 11 until the end of the Term 1 in Grade 12, is composed of weekly classes and ToK MiniWeek, when students attend lectures and spend several days looking at different academic issues from a ToK perspective.

Course content

The course looks at the ways in which we acquire knowledge and the knowledge issues (e.g., reliability, relevance, evidence, etc.) involved in the IBDP subject areas, as well as in areas such as ethics, law, politics and religion. It also looks at other influences on our understanding of the world, such as the media or our different cultural backgrounds.

Skills developed

Students read about and discuss a wide variety of topics. This develops their presentation and debating skills, and enhances an appreciation of alternative points of view, providing a better understanding of complicated problems of knowledge. It aims to teach students how to acknowledge and analyse these problems rather than solve them once and for all.

Like the Extended Essay, it also develops their ability to write a coherent, structured essay in an academic style. A presentation developed in class time and an essay selected from titles prescribed by the IB and advised on by ToK staff form the assessment.

Assessment

External assessment – 67%

Essay of 1,200–1,600 words on a IB Prescribed Title written during Grade 12 Term 1. An example from the 2013 titles is:

- In what ways may disagreement aid the pursuit of knowledge in the natural and human sciences?

Internal assessment – 33%

Presentation on a Knowledge Issue of the students’ choice at the end of Grade 11. Two typical examples:

- How far do ethical considerations limit the pursuit of scientific research?
- Does emotion or reason make for better aesthetic judgments in the Arts?

University courses and careers

The academic rigour, breadth of topics and level of abstraction that characterise ToK make it a great introductory course for any university study.

Extended Essay

The purpose of this essay is to develop skills in the methods of critical research. Students choose one of their subjects, most usefully the one they will study at university, and select a topic for research. With the help of a teacher advisor they work over several months to produce an essay of a maximum of 4,000 words.

Past experience has shown that the majority of students derive intense satisfaction from the completion of a very thorough, personal piece of work.

Award of points to ToK and Extended Essay

Up to three bonus IBDP points are awarded according to the quality of the combined standard of a student’s ToK and Extended Essay. ToK and Extended Essay are each awarded a grade from A to E, and bonus points are calculated from the matrix below.

For example, a candidate who achieves grade B for the Extended Essay and grade C for their ToK will be awarded two bonus points.


<table>
<thead>
<tr>
<th>Theory of Knowledge</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
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<tr>
<td>B</td>
<td>3</td>
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<td>2</td>
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<td>C</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
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<tr>
<td>D</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Failing condition</td>
</tr>
</tbody>
</table>

Attaining a grade ‘E’ in either the Extended Essay or Theory of Knowledge constitutes an automatic fail condition.

Creativity, Action and Service (CAS)

Students are involved in CAS for the whole of their IB Diploma and ideally spend 3–4 hours a week engaged in extra-curricular pursuits. For most CAS experiences an adult supervisor will record attendance and evaluate the student’s contribution. CAS aims to challenge and extend students beyond the academic curriculum, and to develop a spirit of discovery, skills and interests. Many experiences involve a benefit to the community and encourage students to consider global issues and ethical outcomes of their participation.

CAS experiences can occur within the College or outside. Examples of creativity are working for College publications, drama productions, playing in music ensembles, as well as initiating and organising sports coaching. Activity includes playing sports and expeditions. All Grade 11 students are involved in a year of Local Service and most also do service for Project Week. Service arising out of the academic curriculum and using skills learned in the particular subject, is encouraged. All students must also be involved in a project of their own initiation, covering more than one aspect of CAS, which follows a set procedure and demonstrates reflection at each step.

Students have a CAS Advisor, who visits tutor groups, and interviews students at least three times during the course. Students reflect on their CAS experiences using the college online management system. These, along with supervisor evaluations, serve as evidence for the seven learning outcomes, to be demonstrated by the end of the diploma course. The CAS records are used by tutors and University Advisors as an important source of information for writing references.

Graduation from UWCSEA and the IB Diploma are withheld if CAS requirements are not fulfilled.
Matrix of IB prerequisites for university

This matrix contains general guidelines that are a starting point but requirements for specific programmes can change. There are many subjects not listed here that can be studied at university level, which have no specific IB Diploma Programme (IBDP) prerequisites. Because some programmes do have IBDP prerequisites in order to apply, it is essential that students conduct their own research to ensure their IBDP subject package meets their needs.

<table>
<thead>
<tr>
<th></th>
<th>United Kingdom</th>
<th>Australia</th>
<th>Canada</th>
<th>USA</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Architecture</strong></td>
<td>may require HL Mathematics; HL Physics; Art or Design Technology; portfolio</td>
<td>recommend HL or SL Mathematics and/or Physics; may require portfolio</td>
<td>may require HL or SL Mathematics; may require two Sciences (GCSE may satisfy one); may require portfolio</td>
<td>recommend HL or SL Mathematics and HL Science for B.Arch; may require portfolio</td>
<td>may require SL Mathematics or Chemistry or Physics; may require portfolio</td>
</tr>
<tr>
<td><strong>Art and Design, Performing Arts</strong></td>
<td>portfolio/audition usually required; relevant IBDP subject usually required</td>
<td>portfolio/audition usually required; relevant IBDP subject usually required</td>
<td>portfolio/audition usually required; relevant IBDP subject usually required</td>
<td>portfolio/audition usually required; relevant IBDP subject usually required</td>
<td>portfolio/audition usually required; relevant IBDP subject usually required</td>
</tr>
<tr>
<td><strong>Business/commerce</strong></td>
<td>may require SL Mathematics; IB Business usually not required</td>
<td>may require HL or SL Mathematics; IB Business usually not required</td>
<td>may require HL or SL Mathematics; IB Business usually not required</td>
<td>no specific prerequisites; IB Business usually not required</td>
<td>may require SL Mathematics; IB Business usually not required</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td>often require HL Mathematics; may require SL Mathematics; IB Economics usually not required</td>
<td>may require SL Mathematics; IB Economics usually not required</td>
<td>may require SL Mathematics; IB Economics usually not required</td>
<td>no specific prerequisites; IB Economics usually not required</td>
<td>check individual universities</td>
</tr>
<tr>
<td><strong>Engineering</strong></td>
<td>usually require HL Mathematics and HL Physics</td>
<td>may require HL or SL Mathematics; and Chemistry or Physics</td>
<td>may require HL or SL Mathematics; usually require two Sciences (Chemistry often required even for Computer Science)</td>
<td>recommend SL or HL Mathematics and one or more HL Sciences</td>
<td>may require HL Mathematics, HL Chemistry and/or HL Physics</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>may require SL or HL Mathematics and one or more HL Science</td>
<td>may require SL Mathematics and one or more HL Science</td>
<td>may require HL or SL Mathematics; usually require two Sciences</td>
<td>recommend HL or SL Mathematics and one or more HL Science</td>
<td>two of: HL Biology, HL Chemistry, HL Physics, HL Mathematics, HL Computing</td>
</tr>
<tr>
<td><strong>Law</strong></td>
<td>may require English A; essay-based subjects recommended (e.g., History)</td>
<td>may require English A</td>
<td>not available as undergraduate option</td>
<td>not available as undergraduate option</td>
<td>may require specific grade in SL English</td>
</tr>
<tr>
<td><strong>English literature</strong></td>
<td>recommend IBDP English A: Literature</td>
<td>recommend IBDP English A: Literature</td>
<td>no specific prerequisites required</td>
<td>no specific prerequisites required</td>
<td>check individual universities</td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td>requires two HL Sciences; HL Chemistry and usually HL Biology</td>
<td>usually require Chemistry and may require another Science or Mathematics (HL or SL); background in Biology helpful</td>
<td>not available as undergraduate option</td>
<td>not available as undergraduate option</td>
<td>usually require HL Chemistry and HL Biology or HL Physics</td>
</tr>
<tr>
<td><strong>Psychology</strong></td>
<td>may require SL Mathematics; may prefer two HL from Biology, Chemistry, Mathematics, Physics or Psychology</td>
<td>may require SL Mathematics; IB Diploma Psychology usually not required</td>
<td>may require SL Mathematics; IB Diploma Psychology usually not required</td>
<td>no specific prerequisites; IB Diploma Psychology usually not required</td>
<td>check individual universities</td>
</tr>
</tbody>
</table>

Note: European universities often have specific IBDP prerequisites in Languages, Humanities/Social Sciences, Mathematics, and Sciences. Interested students must check individual university websites for details.
Guidelines to IB prerequisites for university

IB Diploma recognition by universities


We urge all students to check university IB Diploma recognition policies for individual countries by contacting the IB Regional Office you are directed to on the IB site.

Students intending to study at Dutch, French, German, Italian, Swiss, or Asian universities must check country and university-specific requirements when selecting Diploma subjects, because these countries tend to have special requirements.

Subject guidance

Remember that the individual subject guidance from teachers is the best indicator of a student’s ability level in each subject. This subject guidance should form the basis of deciding what IB Diploma subjects to select.

FIB students

FIB students considering Science, Computer Science, or Engineering courses in either the UK or Canada need to be aware that some courses may require a background in two sciences at GCSE level. FIB Co-Science is unlikely to satisfy this requirement and you may therefore need to take the two required sciences at IB Diploma level.

IB Diploma Courses candidates

Students who take IB Diploma Courses instead of the full IB Diploma Programme will graduate with a UWCSEA High School Diploma that is accredited by the Western Association of Schools and Colleges (WASC). These students may apply to universities as a US High School Diploma holder and are often eligible for direct entry to Australian, Canadian, Dutch, Korean, UK, and US universities. Students will, however, usually need to meet minimum grade and testing requirements (usually a specific score on the American SAT or ACT test). Additionally, some universities may require that students first complete a foundation programme before being granted direct entry to certain courses. Students are urged to consult with a University Advisor before finalising their decisions.

Frequently asked questions

I don’t know what I want to do at university; must I make a decision now?

• No, you don’t need to decide what you want to do at university now and it is very normal not to be sure. However this is an opportunity to start thinking about the future and considering where your academic strengths and interests lie.
• The University Advising microsite has resources to help you explore career interests and aptitudes. Go to www.uwcsea.edu.sg/UAC/Research and Preparation. We also encourage you to use the research resources the University Advisors shared with you during the ‘Careers Exploration Focus Week’ assemblies.

Are HL and SL IB Diploma subjects considered equally important by universities?

• How you do overall in your IB Diploma is as important as how well you do in each subject.
• Some universities make conditional offers, usually requiring a certain total number of points, as well as specific subjects and grades in HLs.
• It’s important to be confident about HLs, but you can’t afford to neglect SLs.

What is a vocational or professional subject?

• Something job-related, e.g. Architecture, Business, Engineering, Law, Medicine. If you are thinking about studying any vocational subject, you need to do some research: is this the right career area for you?
• It is becoming more and more expected that prior to applying to vocational subjects, students will have gained some relevant practical experience, e.g. volunteering at a hospital or in a relevant service activity, working with an architect in the summer, etc.

What careers can I pursue with my IB Diploma subjects?

• The IB Diploma combines breadth and depth and is intended to give you a broad enough foundation to pursue a wide range of possible options at university.
• Many subjects at IB Diploma, and many university courses, do not lead to a particular career, but rather equip you with the skills needed to succeed at a professional level.
• Courses such as English, Geography, Chemistry, and Economics all fall into this category; non-vocational degree courses at university can lead to numerous career paths, some that may not even exist at present. Attend the Careers Fair, guest lectures, and other information sessions to understand more about what different professions are about, and what you might need to study to get there.

Do universities prefer some IB Diploma subjects over others?

• Some highly selective universities prefer IB Diploma packages with no more than one non-traditional or vocational subject.
• US applicants should note that the list of subjects indicated as “Recommended High School Preparation” in some college websites/guides is intended for US high school applicants and need not be strictly followed by IB Diploma students.

Can I take three sciences in my IB package?

• You can only take three sciences with special permission through the IB Coordinator and will have to prove that you need that package for university entrance (e.g. to study Medicine in India or the Netherlands). You should be very sure of your university course and country requirements if you intend to apply for permission to take a three-science package. If you change your mind you may be stuck with a very demanding package.
Language pathways at IBDP

At UWCSEA we fully support and uphold the IB Language guidelines that state that students should follow the IBDP Language course that offers ‘the most appropriate level of challenge’. As such, we expect students to follow the pathways outlined below if they intend to continue with their Language at IBDP:

• (I)GCSE First Language leads to IBDP Language A
• (I)GCSE Second Language (available in Chinese only) leads to IBDP Language A or Language B HL
• (I)GCSE Foreign Language leads to IBDP Language B

Guidance from our University Advisors highlights that Universities expect to see this continuity of language level from (I)GCSE to IBDP.

Group 1—Language A: Studies in Language and Literature

Language A

Both the ‘Language and Literature’ and the ‘Literature’ option are available at SL and HL in both English and Chinese. Language. Other languages (Dutch, French, German, Hindi, Japanese, Korean and Spanish) offer either the ‘Literature’ or the ‘Language and Literature’ course.

Additional information about the Dutch programme can be found in the Nederlandse Taal en Cultuur guide.

Group 1 courses meet the requirements of students whose Language A is their strongest language, while taking into account that many students selecting these courses have complex language profiles and may be bi- or tri-lingual. While the ‘Literature’ and the ‘Language and Literature’ courses are different, they both develop understanding about language and literature, and are both designed to support future academic study by developing language skills. Both courses include the study of texts in translation, which gives the opportunity for the exchange of ideas about cultural diversity that are integral to the UWC ethos.

Course content – Literature

“That is part of the beauty of all literature. You discover that your longings are universal longings, that you’re not lonely and isolated from anyone. You belong.” F. Scott Fitzgerald

Students read a range of texts in different genres and from different regions and periods, chosen by the class teacher from the extensive prescribed IB book lists. Work in the classroom encompasses a variety of oral, written, creative and analytical activities, designed to encourage students to respond to literary texts in different ways and to fully appreciate the value of literature in the way it can make imaginative sense of the world.

Course content – Language and Literature

The syllabus comprises four main sections. In Parts 1 and 2, a wide range of texts are studied to introduce students to the linguistic topics of ‘language in a cultural context’, as well as ‘language and mass communication.’ In Parts 3 and 4, students study literary texts of different genres and from different regions, periods and contexts. HL students study six literary texts while SL students study four. Work in the classroom encompasses a variety of oral, written, creative and analytical activities, designed to encourage students to respond in different ways to the widest range of texts such as images with or without text, literary and non-literary texts, films and their scripts, oral texts and electronic texts.

Skills developed

• ability to express ideas clearly and with fluency orally and in writing
• ability to substantiate and justify ideas with relevant examples
• ability to evaluate conflicting viewpoints
• understanding of the ways in which cultural values are expressed in texts
• understanding of text structure, style and the writer’s technique
• ability to compare and contrast the form, style and content of texts
• understanding of individual literary works as representatives of genre and period

Assessment

External assessment – 70%

Two written examination papers:

• paper 1: close analysis of unseen passage(s) (literary extracts for the Literature course) – 20% in Literature; 25% in Language and Literature
• paper 2: literature essay paper – 25%

Written coursework assignment – 25% in Literature; 20% in Language and Literature

Internal assessment – 30%

Two oral assessments:

• formal oral commentary (on a literary text for the Literature course) – 15%
• class-based oral presentation(s) or other oral activity – 15%

University courses and careers

The Group 1 courses help prepare students for a wide range of university courses. Study at HL in particular prepares for study in Literature, Linguistics and Media, but also prepares well for the Humanities in general. The more obvious careers related to the study of Literature and Language are journalism, publishing, working in radio and television, advertising and teaching.

However, the courses also provide training in some fundamental skills that can then be directed into areas such as business, law, accountancy and marketing.

Bilingual Diploma

The Bilingual Diploma is awarded to any student who successfully completes a Language A course in any language other than English.

School-Supported Self Taught Languages A (SSSTA)

Students may take their mother tongue as a School-supported Language A, even if no teacher of the language is available or the number of students is too small to warrant a separate class. This option is only available at SL.

In the past few years students have studied the following as their mother tongue/first language: Afrikaans, Albanian, Amharic, Burmese, Czech, Croatian, Danish, Dhivehi, Gujarati, Hebrew, Hungarian, Malay, Mongolian, Norwegian, Oromo, Pilipino, Polish, Portuguese, Punjabi, Romanian, Russian, Serbian, Sinhalese, Swahili, Swedish, Telugu, Thai, Turkish, Vietnamese and Urdu. Other languages may be available upon request from the IB.
Course content
With the assistance of the Coordinator, students choose eight literature texts for study from the IB book list in their Language A and a reading timetable is put in place. In Grade 11 students read and analyse the compulsory Works in Translation and additional literary materials relating to their assessment activities. Regular homework is set. The College engages qualified tutors in the relevant Language A to mark, assess and give feedback on students’ work on a regular basis.

In Grade 12 the Coordinator also sets reading targets for the second year of the course. In class students refine their communicative competence by preparing, practicing and reflecting on written and oral assignments. Students’ work is also assessed and commented on by the external tutor. Throughout the course students also attend regular with the SSSTA coordinator to discuss learning strategies, examine tutors’ feedback, assess academic and linguistic progress and solve any practical difficulties arising from the course and the assessments.

Additional support
Parents may wish to engage the services of a tutor at their own cost.

Skills developed
Students develop the skills of literature analysis and are consequently able to express complex ideas in both their mother tongue and in English. Through the independent self-study of literature works in their own language, students also demonstrate an ability to work independently—a quality sought by universities.

Assessment
The IB sets oral exams for individual SSSTA students. The students record their responses and these are assessed externally by the relevant IB examiner for the language.

External assessment – 100%
• exam critical commentary – 20%
• exam essay – 25%
• coursework essay based on Works in Translation – 25%
• externally assessed orals – 30%

University courses and careers
Studying a SSSTA is very advantageous for students wishing to return to their home country for tertiary studies. Some countries demand proof of competence in the national language before admitting students.

In addition, the self-taught element of the course is practical evidence that the students are self-starters and have the ability to organise their own learning. For students who choose to study in English speaking countries, certified competence in mother tongue can be a great asset for research purposes and to improve chances in a very competitive jobs market.

Group 2—Language B: Language Acquisition

Language B
Language B courses intend to provide students with a high degree of proficiency in their chosen language and to further develop their understanding of different cultures and ways of life of the languages studied.

Language B options: English (HL only), French, German, Spanish or Chinese (SL and HL)

Course content
The course is designed for students with previous experiences of learning a foreign language (normally 3–5 years), and is suitable for those who have displayed both ability and interest in their previous foreign language classes. The syllabuses for both HL and SL are similar in content, although HL is a more intensive course and the proficiency level achieved is higher. HL courses also require students to explore some literary texts.

The objective of the Language B course is for students to communicate clearly and effectively in different styles and contexts while studying the cultures associated with the language. Students will gain a better understanding and use of grammatical structures and vocabulary through studying a variety of topics. These topics all offer a cultural perspective and enable students to take part in discussions on a wide variety of issues. Examples of such topics include communication and media, global issues, and social relationships. Students will be encouraged to reflect upon their own perspectives, those of the school and those of the target language culture.

Skills developed
Students further develop the four main skills of listening, reading, writing and speaking through studying a variety of topic areas and carrying out a range of individual and group work activities.

Examples include:
• listening – news bulletins, interviews, films, internet
• speaking – presentations, debates, discussions, role plays
• reading – news articles, letters, interviews, internet
• writing – letters to newspapers, film reviews, diary entries, essays

Assessment
External assessment – 70%
• paper 1: receptive skills – 25%
• paper 2: written skills – 25%
• written assignment – 20%

Internal assessment – 30%
• oral activities – 30%

University courses and careers
Both courses prepare students adequately to study language at university. Many students also pursue a year abroad option offered by programmes such as Erasmus, where students can study their chosen subject and, therefore, language, in another country. The linguistic competence offered by a Language B course will help candidates in the competitive world of job applications.
**Language B: Ab Initio**

The *Ab Initio* courses offer students the chance to take up a new language at IBDP and to reach a reasonable level of communication in only two years. This is a good course for students who are interested in learning how to communicate effectively in everyday situations and for students who have little or no previous experience of learning a foreign language.

*Ab Initio* languages available: French, Mandarin, Spanish

**Course content**

The *Ab Initio* course is designed for complete beginners who have not studied a foreign language in the past. The emphasis is on practical utility and communication. Over the two years, students acquire the vocabulary and grammatical structures they need to use in everyday social interaction and situations. The course develops a variety of linguistic skills and basic awareness of culture.

Students study the three themes of:
1. the individual and society
2. leisure and work
3. the rural and urban environment

**Skills developed**

The *Ab Initio* course aims to develop the following skills:

- listening – understanding straightforward conversations and the overall idea of a presentation
- reading – understanding straightforward information and skimming to extract key points and ideas in text.
- writing – conveying information clearly, organising ideas, giving details and opinions and using language appropriate to purpose and audience
- speaking – participating in spontaneous conversations, giving information and opinions clearly in brief structured presentations

**Assessment**

External assessment – 75%
- paper 1: receptive skills – 30%
- paper 2: productive skills – 25%
- written assignment – 20%

Internal assessment – 25%
- individual oral – 25%

**University courses and careers**

After two years students possess the skills and knowledge to be able to carry on learning the language independently. Whilst not high enough to study languages at University, the level achieved allows students to take intermediate or combined language courses at university.

The linguistic competence offered by the *Ab Initio* course will help candidates in the competitive world of job application.

**Group 3—Individuals and Society**

**Business and Management**

A student who has studied Business and Management will be able to understand the complexity and dynamism of the business environment. Students study a variety of business situations with an emphasis on the changing nature of business within both local and global contexts. The focus of studies ranges from corporate social responsibility through to stock valuation. Students who have taken this course can progress from school to higher education or directly into employment in industry or commerce.

**Course content**

- introduction to organisations
- marketing
- human resources
- operations management
- accounts and finance

**Skills developed**

- enable students to develop the capacity to think critically
- enhance the student’s ability to make considered decisions
- enable students to appreciate the pace, nature and significance of change

**Assessment**

External assessment – 75% (HL and SL)
- paper 1: pre-issued case study – 40% (HL) 35% (SL)
- paper 2: structured questions and a ‘concept based’ extended response question – 35% (HL) 40% (SL)

Internal assessment – 25% (HL and SL)
- HL – 2,000 word business report
- SL – 1,500 word commentary

**University courses and careers**

A background in business is helpful in a wide variety of disciplines. However, it is also very useful in the study of law, international studies, political sciences, a wide range of business-related courses, and certain engineering courses.

**Economics**

Economics is essentially about the concept of scarcity and the problem of resource allocation. It is used to understand many real world problems, such as international trade and development. The courses are *ab initio*, which means you may start Economics (HL and SL) in the IBDP without having studied it before.

**Course content**

- introduction to Economics
- microeconomics: markets; theory of the firm (HL only); market failure
- macroeconomics: measuring the economy; introduction to development; macro models and policies; unemployment, inflation and distribution
- international economics: reasons for trade; protectionism; economic integration; WTO; balance of payments; exchange rates
- development economics: sources, consequences, barriers and strategies of growth and/or development
Skills developed
- provide students with a core knowledge of Economics
- encourage students to think critically
- promote an awareness and understanding of internationalism
- encourage students' development as independent learners
- enable students to recognise their own tendencies for bias

Assessment

External assessment (4 hours) – 80% (HL and SL)
- paper 1: extended response paper, two essays from four (1.5 hours) – 30% (HL) 40% (SL)
- paper 2: data response, two questions from four (1.5 hours) – 30% (HL) 40% (SL)
- paper 3: HL quantitative paper, two questions from three (1 hour) – 20%

Internal assessment – 20% (HL and SL)
- portfolio: three commentaries analysing articles linking economic theory to a real-world situation

University courses and careers

There are many areas of economics that can be studied from transport to development. It is also a great help in the study of law, international studies, political science, business, certain engineering courses and many other disciplines. It is very helpful in most jobs, but even if one never uses it professionally, it enables individuals to understand what is happening, day-to-day, in the complex world that surrounds them.

Geography

Modern society is currently undergoing extreme change. Geography looks at the spatial issues that shape our decisions within issues of urbanisation, population development and environmental quality, and links them with an understanding of physical processes. Geography helps to explain the inter-relationships between human and natural environments. Simple choices of where to live and where to work are analysed from a balanced geographical viewpoint. An appreciation of how values play a role in shaping decisions is fundamental to the subject and this is a crucial part of the UWC philosophy.

There is no prerequisite to study Geography at IBDP level, however there is a compulsory four-day field trip to Melaka in Term 3 of Grade 11 which is an additional cost to parents.

Course content

Grade 11 (HL)
The course comprises a core theme of patterns and change and three options of freshwater, issues and conflicts, urban environments and extreme environments. Each student has two teachers, and the work is split between both. In Term 3, students participate in a four-day residential trip to Melaka at a cost of about $550. The coursework from this trip is worth 20% of the final exam mark. Students write one report on this course and work on this for most of the Term 3. This is internally assessed and externally moderated.

Grade 11 (SL)
The course comprises a core theme of patterns and change and two options of extreme environments and urban environments. One teacher teaches the course which begins with a core theme of patterns and change. In Term 3, coursework completed based on fieldwork conducted in Singapore is worth 25%, and is internally marked and externally moderated.

Skills developed
- locate and differentiate elements of the Earth's surface
- read, interpret, analyse and produce maps
- read interpret, analyse and construct graphs
- undertake statistical calculations to show patterns and changes
- manipulate and interpret data using quantitative techniques
- undertake geographical investigation
- produce written material (including essays, reports and investigations)

Assessment

External assessment – 80% (HL) 75% (SL)
- HL – three written papers (4 hours 30 minutes)
- SL – two written papers (2 hours 40 minutes)

Internal assessment (fieldwork) – 25% (HL) 25% (SL)
- HL and SL – fieldwork, a written report of 2,500 words

University courses and degrees

The skills acquired set up a student to opt for a variety of degrees including geography, the latter which is sought after by a variety of employers. Alternative options range from traditional openings in environmental and planning fields as well in management areas such as accountancy, banking, advertising, teaching and research assistants. Applied fields, for example development studies, are quite popular.

History

It is essential that one understand the past if one is to attempt to understand the world today with its myriad complexities and contradictions. If the UWC mission statement is to be truly meaningful, then we cannot fail to send out our graduates equipped to understand, and hence thrive in the new world order.

History is a vital component of any balanced education, placing as it does a heavy emphasis on source evaluation, which encourages students to critically analyse information put before them, and to make reasoned and balanced judgements with a respect for the truth. It has a subject matter that involves issues of credibility, plausibility and probability, and a method of disciplined study which deals in arguments and interpretations, not in certainties. This is essential if pupils are not to be unaware and credulous consumers of whatever fare the media may put before them. History also helps students understand the foundations and beliefs of other civilisations stimulating respect and curiosity for cultures other than their own. This is vital in an international, multi-cultural environment.
Course content

Grade 11
• wars: the types, origins, nature and effects. Case studies include World Wars One and Two, and the Russo-Japanese war
• inter-war period 1918–1936 for an in depth document study
HL
• China circa 1850–1919
• Japan circa 1850–1919

Grade 12
• single party states: the origins, nature, establishment, policies and impact. Case studies include: Hitler and Mao
HL
• China circa 1919–1949
• Japan circa 1919–1952

Skills developed
• development of rigorous and cogent arguments
• ability to make reasoned judgements
• understanding the values and limitations of a range of sources of information
• critical thinking
• analysis, synthesis and interpretation of information
• construction of substantiated analyses about the past
• research and selection of material
• communication and organisation

Assessment

External assessment – 80% (HL) 75% (SL)
• examination paper; testing the skills of both essay writing and document evaluation

Internal assessment – 20% (HL) 25% (SL)
• coursework is one 2,000 word research investigation on a topic of the students’ choice

University courses and careers

History is widely respected as a subject, both in terms of content and skills, and as such, historians remain highly sought after by university admissions departments and employers alike. Ability in History opens up a range of possibilities at university and beyond. History graduates have gone on to be very successful in a wide range of careers, including journalism, broadcasting, government, business and economics, as well as politics and law.

Philosophy

IB Philosophy explores issues that are profound, complex, challenging and important for humanity. Examples of questions to be asked are: What is it to be human? Do we have free will? What do we mean when we say something is right or wrong? Is morality relative or absolute? What is Justice?

The course emphasizes a systematic critical inquiry into these concepts. It seeks to actively engage students in philosophical activity and encourage them to develop into independent thinkers. The course also develops highly transferable skills such as the ability to formulate arguments clearly, to make reasoned judgments and to evaluate highly complex and multifaceted issues.

Students are given the opportunity to engage with some of the world’s most interesting and influential thinkers. However the emphasis of the philosophy course is on “doing philosophy”, that is, on actively engaging students in philosophical activity. The course is focused on stimulating students’ intellectual curiosity and encouraging them to examine both their own perspectives and those of others.

Course content

Core theme: Being Human

One of the reasons we study philosophy is to search for a better understanding of ourselves, both as individuals and as members of our communities, and this search is at the heart of this element of the course. This compulsory theme for both SL and HL explores the fundamental question of what it is to be human. This exploration takes place through areas of study such as identity, freedom, mind and body, and human nature. The core theme also provides an opportunity for students to engage with interpretations of the human condition from diverse world perspectives. These perspectives ask different questions, for example: Do we have such a thing as an enduring Self? What specific meaning does our consciousness of being mortal give to our life? Is there such a thing as an inherent Human Nature?

Optional themes

The purpose of the optional themes is to provide students with an opportunity to explore specific areas of philosophy in depth. Some of the optional themes on offer are:
• Ethics
• Philosophy and Contemporary Society
• Philosophy of Religion
• Political Philosophy

Students at HL study two optional themes, and students at SL study one optional theme from this list. Themes are selected based on teacher expertise, student interest and availability of resources.

Prescribed text

This is an opportunity for students to gain in-depth knowledge and understanding of a primary philosophical text. The prescribed list of texts includes:
• The Republic by Plato
• The Ethics of Authenticity by Charles Taylor
• The Life You Can Save by Peter Singer

HL extension

HL students are required to explore the nature of philosophical activity through an analysis of an unseen extract. This aspect of the course focuses on the fundamental question of what philosophy is, and how we do it.

Skills developed

Students learn to:
• develop an intellectually independent and creative way of thinking
• analyse arguments to critically understand their assumptions, reasoning and implications
• formulate arguments in a rational and logical way
• express ideas clearly and coherently, and use language appropriate to philosophy
• examine critically their own experience and their ideological and cultural biases
**Assessment**

**External assessment – 80% (HL) 75% (SL)**
- paper 1: core theme and optional themes (2 hours 30mins /1 hour 45mins)
- paper 2: prescribed text (1 hour)
- paper 3: analysis of unseen text (1 hour 15mins, HL only)

**Internal assessment – 20% (HL) 25% (SL)**

Philosophical analysis of non-philosophical material of 1,600–2,000 words. This is internally assessed by the teacher and externally moderated by the IB.

**University courses and careers**

Recent studies by employer organisations, numerous national governments and employment agencies have shown that Philosophy as a subject is exceptionally well regarded by universities and employers given the skills and perspectives it actively encourages. The focus of contemporary education is more and more about providing foundational and life-long learning skills in preparation for the dynamic nature of the employment market, and as such Philosophy is an ideal subject. It is also personally satisfying as it broadens the mind and deepens understanding while being beneficial for academic performance across the curriculum.

The issues covered in the core theme, ‘What is a Human Being?’ and the ethics and political philosophy themes have direct relevance to careers in law, medicine, politics, business, education, non-government organisations, sciences, and even computer sciences.

**Psychology**

Psychology is the systematic study of behaviour and mental processes. It has its roots in both the natural and social sciences, leading to a variety of research designs and applications, providing a unique approach to understanding modern society. Psychology examines how the interaction of biological, cognitive and socio-cultural influences affects human behaviour, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding and appreciation of the diversity of human behaviour. The ethical concerns raised by the methodology and application of psychological research are key considerations in psychology.

Psychology takes an holistic approach that fosters intercultural understanding and respect. Cultural diversity is explored and students are encouraged to develop empathy for the feelings, needs and lives of others within and outside their own culture. This empathy contributes to an international understanding.

**Course content**

**Grade 11**

The study of the biological level of analysis, the cognitive level of analysis and the socio-cultural level of analysis comprises the core of the Psychology course. The three levels of analysis focus on three fundamental influences on behaviour: biological, cognitive and socio-cultural. The interaction of these influences substantially determines behaviour.

The level of analysis approach reflects a modern trend in psychology towards integration and demonstrates how explanations offered by each of the three levels of analysis (biological, cognitive and socio-cultural) complement one another and together provide more complete and satisfactory explanations of behaviour.

**Grade 12**

The options reflect developing fields in psychology and will involve abnormal psychology, health psychology, developmental psychology or the psychology of human relationships. Students studying SL will cover one option, those studying HL will study two options. At HL, the unit on qualitative research methodology involves research of behaviour in a natural setting with an attempt to interpret the behaviour and meanings that people have given to their experiences.

**Skills developed**

- an understanding of the biological, social and cultural influences on human behaviour
- an interpretation of psychological research to apply the resulting knowledge for the benefit of human beings
- an awareness of how applications of psychology in everyday life are derived from psychological theories
- an understanding of and ability to use diverse methods of psychological inquiry

**Assessment**

**SL**
- paper 1 (2 hours) – 50% short answer and extended response questions on the perspectives
- paper 2 (1 hour) – 25% extended response question on one of the options
- experimental study – 25%

**HL**
- paper 1 (2 hours) – 35% short answer and extended response questions on the levels of analysis
- paper 2 (2 hours) – 25% extended response question on two of the options
- paper 3 (1 hour) – 20% short answer response questions on research methodology
- experimental study – 20%

**University courses and careers**

There are many different areas of psychology that may be studied, including but not limited to, clinical, educational, forensic or developmental psychology. It is also, however, a valuable background in the study of any of the social sciences, business, law, or medicine.

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

Information Technology in a Global Society (ITGS) is not offered as a taught course at UWCSEA, however, there is the opportunity to study it online.

The online course offers us the opportunity to broaden the range of subjects on offer to our students. As the course is run and delivered through Pamoja rather than the College, there is an additional cost of approximately US$2,200 for the two-year course.

ITGS teaches both the software skills needed to communicate effectively in the modern world and information and technology literacy skills that are so important to understanding how and why we use technology and the effect that it has on global society. The primary focus of the course is understanding current issues and technology and as a result, relevant material that is in the news during the course. The course does not fit with a particular set of diploma choices, a particular choice in higher education or a particular career because it fits with all of them.
Information on Pamoja

Pamoja Education is a social enterprise working in cooperation with the IB to provide online Diploma Programme courses. The online courses are taught by highly qualified and experienced IBDP teachers. They are supported in the College by a site-based Coordinator who regularly monitors student progress.

In an online classroom of approximately 25 students, the online teachers introduce weekly lessons, guide discussion, and provide feedback to stimulate critical thinking. Lessons feature weekly objectives to keep students on track, but provide flexibility so that they can complete them within the week at their own pace.

Whilst students are taught online they complete the same internal and external assessments and take the same written examinations as they would if they had taken the course in a face to face classroom.

For further information please visit Pamoja’s website at http://www.pamojaeducation.com

Course content

At either SL or HL the ITGS course consists of three compulsory interconnected strands that reflect the integrated nature of the course. A core of units from each strand are studied by all students, while HL students study additional modules in each area. Each of the areas is presented through studying current news events, technology issues raised in the media and the real world contexts and we investigate the theoretical technical and ethical background needed to understand these.

Strand 1: Social and ethical significance
Reliability and integrity; security; privacy and anonymity; intellectual property; authenticity; the digital divide and equality of access; surveillance; globalisation and cultural diversity; policies; standards and protocols; people and machines; and digital citizenship.

Strand 2: Application to specified scenarios
Business and employment; education and training; environment; health; home and leisure; and politics and government.

Strand 3: IT systems
Hardware; software; networks; Internet; personal and public communications; multimedia/digital media; databases; spreadsheets, modelling and simulations; introduction to project management.

HL extension
IT systems in organisations; robotics, artificial intelligence and expert systems; information systems specific to the annually issued case study.

Skills developed
• critical investigation and analysis of situations, contexts and arguments
• the research, analysis, synthesis and presentation of ideas
• technical understanding of recent information technology developments
• software skills

Assessment

SL
• two papers – 70%
• internally assessed coursework – 30%; providing an IT solution to a problem in a social context

HL
• three papers – 80%; one based on an unseen case study
• internally assessed coursework – 20%; providing an IT solution to a problem in a social context

University courses and careers

ITGS is a good subject choice for numerous higher education courses and careers.

Science, Technology and Society (STS)

Group 3 or 4 subject

STS is a unique SL course developed by UWCSEA that studies the nature and social consequences of scientific and technological developments. A trans-disciplinary course, it is taught by both science and humanities specialists. The broad and innovative nature of the course makes it suitable for students whether their strength lies in humanities or science. The cross-curricular content enables students to take it as either a Group 4 Sciences or as a Group 3 Individuals and Society subject.

Perhaps the most unique aspect of the course is that it is actually written by the teachers at UWCSEA. This means that the course is always up-to-date and relevant. Some of the most recent advances and problems created by science and technology form part of the lessons. The course attempts to understand the ways that science and technology shape culture, values and institutions, and how human values shape science and technology.

Course content

In the course we explore questions such as:
• how have scientific discoveries, from Darwin’s theory of evolution to the mapping of the human genome, altered the surrounding society?
• how do technological innovations like cloning, antibiotics, or computers alter political, social, economic and cultural life?
• how can we reconcile the sometimes conflicting claims of science and religion?
• what kinds of ethical issues arise with new developments in science and technology like genetic engineering or the world wide web, and how do we resolve such issues?

The course is divided into four modules:
1. the historical context
2. the contemporary context
3. meeting basic needs
4. who is in control?

Skills developed
• critical thinking and analysis
• written communication
• verbal communication
• practical skills (experimental design, data collection and processing, concluding and evaluating)
• data analysis

Assessment

External assessment
• examination paper – 60%

Internal assessment
• fieldwork component – 20%
• experimental science and technology – 20%
University courses and careers

In a world that depends on science and technology, an understanding of STS will benefit any student. While many career opportunities are available to scientists and technologists, there is increasing demand for non-scientists who have some training within science and technology.

The questions that we ask on the course are faced by professionals in business, government, the law and medicine on a daily basis. STS allows pursuit of careers that involve contact between professional science and the wider society.

Environmental Systems and Societies (ESS)

Group 3 and 4 subject

This exciting SL course provides students a balanced perspective on the wide range of inter-relationships between the environment and different societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they may very well come to face in later life. The course also encourages students to evaluate the scientific, ethical and sociopolitical aspects of environmental issues.

ESS takes a look at the environment from a systems viewpoint and attempts to understand its dynamic yet self-controlled nature. It leads to an understanding of humans as an integral part of the global environment and addresses issues such as population growth, resource usage, pollution management, conservation and sustainability.

The course is suitable for those with an environmental interest but does require some scientific ability. A cross-curricular subject, it draws from the sciences, geography, economics, politics and sociology and encourages students to look at the ‘big picture.’ This course complements Geography, Economics, Business, Biology and English.

The subject is a trans-disciplinary Group 3 (Individuals and Society) and Group 4 (Sciences) subject; students taking this course satisfy the requirements for both groups, allowing for more versatility in the IBDP package.

Course content

Grade 11

- environmental systems and modeling – examining the functioning of the environment through systems ranging in size from global to local scale. Economic and social systems are considered alongside environmental systems.

- human population, carrying capacity and resource use – this topic considers the nature of human population growth in both the past and the future. The key issue is the nature of the relationship between the size of populations and the supply of resources needed to sustain that population.

The highlight of the Grade 11 year is the four-day trip to Pulau Tioman, in Malaysia. During the trip, the majority of the internally assessed coursework is undertaken.

Grade 12

- conservation and biodiversity – an exploration of the biodiversity existing on the planet, the vulnerability of species and the steps being taken to conserve biodiversity

- pollution management – a wide range of pollution types are considered with respect to the impacts of pollution and the attempts to monitor and manage pollution levels

- climate change – as an extension of the work done on pollution, the mechanics and issues of climate change are examined in depth. Students are encouraged to appreciate the variety of often conflicting arguments surrounding the issue

- environmental value systems – understanding environmental value systems is a central theme in the course. This topic requires students to identify and reflect on the range of perspectives which may be relevant to environmental issues

A field trip to the stunning Semakau landfill/nature reserve is another highlight of the course, showcasing Singapore’s world-class solid domestic waste disposal solution.

Skills developed

- planning primary data collection
- conducting laboratory techniques and fieldwork skills
- presenting and analysing primary and secondary data in a report form
- oral and visual presentation skills
- secondary research skills

Assessment

External assessment – 80%
- two written papers

Internal assessment – 20%
- coursework; consisting of field reports, field course, experiments and projects

University courses and careers

Environmental awareness is becoming increasingly important and degrees specialising in environmental science/studies are becoming common in universities. These degrees relate to many career areas and are useful for any student wishing to enter the growing field of environmental impact assessment, environmental law, journalism, resource management, business, land use planning and development, politics and many more. The environmental industry in the UK is a growth sector—over 400,000 people are currently employed in 17,000 environmental corporations which have a combined turnover of over £25b—equal to that of the pharmaceutical and aerospace sectors. The industry is projected to double in size over the next decade in the UK alone.
Group 4—Sciences

Biology
The Biologist’s realm is the earth’s surface and those thin layers above and below it in which organisms grow, reproduce and die. It is true, astrophysicists look higher and geologists go deeper, but, when soft machines are involved we turn to one of the branches of Biology for answers.

People develop an interest in Biology for all sorts of reasons. The workings of the human body are of immediate relevance, and so many biological matters are topical and receive media coverage. Environmental issues are always in the news, as are medical matters and biotechnology. Biologists are involved in the study of life at all levels, and the application of knowledge in a wide range of contexts.

This course helps students to better understand themselves and their place in the natural world. It allows an in-depth study of a wide range of biological concepts as they apply to biological molecules, cells, organisms, populations and interacting communities.

Course content
SL and HL courses share the core syllabus. HL students study to a far greater depth and breadth.

Core curriculum
- cell biology
- molecular biology
- genetics
- ecology
- evolution and biodiversity
- human physiology

Additional HL topics
HL covers each topic in more depth with particular emphasis on:
- nucleic acids
- metabolism, cell respiration and photosynthesis
- plant biology
- genetics and evolution
- animal physiology

Options
Both SL and HL students study one option during the course. The possible topics are:
- neurobiology and behaviour
- biotechnology and bioinformatics
- ecology and conservation
- human physiology

Field courses
There are compulsory field trips for HL and SL biologists. HL students spend five days on Tioman Island studying coastal, coral reef and rainforest ecosystems. SL students spend one day in Singapore studying forest ecosystems. Both trips entail a cost to parents.

Skills developed
- research, experimental and personal skills to carry out insightful and ethical investigations
- analytical and evaluative skills
- IT skills

Assessment

External assessment – 80%
- paper 1: multiple choice
- paper 2: data based question, short and extended response
- paper 3: short answer questions on experimental skills and techniques, short and extended response questions from one option

Internal assessment – 20%
- individual investigation

University courses and careers
Biology not only provides the springboard into “pure” natural science courses at university, but is also valuable for applied biological sciences such as medicine, pharmacy, biochemistry, veterinary science, agriculture, forestry, marine science, physiotherapy, sports physiology.

Many, but not all, university courses for biology expect another science at HL.

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

Earth, water, air and fire are often said to be the four classical elements. They have connections with Hinduism and Buddhism. The Greek philosopher Plato was the first to call these entities elements. The study of chemistry has changed dramatically from its origins in the early days of alchemists, who had as their quest the transmutation of common metals into gold. Chemistry has been hugely influential on mankind’s development throughout the ages, driving the development of many fundamental aspects of modern life, including, medicines, fuels, armaments, fertilisers, polymers and semiconductors. Despite the exciting and extraordinary development of ideas throughout the history of chemistry, certain things have remained unchanged. Observations remain essential, at the very core of chemistry, and this sometimes requires decisions about what to look for. The scientific processes carried out by the most eminent scientists in the past are the same ones followed by working chemists today and, crucially, are also accessible to students in schools. This is a course that, through practical experience and intellectual argument, enables students the opportunity to delve into the fascinating and sometimes perplexing realms of the nature of light, matter and the Universe.

Course content
Core curriculum
- quantitative chemistry
- atomic structure
- periodicity
- chemical bonding and structure
Physics

Physicists explore the Universe, with investigations ranging from the distant stars to particles smaller than atoms. As well as having to find facts by observation and experiment, they must also try and discover the laws that govern these facts. Theories are then thought up and tested to explain the laws. The reward is a better understanding of our physical world. Physics can be used to predict how satellites will orbit, when materials will break, how electricity will behave and even explain how the Universe began. Physics is used in the home, in transport, medicine, industry, energy production, meteorology, communications and electronics.

Course content

Core curriculum

- **measurement**: uncertainties and errors, vectors and scalars
- **mechanics**: motion, forces, energy, motion in a circle
- **thermal physics**: temperature, heat capacity, latent heat, gas laws
- **waves**: oscillations, reflection, refraction, interference
- **fields and forces**: electrostatics, gravitational fields, gravitational potential, orbital motion
- **electricity**: electric circuits
- **atomic and nuclear**: radioactivity, fission and fusion, quantum nature of radiation, energy levels, particle physics
- **energy production**: fossil and non-fossil power production, greenhouse effect, global warming

Options

Students study one option topics in Grade 12. The class chooses from Relativity, Engineering Physic, Imaging or Astrophysics:

- **relativity**: time dilation, length contraction, space time diagrams
- **engineering physics**: rigid bodies, thermodynamics
- **atomic and nuclear**: radioactivity, fission and fusion, quantum nature of radiation, energy levels, particle physics
- **energy production**: fossil and non-fossil power production, greenhouse effect, global warming

Skills developed

Buildings, aircraft, Formula One cars, computers and saucepans all obey the laws of Physics. It provides an understanding of how the world around us works. It can supply answers to some important questions in topics such as energy demand and the environment. It will make you more informed on issues such as nuclear power and climate change. You will also learn how to plan experiments and estimate and process uncertainties in measurement.

Assessment

External assessment – 80%
- paper 1: multiple choice – 20%
- paper 2: extended answer – 40%
- paper 3: option topics and data response – 20%

Internal assessment – 20%

The internal assessment component occupies about 10 hours of class time and comprises experimental work investigating a research question of your choice.

university courses and careers

Chemistry is essential for students who intend to pursue careers in almost any pure or applied science such as medicine, environmental sciences, biological sciences, engineering, material science and the oil and gas industry. It is also an excellent subject for students intending to do arts or humanities courses at university. The standard level course would be particularly suitable for those students who need some understanding of materials for courses such as 3D arts, geology, food, fashion and even economics and business studies.
University courses and careers

Physics is used by anyone who makes or designs. Its emphasis on logical thought develops skills useful in many business or legal careers, and is helpful to those who work with scientists and engineers. It has applications in daily life, and provides a background understanding of technology in an increasingly technological world.

Sports, Exercise and Health Science

This exciting SL course incorporates the traditional disciplines of anatomy, physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. Students cover a range of core and option topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides students with the opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyse human performance.

The internal assessment is based upon practical experimental investigations and not physical performance. This course suits students who like to apply science to sport.

Course content

Core curriculum

• anatomy
• exercise physiology
• energy systems
• movement analysis
• skill in sport
• measurement and evaluation of human performance

Options

• optimising physiological performance
• psychology in sport
• physical activity and health
• nutrition for sport and exercise

Skills developed

The aims of the course are to:

• acquire knowledge and understanding to apply scientific principles in relation to sport
• enable students to critically analyse human performance
• encourage students to question data and appreciate the value of scientific method
• promote internationalism and ethics by considering sport and health relative to the individual and global context

Assessment

External assessment – 76%

• three written papers

Internal assessment – 24%

• practical experimental investigations

University courses and careers

A dynamic approach to the science related skills of research and critical analysis will be a valuable asset for any university course and will begin to prepare students if they are considering studying sports science at university. This discipline can also effectively complement other science subjects. Careers for sports science graduates include sports science research, sport and leisure management, sports media, teaching.

Design Technology

Design Technology aims to develop internationally minded people whose enhanced understanding of design and the technological world can facilitate our shared guardianship of the planet and create a better world. This course is aimed at students who are interested in solving problems through investigation, applying knowledge and design principles to develop and manufacture optimum solutions. The design cycle is at the core of the course and students use this process in practical investigative work as well as in the theory.

Design Technology interfaces well between the sciences and the arts, owing its knowledge base to the former and its emphasis on creative flair to the latter. The creative tension between theory and practice is what characterizes design technology within the Diploma Programme experimental science. Design Technology achieves a high level of design 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. A high level of commitment and motivation is essential for success in this creative and demanding course.

Course content

SL and HL courses share the core syllabus. Core syllabus component covers the following topics:

• human factors and ergonomics
• resource management and sustainable production
• modelling
• raw Material to final product
• innovation and design
• classic design

Additional topics (HL only)

• user-centred design (UCD)
• sustainability
• innovation and markets
• commercial production

Practical work

Over the period of the course, all students (SL and HL) will work on teacher directed activities, a Design Project and Group 4 project.

Skills developed

• creative thinking and problem solving
• investigation, analysis, design, realisation and critical evaluation
• communication through the use of IT and graphical techniques
• making skills through working with materials, machinery and tools
• time management, organisation and planning

Assessment

External assessment SL

• paper 1 (1 hour) – 30%
  30 multiple choice questions on the core
• paper 2 (1 hour 30 minutes) – 30%
  - section A: one data-based question and several short answer questions on the core (all compulsory)
  - section B: one extended response question on the core (from a choice of three)
External assessment HL

- **paper 1** (1 hour) – 20%
  30 multiple choice questions on the core
- **paper 2** (1 hour 30 minutes) – 20%
  - section A: one data-based question and several short answer questions on the core (all compulsory)
  - section B: one extended response question on the core (from a choice of three)
- **paper 3** (1 hour 30 minutes) – 20%
  Short-answer and extended response questions on the additional higher level topics (all compulsory)

Internal assessment, Group 4 and Design Project – 40%

The internal assessment, Group 4 and Design Project are an integral part of the course and is compulsory for both SL and HL students. All enable students to demonstrate the application of their skills and knowledge, and to pursue their personal interests, without the time limitations and other constraints that are associated with written examinations. The internal assessment are woven into normal classroom teaching with a range of activities conducted through the course.

The first four assessment criteria (A-D) are common between SL and HL, however HL design projects have additional requirements, which are assessed using two additional criteria (E and F):
- Criterion A: Analysis of a design opportunity
- Criterion B: Conceptual design
- Criterion C: Development of a detailed design
- Criterion D: Testing and evaluation
- Criterion E: Commercial production (HL)
- Criterion F: Marketing strategies (HL)

University courses and careers

Design Technology is an excellent preparation for tertiary level courses in engineering (such as structural, mechanical, aerospace, automotive, electrical and civil) and architecture, product design, industrial design and technology.

Computer Science

Students with an interest in pursuing any kind of career with computers or in developing their analytical problem solving skills should consider Computer Science. It is a practical, yet academically rigorous subject offering students a detailed view of how computers work and how systems can be developed (programmed) to work on them. Successful computer systems result from a systematic approach to problem solving along with a sound technical understanding of how computers operate. The aim of the course is to develop both of these aspects of understanding. While learning to programme in Java is a significant element of the course, the primary purpose of this course is not to be a vocational programming course but to allow complex theoretical concepts to be explored practically and experimentally.

Course content

At both SL and HL the course includes units on:
- system fundamentals
- planning and system installation
- system design basics
- computer organisation

- networks
- computational thinking, problem-solving and programming
- object oriented programming (option D)

In addition, HL students study units on:
- abstract data structures and algorithms including: static data structures, dynamic data structures, objects, recursion and algorithm evaluation
- resource management
- control

During Grade 12 both HL and SL students undertake a significant project, using programming skills and theory studied in the course. By developing their own application in Java to solve a problem, students get a chance to demonstrate their creativity and programming skills.

Skills developed

- logical problem solving
- project management
- advanced Java programming

Assessment

**SL**

External assessment – 70%

- two papers examining theory and algorithms through diagrams, pseudocode and Java

Internal assessment – 30%

- a single piece of coursework (85%), producing and documenting a Java application with significant programming aspects, and the Group 4 project (15%)

**HL**

External assessment – 80%

- three papers examining theory, algorithms through diagrams, pseudocode and Java, and application of concepts to an pre-studied case study

Internal assessment – 20%

- a single piece of coursework (85%), producing and documenting a Java application with significant programming aspects, and the Group 4 project (15%)

University courses and careers

This course is aimed at students who are interested in pursuing careers in the computing industry and wish to study computer science, hardware engineering or software engineering courses at university. It also complements many engineering, business or management courses.
Group 5—Mathematics

Overview of Mathematics in the IBDP

There are four Mathematics courses within the IB Diploma Programme. At HL, there is Mathematics and Further Mathematics and at SL, Mathematical Studies and Mathematics. These courses are designed to meet the needs of students with differing abilities and different requirements for higher education.

In addition to honestly assessing their child’s interest and performance in Mathematics, parents are advised to consider carefully, with their child, which country, which university and which course they are contemplating so that they can determine the most appropriate IBDP course for their child. A number of countries, and some universities in certain countries, restrict entry to courses based on the level of Mathematics studied in the IBDP.

Mathematics HL

This course is for students who have already demonstrated a high degree of mathematical insight and competence. It is suitable for those who have performed well in an additional mathematics course, extremely well in CIM or extremely well at IGCSE, or have attained similar success from an equivalent background.

Although modern in approach and content, a sound ‘traditional’ background is a necessary basis; a main proviso is that the student has genuine interest and ability in the subject and is capable of meeting the demands of an extremely large workload.

It is departmental policy to restrict entry to those students who can demonstrate the above level of mathematical ability so that they have a positive experience on this most academically challenging of courses. In practice, this means that maximum attainment grades in Grades 9 and 10 are required.

Course content

Grade 11
• sequences and series
• mathematical induction
• algebraic techniques—logarithms, binomial expansions, functions and equations
• calculus of polynomial functions—fundamental theorem of calculus
• techniques of differentiation—chain, product and quotient rules
• exponential and logarithmic functions
• circular functions and trigonometry
• techniques of integration

Grade 12
• vector geometry
• complex numbers
• probability and statistics
• an option topic to be decided upon by the department

Skills developed

All mathematics courses seek to develop the following skills at the appropriate level for that course:
• manipulative algebraic skills
• facility with mathematical software and technology via the graph drawing calculator
• discrimination between methods of solution to a given problem in order to determine the most efficient
• applicability of the subject to other disciplines

Assessment

External assessment – 80%
• paper 1 (2 hours) – calculators not permitted
• paper 2 (2 hours) – graphical calculator required
• paper 3 (1 hour) – graphical calculator required

Internal assessment – 20%

Students are required to do a ‘Mathematical Exploration’. This is a written report in an area of mathematics of the student’s choosing and is assessed based on the student’s ability to communicate mathematically and to reflect on what has been done.

University courses and careers

Those courses requiring this level of mathematics include mathematics, pure sciences, medicine and engineering.

Mathematics SL

This course is designed to provide mathematical techniques and methods for those needing substantial mathematical skills in other subject areas. In order to gain success in this course a high level of mathematical ability is required as well as sustained effort and commitment. It is not an easy option.

Course content

Grade 11
The syllabus is a subset of the higher level course and comprises:
• arithmetic and geometric sequences and series
• theory of logarithms
• the linear function
• the quadratic function
• calculus of polynomials
• techniques of differentiation
• calculus of exponential and logarithmic functions

Grade 12
• applications of the integral calculus—areas, volumes, kinematics
• trigonometry, circular functions and the calculus of these
• statistics and probability
• regression and correlation
• vector geometry
• binomial expansions

Skills developed

All mathematics courses develop the following skills at the appropriate level for that course:
• manipulative algebraic skills
• facility with mathematical software and technology via the graph drawing calculator
• discrimination between methods of solution to a given problem in order to determine the most efficient
• applicability of the subject to other disciplines
Assessment

External assessment – 80%
• paper 1 (1 hour 30 minutes) – calculators not permitted
• paper 2 (1 hour 30 minutes) – graphical calculator required

Internal assessment – 20%
Students are required to do a ‘Mathematical Exploration’. This is a written report in an area of mathematics of the student’s choosing and is assessed based on the student’s ability to communicate mathematically and to reflect on what has been done.

University courses and careers
Those requiring this level of mathematics include scientific and technical disciplines. This course is suitable for those wishing to study engineering in the US. Some countries require SL Mathematics for commerce and business courses.

Mathematical Studies (SL)
This course is designed for students whose proposed university course does not lie in a field where mathematical skills and techniques are likely to be needed. It is, however, a demanding course in its own right and requires commitment and a sound level of mathematical facility from the student.

Course content

Grade 11
• arithmetic and geometric sequences and series
• introduction to the graphing calculator
• functions—notation and manipulation
• the linear function
• statistics—regression, correlation, chi squared test of independence
• set theory

Grade 12
• logic
• probability
• introductory calculus
• exponential functions
• financial mathematics

Skills developed
All mathematics courses seek to develop the following skills at the appropriate level for that course:
• manipulative algebraic skills
• facility with mathematical software and technology via the graph drawing calculator
• discrimination between methods of solution to a given problem in order to determine the most efficient
• applicability of the subject to other disciplines

Assessment

External assessment – 80%
• paper 1 (1 hour 30 minutes) – graphical calculator is required
• paper 2 (1 hour 30 minutes) – graphical calculator is required

Internal assessment – 20%
An extended project on an application of Mathematics. This is begun in Grade 11 and updated throughout the first term of the Grade 12.

University courses and careers
Mathematical Studies is for those students who do not anticipate a need for rigorous mathematics in their future studies. Information should be sought for specific courses; please note that Germany, Switzerland and Ireland may not recognise this course as part of the IB Diploma Programme for entry to their universities.

Further Mathematics (HL)
This course comprises the five option topics of HL in addition to a module on Euclidean geometry. The course is no more difficult than HL Mathematics; rather, it gives the student the greater breadth in the subject that may be advantageous in future study. It is highly rigorous, intellectually stimulating and requires a great deal of commitment on the part of the student.

It can be studied either within the diploma (as a selection from Group 6) or extra to the diploma as a seventh subject that is individually certified.

Course content
Grade 11 and 12 course content order not set at time of publication.
• discrete mathematics, comprising graph theory and number theory
• calculus
• linear algebra
• sets relations and groups
• geometry
• statistics and probability

Skills developed
All mathematics courses seek to develop the following skills at the appropriate level for that course:
• manipulative algebraic skills
• facility with mathematical software and technology via the graph drawing calculator
• discrimination between methods of solution to a given problem in order to determine the most efficient
• applicability of the subject to other disciplines

Assessment

External assessment – 100%
• paper 1 (1 hour 30 minutes) – graphical calculator is required
• paper 2 (1 hour 30 minutes) – graphical calculator is required

University courses and careers
Further Mathematics is suited to those who are interested and committed mathematicians and/or considering university courses with a substantial mathematical content. Students who intend to apply for science or engineering degrees at a prestigious university should also consider this course.
Group 6—The Arts

Dance

Dance is a vibrant and stimulating subject that integrates physical and intellectual Knowledge. The active nature of the course allows students to work intensely across a variety of different dance styles embracing traditions and world dance cultures. The written components encourage students to explore familiar and unfamiliar dance forms and understand the dynamic and changing nature of the arts. Dance experience is not necessary at standard level just an enthusiasm and commitment to Dance and a willingness to take risks.

Course content

The coursework components, performance and composition, are developed continuously through Grades 11 and 12 culminating in the final submission of portfolios in February of Grade 12.

Grade 11
• choreography
• anatomy and dance physiology
• performance skills
• contemporary
• workshops in a variety of styles including Hip Hop and Lyrical
• dance history
• dance analysis of works with cultural links
• independent dance style
• performance opportunities

Grade 12
• composition
• performance in two contrasting styles
• world dance investigation
• learning communication and leaderships skills
• dance analysis
• performance exam
• dance workshops
• theatre trips

Skills developed

Students will develop their physical, intellectual and emotional skills through participation in workshops and studying dance theories.

Dance enables candidates to develop skills, knowledge and understanding of dance as choreographer, performer and critics through:
• applying and adapting a wide range of skills and techniques effectively in performing and choreographing dance, including the ability to improve
• creating dances for a range of purpose and in response to different stimuli
• developing and ability to analyse, evaluate and appreciate dance

Candidates also appreciate the contributions of dance to their personal and social health, fitness and wellbeing and be aware of the range of opportunities and pathways available in dance.

Assessment

HL
External assessment – 60%
• composition and analysis 35% (practical and written)
• World Dance investigation 25% (written)

Internal Assessment – 40%
• performance (practical)

SL
External assessment – 60%
• composition and analysis 40% (practical and written)
• World Dance investigation 20% (written)

Internal Assessment – 40%
• performance (practical)

University courses and careers

Students who have studied this course have gone on to take courses in Dance, Theatre, Teaching, Arts Management, Marketing, Public Relations, Law, Business Studies, Languages, Occupational Therapy, Arts Therapy, Psychology, History, Communication Studies and many more.

Film

The course allows students to explore film as a powerful communication medium and an art form. The 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 filmmaking, the course explores film history, theory and language.

To achieve an international understanding within the world of film, students are taught to consider film texts, theories and ideas from different individuals, nations and cultures.

Throughout, students also learn and exercise the fundamentals of film production.

At the core 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.

Course content

Part 1 – textual analysis

Part 2 – film theory and history

Part 3 – creative process—techniques and organisation of production

From the very start, these three parts are taught concurrently so that students learn through both academic study and practical, creative filmmaking.

Grade 11
• the concept and origins of film
• the silent era
• Soviet cinema and the art of montage
• film as propaganda
the impact of sound
documentary filmmaking
Italian neorealism
French new wave
Hollywood: the studio system, ‘golden age’ and ‘new Hollywood’
Japanese ‘Golden Age’
genre studies
auteur theory
understanding of film techniques and processes
acquisition of film-making skills and implementation into productions

Grade 12
Internal and external assessment focus based on independent study:

oral presentation – detailed textual analysis of an extract from a prescribed film
independent study – a script for a documentary on a chosen aspect of film history and theory
film production – one completed film production of 4–5 minutes (SL) or 6–7 minutes (HL)

Skills developed

creative expression
media literacy, analysis and interpretation
interpersonal awareness
organisation and planning
problem solving
research
technical skills
visual and critical awareness
working to deadlines
reflection and evaluation

Assessment

independent study – 25%
documentary script on an aspect of film theory
oral presentation – 25%
detailed textual analysis of film
film production – 50%
one completed film production of 4–5 minutes (SL) or 6–7 minutes (HL) with accompanying production portfolio

University courses and careers

Film degrees are offered in leading universities around the world and lead to a wide range of careers in:

communications
professional writing and screenwriting
filmmaking and television journalism
production management
advertising and marketing
field research
sound and special effects

Music

The study of Music enables students to recognise and discuss musical elements found in a diverse range of musical genres, thus developing greater sensitivity and curiosity in the music that surrounds us. Students also develop an appreciation of the way in which music connects with other areas of knowledge.

Course content

The coursework components, performance and composition, are developed continuously through Grades 11 and 12 culminating in the final submission of portfolios in February of Grade 12.

HL only

• solo performance: vocal or instrumental (20 minutes)
• composition: three compositions to be notated and recorded

SL only

Students select one of the following:

• solo performance: vocal or instrumental (15 minutes)
• composition: two compositions to be notated and recorded
• group performance: membership of an ensemble including at least two public performances

Grade 11

• musical analysis and perception: study of a diverse range of music including; Western art music from the late renaissance to the present day and world music
• musical links investigation: 2,000 words on music from two different genres

Grade 12

• musical analysis and perception: study of two prescribed works
• musical analysis and perception: further study of a diverse range of music

Skills developed

• instrumental/vocal skills through performing in a variety of contexts
• creativity through the study of composition
• knowledge of musical styles and composition
• aural analysis skills through the study of music from diverse cultures and traditions
• an understanding of recording techniques
• ability to use music software and other music technology
• research skills and musical interests through the musical links investigation

Assessment

External assessment (HL and SL) – 50%

• listening paper – 30%
• musical investigation – 20%

Internal assessment (HL) – 50%

• solo performance – 25%
• composition – 25%

Internal assessment (SL) – 50%

One of the following:

• solo performance
• composition
• group performance
University courses and careers

An excellent foundation for further study in musicology, music performance, arts and music management, the recording industry and media. Graduating students have typically gone on to study performance, music technology or composition at conservatoire or university, or have combined music with other areas in order to follow courses in arts and music management.

Theatre

Theatre is a dynamic and stimulating course that looks at all aspects of theatre. It is essentially a practical subject in that all theory is investigated by practical engagement. This active nature of the course makes it both exciting and challenging. Theatre students soon develop a passion and an intense commitment to the course, a commitment that brings both academic rewards and a sense of achievement.

Through the course students develop their independent learning skills through research, critical thinking and analytical skills through a study of practitioners and theorists, collaboration, negotiation and confidence skills through group devising and presentations, cultural awareness empathy through study of world theatre.

Course content

Theatre in Context, Theatre Processes, Performing Theatre

Grade 11
• ancient Greek theatre
• physical comedy
• political theatre
• introduction to devising techniques
• world theatre traditions
• design
• performance skills
• world texts and traditions
• theatre production
• theatre of the oppressed

Grade 12
• collaborative project
• research presentation
• metaphysical theatre
• theatre theorists
• exploring performance from a directorial perspective – Director’s Notebook

Skills developed

During the course students:
• perform before an audience
• crew a production
• experience what the chief artists and craftsmen in the theatre do
• investigate performance theory and forms of theatre other than the Western model
• work in an ensemble
• write and direct a piece of theatre
• research world theatre traditions
• learn to communicate effectively using signs and symbols other than the spoken word

Assessment

HL
External assessment – 75%
• solo theatre – 35%
• Director’s Notebook – 20%
• research presentation – 20%

Internal assessment – 25%
• collaborative project

SL
External assessment – 65%
• Director’s Notebook – 35%
• research presentation – 30%

Internal assessment – 35%
• collaborative project

University courses and careers

Students who have taken this subject in recent years have gone on to follow courses in International Relations, Law, Psychology, Political Studies, Human Resources, Public Relations, Event Management, Business Studies, Hotel Management, English and Drama, Media and Communications Studies, History, Engineering and, of course, Performance Arts and Theatre.

Visual Arts

IB Visual Arts embraces a wide variety of expressive approaches. Students learn to investigate deeply and locate themselves within a historical/cultural context and to extend their use of materials and concepts beyond traditional boundaries. Both intellectual and emotional learning are developed through the study of Visual Art. While students are introduced to advanced processes and materials, the media they choose to use throughout the two years of the course is at their discretion. Through the investigation and experimental phases students discover the most appropriate media and approach. The course rapidly becomes very personal.

Course content

The course encompasses a wide range of activities designed to encourage students to explore and discover new possibilities in the visual arts.

Students develop ideas and themes for their studio work and refine their skills in the investigation workbook. New art processes and concepts, the use of media, and learning research techniques that yield many possibilities for studio works are the driving force for work in the investigation workbook. Gallery visits, drawings, experiments with materials and approaches, and historical and critical analysis are included. Divergent and convergent strategies are employed.

In the studio, students develop an exciting and highly personal portfolio of work in preparation for their exam/show. The portfolio of work serves a second purpose for those who choose to attend postsecondary education in the visual arts: it is their university admissions portfolio.
Skills developed

• visual literacy and observation skills
• visual research and in-depth investigation
• the ability to experiment with a range of visual solutions for communicating their intentions
• critical analysis of artwork
• to consider the social, historical, geographical and cultural influences on art

Assessment

Both the studio work and the investigation workbook are assessed frequently throughout the course so that students can track their positive progress. Starting this year, IBO has added a short comparative study component. At the end of the course the work of the student will be both externally and internally assessed for the purpose of assigning the final mark.

External assessment – 60%
Comparative study – 20%

Analyse and compare different artworks by different artists. Investigate purpose, technique and results
Investigation workbook (process portfolio) – 40%

The Investigation Workbook is a journal of art-making, engagement with different media, techniques and processes involved in making their own body of works.

The investigation workbook is where ideas are recorded and refined in preparation for the studio work. The investigation workbook is internally assessed with the following criteria, each worth 5% of the available marks:

• range of sources for inspiration including galleries, Internet, trips, other classes and popular media
• critical observation and reflection in analysing the work of others as well as your own work
• looking into the art, art styles and artists from other times and cultures
• use of specialist art vocabulary to a progressively more advanced level
• develop ideas through compositional studies, colour and value studies and the like
• media experiments with a broad range of media from traditional to more non-traditional
• practicing technical skills that will later help the studio work
• integration of the investigation workbook with studio work

Internal assessment – 40%

Studio work: an exhibition with a short written rationale

Students create a portfolio of studio works over the two years and display the more resolved artworks in a show. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication. Students reflect on changes made during the process of creation and provide a rationale for the decisions regarding the selection of certain pieces for exhibition.

The studio work is assessed according to the following criteria:

• self-direction and independent judgment while extending personal boundaries
• sensitivity to materials chosen and ability to review work as it progresses
• understanding the ideas and techniques that underpin artistic expression
• technical skill
• thoughtful development of ideas and strategies for expression
• confidence and inventiveness
• personally relevant artwork that show cultural and historical awareness

University courses and careers

The course is useful for those wishing to pursue tertiary education in the following fields: fine art, art history, arts administration, architecture, interior design, theatre design, graphic design, photography, fashion, textiles and jewellery design, ceramics and industrial design and television production. However, the course is also suitable for those who may not wish to pursue an art-related career, but would like to gain deeper appreciation and understanding of the subject as well as the ability to discover multiple solutions for any given problem.
Homework

The purposes of homework are:

1. **Review**: to consolidate, rehearse or practice work done in class. Ideally review homework is set for that night. Examples:
   - reading
   - key word lists
   - highlighting keywords in text
   - puzzles; crosswords and word searches
   - summary table/questions
   - memory/mind maps
   - categorising information
   - prioritising information

2. **Independent, creative or research tasks**: to provide students with the opportunity to be more creative, reflective and evaluative.
   Tasks should be set with at least two nights’ completion time so students can structure their homework time around their activity/rehearsal schedules. Examples:
   - notes/record of information independently researched
   - learning/memorising vocabulary, facts, script
   - reading and comprehension
   - essay
   - laboratory report
   - art masterpiece
   - creative writing
   - research homework

**Weekly homework allocation guidelines**

All students are expected to devote approximately 12 hours and 45 minutes per week to their academic studies outside class.

**Coursework/holidays and revision**

Assessed coursework and revision replaces homework rather than being set in addition to it.

Homework set during the last week of term for submission after the holiday should not be more than the normal weekly amount.

**Timing and deadlines**

All students are expected to abide by mutually agreed deadlines, unless there are genuine extenuating circumstances.

Teachers are sensitive to the demands on the students in the whole college environment and are receptive to student negotiation in advance of a deadline with regard to amount of homework set and the deadline for completion. Students involved in performances, concerts etc, can negotiate sensible extensions, but must do so before they miss a deadline.

Homework set is not required to be submitted the next day.

**Marking and assessment of homework**

All significant homework tasks should receive feedback in order to motivate and guide students.

Students are made aware of the assessment criteria to be applied to the assignment, and assessed work with feedback is returned in a reasonable time to have allowed assessment of the work of the whole class.

Reports and assessments

The IBDP and Courses programmes are two year courses culminating in external examinations. Students receive three assessments and one written report over the course of each year.

Assessments are broken into two components: attainment and effort indicator. The attainment grades are reflective of progress made by the students while the effort indicators reflect the level of student engagement.

**Attainment indicators**

7: Excellent attainment
6: Very good attainment
5: Good attainment
4: Satisfactory attainment
3: Attainment needs to improve
2: Low attainment, performance is a serious cause for concern
1: No measurable attainment. Urgent action is needed
RJ: The student has only recently joined this class and it is too early to give an assessment

**Effort indicators**

- Maximum effort: exceptional
- Very good effort: above expected
- Good effort: expected
- Inconsistent effort: Inconsistent or below expected, improvement is needed
- Poor effort: serious cause for concern

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- Maximum effort: exceptional
- Very good effort: above expected
- Good effort: expected
- Inconsistent effort: Inconsistent or below expected, improvement is needed
- Poor effort: serious cause for concern
Academic structure

High School
Principal
Vice Principal–Curriculum
Vice Principal–Pastoral
IB Coordinator

Danny O’Connor
Pippa Haley
Gary Seston
Mike Millichamp
<table>
<thead>
<tr>
<th>IB Subject Groups</th>
<th>Department</th>
<th>Head of Department</th>
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<tr>
<td>1 and 2: Languages</td>
<td>English</td>
<td>David White</td>
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<td>English as an Additional Language</td>
<td>Andrew Denney</td>
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<td>French</td>
<td>Michele Pirson</td>
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<td>German</td>
<td>Rahel Probst</td>
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<td>Spanish</td>
<td>Vicky Berman</td>
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<td>Dutch</td>
<td>Hans Schellekens</td>
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<td>Chinese</td>
<td>Chen Draper</td>
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<td></td>
<td>Japanese</td>
<td>Fukiko Ishikawa (teacher)</td>
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<td>Korean</td>
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<td>Hindi</td>
<td>Anu Ruhil (teacher)</td>
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<td>School Supported Self-Taught Languages</td>
<td>Kevin Morley</td>
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<td>3: Individuals and Society</td>
<td>Economics</td>
<td>Steve Vorster</td>
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<td>Environmental Systems and Society</td>
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<td>Science, Technology and Society</td>
<td>Ronald Gillies</td>
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<td>Information Technology in a Global Society</td>
<td>Pippa Haley (site-based Coordinator)</td>
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<td>4: Sciences</td>
<td>Biology</td>
<td>Elaine Teale</td>
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<td>Chemistry</td>
<td>Rachel Ingram</td>
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<td>Andy Cockburn</td>
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<td>Design Technology</td>
<td>Carl Waugh</td>
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<td>Sports, Exercise and Health Science</td>
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<td>Computer Science</td>
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<td>5: Mathematics</td>
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<td>Christine Chaboyer</td>
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<td>6: The Arts</td>
<td>Dance</td>
<td>Lucia Cordani (teacher)</td>
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<td>Lynne Arrol</td>
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<td>Visual Art</td>
<td>John Widder</td>
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**IB Core Elements**

- Theory of Knowledge (ToK)
- Extended Essay
- Creativity, Action and Service (CAS)
- Learning Support Coordinator

Contact information for staff can be found in the Staff Directory on the College website.