



# IB Diploma Hand book

A Guide to the International Baccalaureate  
Diploma Programme

2020 — 2022

## Dear Incoming UWCEA Diploma Programme Student,

This booklet describes the program options available as an incoming student to the International Baccalaureate (IB) Diploma Programme at UWCEA.

Option 1 is to undertake the IB Diploma Programme (DP).

Option 2 is to take a series of DP courses and attain the UWCEA Diploma.

It is important that you make an informed decision regarding which option to take.

The IB Diploma Programme is known and respected world-wide as a passport to higher education. On the homepage of the IB website it describes the Diploma Programme (DP or simply 'Diploma') as **“preparing students for success in higher education and life in a global society.”** (<https://www.ibo.org/programmes/diploma-programme/>) In the eyes of many of its advocates, the IB DP is the **gold standard** of university preparatory educational programmes. 2,926 secondary schools worldwide offer this credential and 3,300 universities in 143 countries recognize it. There are over 150,000 IB Diploma students from 211 different nationalities. In addition, there are over 8,000 trained IB examiners who assess student work and help to maintain the consistency in internal grading which has become a trademark of the IB Diploma system. Since 1970 the IB has offered the DP, UWCEA offering it on the Moshi since 1973 and thus becoming the first school in Africa to do so (and one of the first in the world). In May 2016, Arusha was pleased to have its first graduating class of its new IB Diploma Program. One recent IB DP statistical bulletin highlights how the number of IB DP schools has grown by nearly 40% since 2012 and the number of students has also increased dramatically thanks to the outstanding global education it provides. ([shorturl.at/jqBCE](http://shorturl.at/jqBCE))

However, the IB Diploma is more than an outstanding academic qualification. Through its various components students develop the knowledge, critical thinking skills and confidence that not only prepares them for university, but also serves to mould their character. In this regard, it is an invaluable qualification in its own right. But, like most worthwhile things, the IB Diploma is not easily achieved. It is a demanding and rigorous programme of study.

Until now, your academic programme has been largely chosen for you; this may be the first time where the decision rests on your shoulders. It is important that you realistically assess your abilities and work ethic, along with your future educational objectives, so that the choice you make is one you can commit to for the next two years as a DP student. Do not hesitate to contact us with questions about the plan that may be best for you.

We look forward to supporting you at UWCEA as a DP student. Feel free to contact us with any questions or concerns.

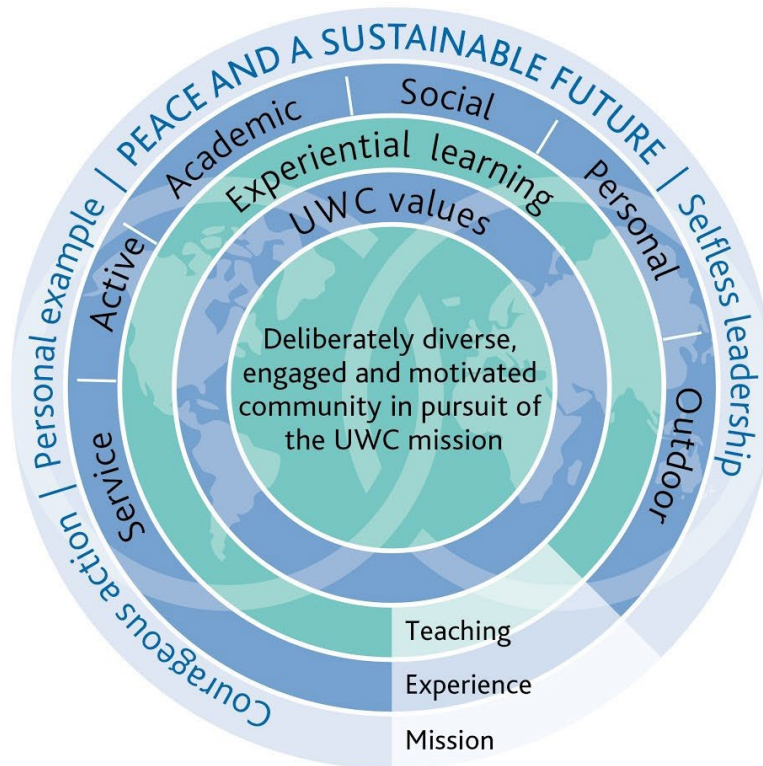
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## UWC East Africa Guiding Statements



### UWC Mission

UWC makes education a force to unite people, nations and cultures for peace and a sustainable future

### UWC Values

International and intercultural understanding | The celebration of difference  
Personal responsibility and integrity | Mutual responsibility and respect  
Compassion and service | Respect for the environment  
A sense of idealism | Personal challenge | Action and personal example

## ***UWC Common Code of Conduct***

# UWC Common Code of Conduct

Pursuing the UWC mission — to make education a force to unite people, nations, and cultures for peace and a sustainable future — requires a commitment to the following values: international and intercultural understanding, celebration of difference, personal responsibility and integrity, mutual responsibility and respect, compassion and service, respect for the environment, a sense of idealism, personal challenge, action and personal example.

At the heart of the UWC ethos is respect for others in all our actions and words. This means that we must think about the common good and be able to rise above our individual desires and needs. In short, our ideals require good heartedness from all members of the UWC community and a recognition that cultural norms are diverse.

The common code of conduct is required to make expectations clear. Students who accept a position at a UWC school or college commit to the pursuit of a healthy lifestyle, one that avoids potential harm to self and to others.

The following are not tolerated:

- illicit drugs
- Tobacco
- Alcohol on school property and school sponsored activities
- Sexual activity in any public area, including student rooms
- Hazing, bullying or harassment
- Assault
- Stealing or 'borrowing without permission'

Additionally, each college will have clear expectations regarding:

- Attendance (at all classes and activities)
- Academic integrity
- Respect for curfew and/or quiet time
- Alcohol 'off-campus'

Individual UWC schools and colleges may have additional standards on these issues that reflect the laws and cultural norms of the country in which they are located. The expectation is that the UWC Common Code of Conduct will be followed both in action and in spirit. Those who breach the code will lose the right to remain in their UWC school or college.



## The IB Diploma Programme at a Glance



The IB Diploma is an academically demanding and balanced programme of education that helps students get ready for success at university and life beyond. The above model provides a visual depiction of the DP's various components which make it such an exceptional holistic programme and these include:

1. At the centre is the *IB Learner Profile* which are the attributes the IB expects to see grow and develop in the life of the student (<https://www.ibo.org/benefits/learner-profile/>)
2. Approaches to teaching and learning are included in the second circle demonstrating the DP's commitment to particular pedagogical approaches to teaching and to developing particular skills for learning.
3. The IB Diploma is a holistic programme and this is reflected in the third circle. All Diploma students complete three core requirements: Creativity, Activity & Service, Theory of Knowledge and the Extended Essay. These are briefly described after this section.

4. As the diagram's fourth and widest circle shows, DP students study six subjects — one from each subject group. To attain a Diploma at the conclusion of the 2-year programme of study, three courses must be taken at Higher Level and three at Standard Level. These distribution requirements ensure that the science-oriented student is challenged to learn a foreign language and that the natural linguist becomes familiar with laboratory procedures. While overall balance is maintained, flexibility in selecting an extra subject from one subject group allows the students to pursue areas of personal interest and to meet special requirements for university entrance.
5. With “international-mindedness”, the outer circle gives the required emphasis to how all DP teaching and learning should take place within a spirit of tolerance and healthy openness as students grow as global citizens.

### **Creativity, Activity and Service (CAS)**

**CAS** is an important part of the holistic nature of the IB diploma it involves students in experiences that encompass creativity, activity and service.

**Creativity** encourages students to create an “original or interpretative product or performance”. **Activity** seeks to develop a healthy lifestyle through physical activity. **Service** is about “Collaborative and reciprocal engagement with the community in response to an authentic need”. Moreover, students are involved in at least one CAS project, this is a collaborative and longer term covering at least one of the strands.

### ***Theory of Knowledge (ToK)***

Students examine and reflect on the nature of knowledge in this interdisciplinary course. This course develops a coherent approach to learning that unifies the academic disciplines. In this course on critical thinking, students inquire into the nature of knowing and deepen their understanding of knowledge construction. At the heart of TOK's content is the question ‘How do we know that something is true, or an assertion is well grounded?’ Other questions explored in the course are the following: What counts as knowledge? How does it grow? What are its limits? Who owns knowledge? How do different disciplines justify knowledge?

### ***Extended Essay (EE)***

Students investigate a self-generated research question by undertaking independent research in one of their DP subject areas, culminating in a 4,000-word academic and fully referenced paper that follows the IB guidelines for Academic Integrity. This project offers the opportunity to investigate a topic of special interest and acquaints the student with the kind of independent research and writing skills expected at university.

## **The IB Diploma incorporates varied assessment practices**

Subject Guides identify goals, objectives and assessment criteria for each subject. Ongoing assessment tasks, such as written exams and oral presentations, are designed to support and encourage optimum teaching and learning. At the end of the second year of the DP, students sit written exams in most subject areas. There are no written exams in Visual Arts or Theatre. To help prepare students for these written exams, teachers use a variety of tools such as ensuring students practice on questions from previous years' exams.

Assessment tasks in the DP measure skills such as analysing and presenting information, evaluating and constructing arguments and solving problems creatively. Basic skills are also assessed, including the retention of knowledge and the understanding of key concepts. It is important to emphasize that in promoting academic skills, DP assessment promotes intercultural skills and an international outlook.

### **Internal versus External Assessment**

DP assessment is not only exam-based, each subject has a coursework component referred to as the Internal Assessment. The Internal Assessment is graded or marked by the class teacher and then a sample is submitted to an external IB-appointed examiner. If necessary, the marks will be adjusted to reflect the international marking standard. This process is known as moderation. Internal Assessment can account for 20-60% of the final DP mark, depending on the subject.

External Assessment includes the May examinations along with coursework in a few subjects. The IB appoints external examiners who mark these. Their marking is also subjected to moderation and this is part of the reason why IB results carry worldwide recognition.

### **Diploma Results**

Diploma courses are graded using the IB scale of 1-7, with 7 being the highest. Diploma candidates take six classes, with the potential to earn 42 points. In addition three points may be awarded based on the combined assessment of the Extended Essay and Theory of Knowledge, giving an overall maximum of 45 points.

A Diploma is normally awarded if a student satisfies the Core requirements and earns 24 points. They must earn a minimum of 12 points in their combined higher-level subjects, with no mark falling below a 2. There are no more than two grade 2s awarded and there are no more than three grade 3s or below awarded. Students must also gain a minimum of 9 points in the standard level courses. Please see the publication "Diploma Programme Regulations" on the IB website for the complete details regarding the award of the Diploma.

Results are published annually on 6 July and are available to candidates on-line via an individualized access code. Universities require that the official results be sent directly to them from the IB offices in Geneva. The original hard copies of IB Diplomas and Certificates are mailed to UWCEA in early September where they are available for collection or can be sent to students if required.



# DP List of Courses and Requirements for 2020-2022

## UWCEA Arusha

### Diploma Courses

GROUP 1	Studies in Language and Literature	English Literature SL/HL, English Language and Literature SL/HL, Swahili Literature SL/HL, Self-Taught Mother Tongue Language A SL
GROUP 2	Language Acquisition	English B SL/HL, French B SL/HL, Swahili B SL/HL, Dutch B SL/HL, Swahili <i>ab initio</i> SL only, French <i>ab initio</i> SL only, (B = intermediate; <i>ab initio</i> = beginner)
GROUP 3	Individuals & Societies	Geography SL/HL, History SL/HL, Economics SL/HL Environmental Systems and Societies (ESS)* SL only
GROUP 4	Sciences	Biology SL/HL, Chemistry SL/HL, Physics SL/HL, Environmental Systems and Societies (ESS)* SL only
GROUP 5	Mathematics	Mathematics: Analysis and Approaches HL/SL Mathematics: Applications and Interpretation HL/SL
GROUP 6	Arts & Electives	Visual Arts SL/HL, Music SL/HL or a course from group 1, 2, 3 or 4 (some combinations may not be possible due to timetabling)

\*As an inter-disciplinary course, Environmental Systems & Societies SL can fulfil the requirements of either a Group 3 or Group 4 course.

### Core Requirements

Creativity, Activity and Service  
Theory of Knowledge  
Extended Essay

### Additional Features

Life Skills  
Diploma Success Skills

### Notes:

1. All Group 1-6 courses listed above are two years in length.
2. In determining which courses to take at standard and which at higher, we strongly recommend that students have achieved a grade of 5 or above in the MYP precursor to their HL subjects.
3. Successful completion of CAS and Life Skills are required for graduation and must be undertaken by all students.
4. Any *ab initio* (beginner) course is solely for **beginners** in this language and students are not eligible if they have studied the language 3 or more years out of the last 5 years or within the last two years.
5. Dutch language courses are financed by supplementary parental payments.
6. Pamoja online courses are available, but the Pamoja fees are additional to the tuition fees.

## DP List of Courses and Requirements for 2020-2022

### UWCEA Moshi

#### Diploma Courses

GROUP 1	Studies in Language and Literature	English Literature HL/SL; English Language & Literature SL/HL; Swahili Literature HL/SL; Self-Taught Mother Tongue Language A SL
GROUP 2	Language Acquisition	English B HL/SL; French B HL/SL; Swahili B HL/SL; Swahili <i>ab initio</i> SL; Spanish <i>ab initio</i> SL; on-line Language Acquisition courses through Pamoja Education (B = intermediate; <i>ab initio</i> = beginner)
GROUP 3	Individuals & Societies	Economics HL/SL; Environmental Systems & Societies SL*; Geography HL/SL; History HL/SL, Business Management HL/SL or on-line courses via Pamoja Education
GROUP 4	Sciences	Biology HL/SL; Chemistry HL/SL; Environmental Systems & Societies SL*; Physics HL/SL
GROUP 5	Mathematics	Mathematics: Analysis and Approaches HL/SL Mathematics: Applications and Interpretation HL/SL
GROUP 6	Arts & Electives	Music HL/SL, Theatre HL/SL Visual Arts HL/SL; or a course from group 1, 2, 3 or 4

*\*As an inter-disciplinary course, Environmental Systems & Societies SL can fulfil the requirements of either a Group 3 or Group 4 course.*

#### Core Requirements

Creativity, Activity and Service  
Theory of Knowledge  
Extended Essay

#### Additional Features

Life Skills  
Diploma Success Skills

#### Notes:

1. All Group 1-6 courses listed above are two years in length;
2. In determining which courses to take at standard and which at higher, we strongly recommend that students have achieved a grade of 5 or above in the MYP precursor to their HL subjects.
3. Successful completion of CAS and Life Skills are required for graduation and must be undertaken by all students.
4. Any *ab initio* (beginner) course is solely for **beginners** in this language and students are not eligible if they have studied the language 3 or more years out of the last 5 years or within the last two years.
5. Dutch language courses are financed by supplementary parental payments.
6. Pamoja online courses are available, but the Pamoja fees are additional to the tuition fees.

## **Diploma versus Course status**

You need to choose a programme that you will find interesting and rewarding to study over two years. You need recognized qualifications that give you flexibility and choice for the next stage of your life.

Rather than meeting all the requirements for the IB Diploma, students may elect to study a number of IB Diploma subjects at Higher or Standard Level to gain individual IB course credits. They do the full coursework and examinations in these subjects but are exempted from Theory of Knowledge and the Extended Essay. Many Course students excel because the workload and subject areas are tailored to their interests and capabilities. Good course student scores will gain you entry into many universities. Competitive European universities will usually require the IB Diploma for entrance, but many higher education courses will also be available in Europe to candidates holding good Course results.

Course programs must be designed to meet graduation requirements at a minimum.

Students selected by National Committees are required to follow the Diploma Program

### **DP Subject choices**

Diploma courses are all 2-year courses, so it is important that you think through your choices. You can talk to teachers, current students, your parents and the Diploma Programme Coordinator, but remember the final decision must be yours. Ideally, your Higher-level subjects should be those for which you have a high level of competence and interest; your current teacher will make recommendations regarding academic competence. You should review the course descriptions in this handbook carefully, watch the videos on the website and consult the timetable categories to determine which courses may conflict with one another. Since universities often have specific course requirements for certain majors, you should consider your future goals as you plan your programme. Finally, this may be your last opportunity to take courses in certain subject areas, like the arts, and we encourage you to branch out and explore all the academic courses on offer.

## Timetable Categories for 2020-2022 **UWCEA Arusha**

Category A	Category B	Category C	Category D	Category E	Category F
English A Literature HL or SL	English B HL or SL	Geography HL or SL	Physics HL or SL	Mathematics: Analysis and Approaches HL or SL	Visual Arts HL or SL
English A Language and Literature HL or SL	French B HL or SL	Chemistry HL or SL (group 4)	Biology HL or SL	Mathematics: Applications and Interpretations HL or SL	Music HL or SL
Swahili A Literature HL or SL	Swahili B HL or SL	Economics HL or SL	ESS SL		History HL or SL (Group 3)
School Supported Self-Taught SL	Swahili Ab initio, SL				Economics HL or SL (Group 3)
	French Ab initio, SL				
	Dutch B HL or SL				

*HL: Higher Level course offered*  
*SL: Standard Level course offered*

### **Notes:**

1. Courses in the same timetable category (A - F) will be taught at the same time and therefore cannot be taken together as part of a Diploma programme.
2. Online courses are listed and although they are not timetabled, they are part of the curriculum. Students work during tuition hours on the on-line course individually. Each week online students will study during tuition hours for not less than four and a half hours and this equates to the number of hours of lessons for other DP subject courses.
3. Dutch courses are financed by additional parental contributions and subject to availability.

## Timetable Categories for 2020-2022 **UWCEA Moshi**

Category A	Category B	Category C	Category D	Category E	Category F
English A Literature HL or SL	Swahili A Literature HL or SL	Geography HL or SL	Physics HL or SL	Mathematics: Analysis and Approaches HL or SL	Visual Arts HL or SL
English A Language & Literature HL or SL	School Supported Self-Taught A SL	History HL or SL	Biology HL or SL	Mathematics: Applications and Interpretations HL or SL	Theatre HL or SL
English B HL or SL	French B HL or SL	Economics HL or SL	Chemistry HL or SL		Business Management HL or SL (Group 3)
	Swahili B HL or SL	Business Management HL or SL	ESS SL		Chemistry HL or SL (Group 4)
	Swahili Ab initio, SL	Music HL or SL (Group 6)			Biology HL or SL (Group 4)
	Spanish Ab initio, SL				
	Dutch B HL or SL				

*HL: Higher Level course offered*  
*SL: Standard Level course offered*

### **Notes:**

1. Courses in the same timetable category (A - F) will be taught at the same time and therefore cannot be taken together as part of a Diploma programme.
2. Online courses are listed and although they are not timetabled, they are part of the curriculum. Students work during tuition hours on the on-line course individually. Each week online students will study during tuition hours for not less than four and a half hours and this equates to the number of hours of lessons for other DP subject courses.
3. Dutch courses are financed by additional parental contributions and subject to availability.

## ***UWCEA DIPLOMA COURSES BY SUBJECT GROUP***

### **GROUP 1: STUDIES IN LANGUAGE AND LITERATURE**

Each student who wishes to follow the IB Diploma must take two language courses. In most cases, this involves one from Group 1 (usually their best language) and one from Group 2 (a language acquisition course) but students who take two subjects from group 1 will be awarded a Bilingual Diploma.

Group 1 courses are designed to support future academic study by developing high levels of language competence and communication skills as well as social, aesthetic and cultural literacy. Literature plays a central role in the courses, which aim to support lifelong learning through engaging students as actively as possible with the texts they study. Each course highlights a different perspective in the study of texts.

Group 1 courses are suitable for students who have experience of using the language in an academic context. This is not a course with emphasis on grammar, syntax and other basic competencies in that language.

In Group 1 Language A: Literature courses have a focus towards developing an understanding of the techniques involved in literary criticism in context and promoting the ability to form independent literary judgments.

Language A Literature courses will be offered in English, Swahili and Self-taught Mother Tongue.

## **GROUP 2: LANGUAGE ACQUISITION (B and ab initio)**

Group 2 courses exist to provide students with the opportunity to acquire or develop an additional language (or languages) and to promote an understanding of other cultures through the study of language. Please find below an outline of the Group 2 Language courses.

### **LANGUAGE B (Higher & Standard levels)**

#### Course description

Language B SL and HL are language acquisition courses for students with some background in the target language. While learning this additional language, students also explore the culture(s) connected to it. Standard and higher levels are differentiated by the recommended teaching hours, the depth of syllabus coverage, the study of literature at HL, the level of difficulty and the demands of assessment and the assessment criteria.

The range of purposes and situations for which and in which the language is used in the language B courses extends well beyond those at ab initio. Language B will be offered in English, French, Dutch and Swahili.

#### ENGLISH B, FRENCH B, SWAHILI B, and DUTCH B (Higher and Standard levels)

The English, French, Swahili and Dutch B programmes are offered at both Higher Level (HL) and Standard level (SL). They are most appropriate for those students who wish to continue studying French/Swahili/English/Dutch as a second or foreign language, after having previously studied the language for at least two years.

Note: A native speaker of a language cannot take it as a language B, even at HL, unless they have never studied it in school

### **LANGUAGE *ab initio* [beginner] (Standard level)**

#### Course description

The language ab initio (beginner) course is a language acquisition course for students with little or no experience of the language. Students are not eligible if they have studied the language 3 or more years out of the last 5 years or within the last two years

Each theme has a list of topics that provide the students with opportunities to practice and explore the language as well as to develop intercultural competence. The students develop a greater awareness of cultures through language learning. Through the development of receptive, productive and interactive skills, students acquire the ability to respond and interact appropriately in a defined range of everyday situations. Each ab initio language has a language-specific syllabus that is used in conjunction with the IB guide.

Ab initio courses will be offered in Swahili, Spanish and French.

## **GROUP 3: INDIVIDUALS & SOCIETIES**

Living through a time of dramatic technological change it is crucial to recognise that people have both inspired these changes and have to live with them. At UWCEA we have available courses in Economics, Geography, History and Business and Management.

Students with a strong interest in the Humanities can include two group 3 subjects in their IB Diploma programme, using one to meet the group 6 elective requirement.

### **GEOGRAPHY (Higher & Standard Levels)**

Geography is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. It also investigates the way that people adapt and respond to change and evaluates management strategies associated with such change. Geography describes and helps to explain the similarities and differences between spaces and places. These may be defined on a variety of scales and from a range of perspectives. Within Individuals and Societies (group 3) subjects, geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The Diploma Programme geography course integrates both physical and human geography and ensures that students acquire elements of both scientific and socio - economic methodologies.

Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints and ideas.

### **HISTORY (Higher & Standard Levels)**

The IB Diploma Programme (DP) history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past.

### **ECONOMICS (Higher & Standard Levels)**

One of the most inviting factors about studying Economics is that the educators hold strong views about what they teach; however, they do not all hold the same view. This tenet runs deep in the history of economics as well, where waves of different ideologies have come to light and have shaped the policies of governments around the world. Many of these ideologies have been met with criticism. For example, the arguments and protests witnessed worldwide concerning opening countries to business amidst the Coronavirus pandemic stem from different views on both the governance of the macro economy, and the behaviours of individuals and firms in the market. As another example, the patenting of human lifeforms is an economic issue as much as it is a scientific one, as it gives firms immense market power that can sometimes be abused. Therefore, the course examines arguments made by both the critics and the proponents of the theory presented in the syllabus.



Students should take this course if they are interested in the human condition and the theories Economists use to make sense of the world. You must be able to engage yourself in abstract thought. IB Economics provides a good foundation for the following courses: History, Political Science, International Relations, Sociology, Philosophy, Geography and Business.

### **BUSINESS & MANAGEMENT (Higher & Standard Level)**

The Business Management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyse, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the socio-cultural and economic contexts in which those organizations operate.

The course covers the key characteristics of business organization and environment and the business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course. Through the exploration of the six underpinning concepts (change, culture, ethics, globalization, innovation and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. The conceptual learning is firmly anchored in business management theories, tools and techniques and placed in the context of real-world examples and case studies.

## **GROUP 4: SCIENCES**

A common curriculum model applies to Biology, Chemistry and Physics. This consists of subject specific core material to be covered by both Higher and Standard students, additional Higher-level material, and option topics for both Higher and Standard level. Environmental Systems and Societies is a Standard-level curriculum only. In addition, all students are required to spend 20% of the teaching time following a scheme of practical/investigative work. All students carry out an individual investigation, their IA, which counts towards their final grade. The Group 4 project is carried out jointly by students studying Biology, Chemistry or Physics in order to apply science skills collaboratively across the disciplines to investigate real life issues.

Students with a strong interest in Science can include two group four subjects in their IB Diploma programme meeting the group 6 elective requirement.

### **BIOLOGY (Higher & Standard Levels)**

The content and level of the programme is set to provide a sound preparation for college or university. It is therefore suitable for students planning to study courses requiring a biological qualification e.g. Biochemistry, Dentistry, Medicine, Agriculture or Pharmacy. Students wishing to study Higher-level Biology need a good background in Biology and Chemistry. If they plan to pursue the subject beyond IB Diploma, they are also advised to study IB Diploma Chemistry at least at Standard level. Fieldwork is an important part of the course and will be undertaken at various levels.

#### Course objectives:

The underlying basic concepts in Biology are the relationship between structure and function, adaptations and interdependence, dynamic equilibrium and evolution. These themes run throughout the course at core, additional higher level and options. It is hoped that students will acquire a limited body of facts, and at the same time develop a broad, general understanding and appreciation of the underlying biological concepts

### **CHEMISTRY (Higher & Standard Levels)**

The Science of Chemistry is studied as a preparation for many different occupations. It is essential for those who wish to study Medicine, Pharmacy, Biochemistry, Molecular Biology or Chemical Engineering, and is important as a link subject, studied often in combination with Physics or with Biology.

#### Course Objectives

The primary goal of the Chemistry course is to provide a solid foundation in the basic concepts and facts of chemistry, particularly those needed by future scientists and engineers. It gives students an appreciation of the importance of chemistry to society in general and to daily life in particular. Because of the logical nature of chemistry, the course will also develop skills in analytical thinking and problem solving. When both the experimental and logical nature of chemistry are seen together in lecture and laboratory settings our students better appreciate how scientists work, how observations are used to formulate theories and how theories are used to suggest additional experiments. Our students who perform well are those who have developed logical skills combined with good recall, methodical working and the ability to apply principles learned to new situations.

Chemists know that the tools of logic and reason lead directly not to fact, but to theory, and that any good theory must still face such questions as, 'Is the theory right or wrong?' The appreciation of these distinctions, together with reasoning skills, has significance far beyond the chemistry classroom or laboratory. This links Chemistry to the Theory of Knowledge aspects of the IB Diploma.

### **PHYSICS (Higher & Standard Levels)**

Physics does involve calculation, but it is not considered a branch of Mathematics. Competence with algebra and an ability to think in a logical way will help see you through. It is very important to realise that standard level Physics is not in any sense easier than higher level. It contains fewer topics and is allocated fewer timetabled lessons, but the topics that it covers are tested to exactly the same level of difficulty as the higher physics paper. As the DP Physics guide articulates, "Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles — currently accepted as quarks, which may be truly fundamental — to the vast distances between galaxies."

#### Course objectives

The IB Diploma physics course aims to provide students with a solid understanding of the 'classical Physics' concepts and ideas that permeate both traditional "Newtonian" mechanics and the more modern "Quantum Mechanical" view of the subject. The course aims to develop the understanding of physics relevant to modern science and technology. Conceptual skills and problem solving skills will be developed in parallel. The course aims to introduce the main ideas in an interesting and practical fashion. Emphasis is placed on the use of IT in data collection. Through hands-on experience, and the study of theories, models and laws, students gain a close insight into the world around them. From Newton to Einstein, from quarks to galaxies, Physics takes you on a voyage of discovery and understanding. As the DP Physics guide states, "The Diploma Programme physics course allows students to develop traditional practical skills and techniques and increase their abilities in the use of mathematics, which is the language of physics. It also allows students to develop interpersonal and digital communication skills which are essential in modern scientific endeavour and are important life-enhancing, transferable skills in their own right."

### **ENVIRONMENTAL SYSTEMS & SOCIETIES (Standard Level)**

This course is designed to combine the methodology, techniques and knowledge associated with group 4 (sciences) with those associated with group 3 (individuals and societies). As an interdisciplinary course, students can study ESS and have it count as either a group 3 or a group 4 subject, or as both. If students choose the latter option, this leaves the opportunity to study an additional subject from any other group, including an additional group 3 or group 4 subject.

#### Course objectives

The aims of the ESS course are to enable students to:

1. acquire the knowledge and understandings of environmental systems at a variety of scales
2. apply the knowledge, methodologies and skills to analyse environmental systems and issues at a variety of scales
3. appreciate the dynamic interconnectedness between environmental systems and societies

4. value the combination of personal, local and global perspectives in making informed decisions and taking responsible actions on environmental issues
5. be critically aware that resources are finite, and that these could be inequitably distributed and exploited, and that management of these inequities is the key to sustainability
6. develop awareness of the diversity of environmental value systems
7. develop critical awareness that environmental problems are caused and solved by decisions made by individuals and societies that are based on different areas of knowledge
8. engage with the controversies that surround a variety of environmental issues
9. create innovative solutions to environmental issues by engaging actively in local and global contexts

## GROUP 5: MATHEMATICS

All students graduating from UWCEA at diploma level will need to study one of the mathematics courses on offer. The two courses are Mathematics: Analysis and Approaches and Mathematics: Applications and Interpretation.

### Course Objectives

As a DP mathematics student, you will be expected to demonstrate the following:

- Knowledge and understanding: Recall, select and use your knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.
- Problem solving: Recall, select and use your knowledge of mathematical skills, results and models in both abstract and real-world contexts to solve problems.
- Communication and interpretation: Transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation; use appropriate notation and terminology.
- Technology: Use technology accurately, appropriately and efficiently both to explore new ideas and to solve problems.
- Reasoning: Construct mathematical arguments through use of precise statements, logical deduction and inference and by the manipulation of mathematical expressions.
- Inquiry approaches: Investigate unfamiliar situations, both abstract and from the real world, involving organizing and analysing information, making conjectures, drawing conclusions, and testing their validity.

Diploma mathematics courses all require the use of a graphic display calculator. We recommend the TI-84 Plus from Texas Instruments. These are available to purchase from the school, but may be cheaper elsewhere. Instruction will be given in class using the TI-84 Plus.

### Course Selection

The DP mathematics courses are designed for different types of students: those who wish to study mathematics as a subject in its own right or to pursue their interest in areas related to mathematics, and those who wish to gain understanding and competence in how mathematics relates to the real world and to other subjects. There are many elements common to both courses although the approaches may be different. Great care should be taken to select the course and level that is most appropriate for you.

In making your course selection, you should take into account the following factors:

- your own abilities in mathematics and the type of mathematics in which you can be successful;
- your own interest in mathematics and those particular areas of the subject that may hold the most interest for you;
- your other choices of subjects with the framework of the DP;
- your academic plans, in particular subjects you wish to study in the future;
- your future choice of career.

As a general rule if you are going down the Human Science, Engineering or Mathematics route consider Analysis and Approaches. If you are going for Social Sciences then consider Applications and Interpretations. If you are considering Economics then it varies according to university. Look at [this document](#) for more information from universities. However, your ability

should drive your choice of both career and Mathematics course.

### **MATHEMATICS: ANALYSIS AND APPROACHES (Higher & Standard Levels)**

Mathematics: Analysis and Approaches is for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. You will also be fascinated by exploring real and abstract applications of these ideas, with and without technology. This course is for students who enjoy the thrill of mathematical problem solving and generalization.

This course recognizes the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a pre-university mathematics course such as functions, trigonometry, and calculus, as well as topics that are amenable to investigation, conjecture and proof such as the study of sequences and proof by induction. This course allows the use of technology, as fluency in relevant mathematical software and hand-held technology is important regardless of choice of course. However, there is a strong emphasis on the ability to construct, communicate and justify correct mathematical arguments.

### **MATHEMATICS: APPLICATIONS AND INTERPRETATION (Higher & Standard Levels)**

Mathematics: Applications and Interpretation is for students who are interested in developing their mathematics for describing our world and solving practical problems. You will also be interested in harnessing the power of technology alongside exploring mathematical models. This course is for students who enjoy mathematics best when seen in practical contexts.

This course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. This course makes extensive use of technology to allow students to explore and construct mathematical models. It develops mathematical thinking, often in the context of a practical problem and using technology to justify conjectures.

From the DP math Course Guides

## GROUP 6: ARTS

As their group six subject, IB Diploma students may choose to study Visual Arts, Music or one additional subject from Groups 1 or 2 (Languages), Group 3 (Individual and Societies) or from Group 4 (Experimental Sciences).

### **VISUAL ARTS (Higher & Standard Levels)**

The Visual Arts are an integral part of everyday life, permeating all levels of human creativity, expression, communication and understanding. They range from traditional forms embedded in culture, to the varied and divergent practices associated with emerging conceptual forms of visual language. They may have socio-political impact as well as ritual, spiritual, decorative or functional value; they can be uplifting, persuasive and subversive in some instances. enlightening and uplifting in others. We celebrate the Visual Arts not only in the way we create images and objects, but also in the way we appreciate, enjoy, respect and respond to the art-making practices of others. Theories and practices in Visual Arts are dynamic and connect many areas of knowledge and human experience through individual and collaborative exploration, creative production and critical interpretation.

#### Course Objectives

Having followed the visual arts course, students are expected to:

1. Demonstrate knowledge and understanding of specified content
  - Identify various contexts in which the visual arts can be created and presented
  - Describe artwork from differing contexts, and identify the ideas, conventions and techniques employed by the art-makers
  - Recognize the skills, techniques, media, forms and processes associated with the visual arts
  - Present work, using appropriate visual arts language, as appropriate to intentions
2. Demonstrate application and analysis of knowledge and understanding
  - Express concepts, ideas and meaning through visual communication
  - Analyse artworks from a variety of different contexts
  - Apply knowledge and understanding of skills, techniques, media, forms and processes related to art-making
3. Demonstrate synthesis and evaluation
  - Critically analyse and discuss artworks created by themselves and others and articulate an informed personal response
  - Formulate personal intentions for the planning, development and making of artworks that consider how meaning can be conveyed to an audience
  - Demonstrate the use of critical reflection to highlight success and failure in order to progress work
  - Evaluate how and why art-making evolves and justify the choices made in their own visual practice
4. Select, use and apply a variety of appropriate skills and techniques
  - Experiment with different media, materials and techniques in art-making
  - Make appropriate choices in the selection of images, media, materials and techniques in art-making
  - Demonstrate technical proficiency in the use and application of skills, techniques, media, images, forms and processes
  - Produce a body of resolved and unresolved artworks as appropriate to intentions

From the Diploma Programme Subject Brief

## **MUSIC (Higher & Standard Levels)**

The IB Diploma Programme music course seeks to develop students' knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology and context. Through the course of study, students become aware of how musicians work and communicate.

Music functions as a means of personal and communal identity and expression and embodies the social and cultural values of individuals and communities. This scenario invites exciting exploration and sensitive study.

### Course Objectives

Having followed the Music course students are expected to:

- knowledge, understanding and perception of music in relation to time, place and cultures
- appropriate musical terminology to describe and reflect their critical understanding of music
- comparative analysis of music in relation to time, place and cultures.
- creative skills through exploration, control and development of musical elements
- performance skills through solo or group music making
- critical-thinking skills through reflective thought.

From the Diploma Programme Subject Brief

## **THEATRE (Higher & Standard Level)**

Theatre is a practical subject that encourages discovery through experimentation, risk-taking and the presentation of ideas. The IB DP theatre course is multifaceted and gives students the opportunity to actively engage in theatre as creators, designers, directors and performers. It emphasizes working both individually and collaboratively as part of an ensemble. The teacher's role is to create opportunities that allow students to explore, learn, discover and collaborate to become autonomous, informed and skilled theatre-makers.

### Course Objectives

Having followed the theatre course students are expected to:

1. Demonstrate knowledge and understanding of specified content
  - Describe the relationship between theatre and its contexts
  - Identify appropriate and valuable information from research for different specialist theatre roles
  - Present ideas, discoveries and learning, gained through research and practical exploration to others
2. Demonstrate application and analysis of knowledge and understanding
  - Explain the relationship and significance of the integration of production, performance and research elements
  - Explore and demonstrate different ways through which ideas can be presented and transformed into action
  - Explain what has informed, influenced and had impact on their work



3. Demonstrate synthesis and evaluation
  - Evaluate their work and the work of others
  - Discuss and justify choices
  - Examine the impact their work has had on others
4. Select, use and apply a variety of appropriate skills and techniques
  - Demonstrate appropriate skills and techniques in the creation and presentation of theatre in different specialist theatre roles
  - Demonstrate organization of material including use and attribution of sources
  - Demonstrate the ability to select, edit and present work appropriately

From the Diploma Programme Subject Guide

## Core components of the *Diploma Programme*

### **THEORY OF KNOWLEDGE**

#### Knowing about knowing

ToK is a course about critical thinking and inquiring into the process of knowing, rather than about learning specific body of knowledge. It is a core element that all Diploma Programme students undertake. TOK and the Diploma Programme subjects support each other in the sense that they reference each other and share some common goals. The ToK course examines how we know what we claim to know.

### **THE EXTENDED ESSAY**

The Extended Essay is an independent, self-directed piece of research, culminating in a 4,000-word paper. It is important, because it provides practical preparation for the kinds of undergraduate research required at tertiary level. From the choice of a suitable research question, to the final completion of the extended essay, students must produce their piece within the constraints of time, essay length and available resources. This component provides an opportunity to engage in an in-depth study of a topic of interest within a chosen subject.

Emphasis is placed on the research process, on the appropriate formulation of a research question, on personal engagement in the exploration of the topic, and on communication of ideas and development of argument. It develops the capacity to analyse, synthesize and evaluate knowledge, with a personal choice of topic from within any subject area. Students are supported and encouraged throughout the Diploma Success Skills with advice and guidance from a supervisor.

### **CREATIVITY, ACTIVITY & SERVICE**

The CAS programme is seen as such an important component of the IB diploma that it is an UWCEA graduation requirement. UWCEA feel strongly that through this programme students can learn more about themselves and their own potential and about their relationship and responsibility to the society around them. The CAS programme offers the opportunity for students to put themselves in new situations. If a student chooses to teach English or craft to primary school children, or to work in a community-building group, or to grasp the principles of chess, they will learn from their reactions to it, to people and needs they have not met before and students often create their own initiatives and ideas in response to an experience.

All D1 and D2 students are expected to follow a balanced programme of involvement. Some experiences e.g. woodwork, mosaics or playing a musical instrument fit into the creativity strand, playing a sport fits into the activity strand and working with street children fits into the service strand. Many experiences combine all three CAS strands for example designing and teaching a swimming programme.

The three strands of CAS enhance students' personal and interpersonal development through experiential learning and enable journeys of self-discovery. CAS encourages IB students to share their energies and special talents while developing awareness, concern and the ability to work cooperatively with others. Sample CAS experiences include the following:

Creativity	Activity	Service
Cookery	Athletics	Environment Club
Drama Production	Cricket	Working with an NGO
Origami	Dance	Student Government
Chess Club	Swimming	Working at an animal shelter

Students must keep regular records of experiences undertaken and write reflections regularly about their response to the seven learning outcomes this is documented through a **CAS Portfolio** which they present during a series of interviews.

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

In an addition to meeting each strand and the learning outcomes students must complete a CAS project this is a collaborative, longer term series of experiences involving one or more strands for example organizing a school event.

## **ADDITIONAL INFORMATION**

### **LIFE SKILLS**

All IB Diploma students participate in a two-year Life Skills course. The course is a continuation of the Life Skills curriculum that runs throughout the Middle Years Programme. At IB Diploma level, lessons aim to cover social, personal skills, and topics that relate particularly to young adults in preparation for life after UWCEA. Preparation for college/university and career exploration are also a component of your coursework. In addition, there is a focus on interpersonal skills, group dynamics and the practical skills that UWCEA students will need to use on leaving school - for example basic cookery, budgeting of personal finances, CV/resume writing, interviewing, debating and discussion skills. Some of the issues students face when studying in a new country such as loneliness, homesickness and racism are also examined. There is also an element of this course that addresses current events and issues as they arise to meet the needs of the students.

### **DIPLOMA SUCCESS SKILLS**

Students will be guided on how to approach research and develop academic writing skills by practicing tools for developing questions, methodologies, referencing, academic honesty and academic language for essay writing in all subjects across the Diploma Programme.

### **UNIVERSITY AND SOCIO EMOTIONAL GUIDANCE**

The goals of the UWCEA's University and Socio-Emotional Department are to provide assistance to each student as they prepare for post-secondary studies around the world, and to support their mental health/wellbeing. The department aims to provide students with all the available and relevant data on which to base a decision to apply and/or attend a specific institution after graduation, while also supporting the development of skills that will promote a healthy lifestyle and problem solving. In addition, the department will send transcripts, school profiles and teacher recommendations, which will promote the student's candidacy by highlighting known skills, achievements, interests, and potential. UWCEA's success in placing students in top universities worldwide is a tribute to UWCEA's outstanding DP academic programme, and will continue to build upon the UWC Davis Scholars partnership with institutions throughout the United States.

(<https://www.davisuwcscholars.org/partners>)

## SAMPLE DIPLOMA PROGRAMMES

Below are some possible sample programmes that students could follow:

### No special emphasis **Diploma Programme**

Group 1	English Literature A	HL
Group 2	French B	HL
Group 3	Geography	HL
Group4	Physics	SL
Group 5	Mathematics A&A	SL
Group6	Music	SL
CORE	ToK/CAS/EE	

### Humanities Emphasis

Group1	English A	HL
Group 2	Swahili B	SL
Group 3	Geography	HL
Group4	Biology	SL
Group 5	Mathematics A&I	SL
Group 6	History	HL
CORE	ToK/CAS/EE	

### Science Emphasis

Group1	English A	SL
Group 2	Swahili <i>Ab initio</i>	SL
Group 3	Geography	SL
Group4	Physics	HL
Group 5	Mathematics A&A	HL
Group 6	Chemistry	HL
CORE	ToK/CAS/EE	