## International School of Tanganyika

Challenge | Support | Inspire



International School of Tanganyika
Secondary School
International Baccalaureate Diploma Programme (DP) Guide

2019-21


## Dear Parents and Students

I would like to welcome you to the 2019-2021 IB Diploma and Courses options book. If you are considering joining the International Baccalaureate programme here at IST, reading this first is the best starting point.

The school has offered this programme for many years and we find that it is an excellent preparation for courses at universities and colleges all over the world in a wide variety of subject areas. We believe it is the best preparation for those who are moving onto further education, and that the programme produces young adults with a broad academic base, enquiring minds and diverse social interests.

The Diploma allows for the study of 6 subjects - with 3 at higher level and 3 at standard level in 6 group areas. They should choose, to the extent possible, higher level subjects (3) that they are passionate about, and perhaps even aim to study at university level. This booklet will give you some information to help you choose the best options for your IB Diploma.

Students have left IST to continue their education at places such as the University of Cambridge, the London School of Economics, Princeton, Yale, MIT and McGill. I hope the following pages will give you the information you require, but if they do not, please do not hesitate to contact me.

Yours faithfully,

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## Contents

Why the International Baccalaureate Diploma Programme? ..... 4
Teaching and Learning Philosophy at IST ..... 6
The IB DP Programme at IST ..... 6
Entry Requirements for IB Diploma and Courses Programmes at IST ..... 7
Diplomas, Certificates and College/University transcripts ..... 8
The Academic Subjects ..... 9
The Extended Essay ..... 10
Theory of Knowledge ..... 10
CAS ..... 11
Personal and Social Education ..... 11
The Academic Subjects in Detail
Group 1: English A Literature, English A Language and Literature, ..... 12 Swahili A Literature, School Supported Self Taught Literature SL only
Group 2: Language Acquisition: An appropriate level ..... 15 of challenge
Group 2: Language B, Language ab initio ..... 16
Group 3: Economics, Geography, History, Psychology ..... 18
Group 4: Environmental Systems and Society, Physics, ..... 23 Chemistry, Biology, Design Technology
Group 5: Mathematics: Applications and Interpretation, Analysis and Approaches ..... 28
Group 6: Visual Arts, Theatre, Music ..... 31
Deadlines for changing between subjects and levels ..... 36

## Why the International Baccalaureate Diploma Programme?

We teach the IBDP programme because we believe in its mission statement:
"The IB programme aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the IBO works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessments.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people with their differences can also be right".
(IBO Mission Statement)

## Furthermore IST aims to develop in its students the qualities listed in the IB Learner Profile:

## IB Learner Profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet help to create a better and more peaceful world.

As IB learners, we strive to be:

Inquirers: We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

Knowledgeable: We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

Thinkers: We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

Communicators: We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

Principled: We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

Open-minded: We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

Caring: We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

Risk-takers: We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

Balanced: We understand the importance of balancing different aspects of our lives-intellectual, physical and emotional-to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

Reflective: We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help people become responsible members of local, national and global communities.

At IST we believe in the breadth of the IB Diploma programme, seen in the Diploma model below. These subjects in the circle are explained in greater detail later on. Central to the programme are Approaches to Teaching and Learning, highlighting the IB's aim of pedagogical excellence and a desire to instil a passion of lifelong learning, Theory of Knowledge (TOK) which challenges students to reflect critically on diverse ways of knowing and areas of knowledge, and to consider the role knowledge plays in a global society; CAS - Creativity, Action, Service - which encourages students to develop those elements; and the extended essay, a piece of original research on a topic of interest.

## Diploma Programme (DP) model



## Teaching and Learning Philosophy at IST

## Effective learning

Student learning is the highest priority at IST. The most effective learning happens in a context in which students feel understood, safe and confident. Teaching and learning at IST follows a constructivist approach, where students actively shape their understanding in interaction with teachers and peers.

Effective learning requires students to be engaged, motivated and inspired by their teachers, peers and environment, as well as intrinsically. Motivation increases when students have choice and control over their learning in authentic contexts. Students must master core skills and acquire substantive knowledge, which are necessary for the active, critical, and inquiry-based learning we value. Students learn more effectively when teachers actively promote a growth mindset, purposefully fostering perseverance, practice and hard work in their students.

## Challenge and support

IST believes that support and challenge maximise the potential of each individual student. All students are capable of making educational progress when they are appropriately supported and challenged. Therefore, teachers at IST challenge students to continuously grow in their understanding and skills.

IST supports a diverse range of learning needs, as students come to us with various levels of readiness, learning support needs and interests. Working with diverse classmates enriches our students' education and prepares them for life. It is vital that all students receive prompt, clear feedback about their performance, with a focus on how to improve. It is also essential that students have ongoing opportunities to communicate their experience of the teaching and learning process to their teachers.

## International-mindedness

Teaching and learning at IST promote international-mindedness by aiming to develop students' sense of identity as global as well as national citizens. The curriculum contributes to this by stimulating students' curiosity about the world and commitment to solving its problems. Students benefit from working with classmates and teachers from diverse cultural backgrounds.

## Curriculum

To implement this teaching and learning philosophy, IST follows IB curriculum programmes in the Elementary and Secondary years, as defined by the International Baccalaureate Organisation.

The curriculum is balanced and holistic, providing varied opportunities for students to learn and demonstrate their learning. It enables students to gain understanding and skills in ways that are disciplinary, trans-disciplinary and interdisciplinary. It encourages students to be reflective and to act upon their learning.

## The IB DP Programme at IST

The two years leading to graduation at IST are based primarily on courses leading to the IB Diploma exams. Students entering grade 11 will be expected to enrol in six courses in addition to Theory of Knowledge (if on the full Diploma) and Personal and Social Education (PSE). These courses
will be selected from offerings in Groups 1 to 6 . All students must also participate in the school's CAS programme. Diploma students take 3 subjects at higher level, 3 subjects at standard level, and do an Extended Essay. On a case by case basis, students may be advised to take an IB Courses program that may involve some selected courses at HL and could also include the writing and submission of an extended essay. IB Courses students are expected to follow the CAS program and TOK.

Course selection at this stage in a student's life entails important decisions and should be made in consultation with parents, teachers and the counsellors. These choices must take into account each student's:

- long-term education and career goals
- demonstrated skills and strengths
- current interests

It is the responsibility of each student and their parents to ensure that subjects chosen match the entry requirements of individual universities for which the student may apply at a later stage.

## Entry Guidelines for IB Diploma and Courses Programmes at IST:

## Internal Applicants

Entry into the IB Diploma programme is moderately selective. However, we firmly believe at IST that all students can be successful in the Diploma.

Students wishing to study the Diploma should demonstrate strong approaches to learning (meeting expectations - M) in all courses. Students must show dedication, as well as academic ability that would enable them to follow the rigorous course of subjects and ancillary programmes: CAS, Extended Essay and Theory of Knowledge.

In certain situations, students for whom it is felt have not demonstrated this ability may be advised into an IB Courses programme, provided that a suitable programme can be offered.

All students wishing to enter Grade 11 will be required to have fulfilled their obligations to the school's Community \& Service programme in Grades 9 and 10.

## Guidelines for Internal Applicants and Entry to IB Diploma Programme

In order to enter the IB Diploma programme (Grades 11 and 12) students must meet acceptable levels of attainment in the IB MYP programme in Grades 9 and 10. The following entry guidelines are based on students' grades in Semester 1 and Term 3 (i.e. January and March) of the $10^{\text {th }}$ Grade. On the Semester 1 report card, there will be a grade for each of the eight subject disciplines in the MYP programme.

The maximum grade for each subject will be 7 , giving a total maximum grade point total of 56 (final MYP grades issued by the IBO are out of a total of 63 as there is also a grade for Personal Project).

The minimum MYP points score for entry to the Diploma Programme is an average of 35 points for achievement on the December and March Report cards.

In addition, students should achieve a grade of 5 in any subject that they wish to study at Higher Level. (Some departments may have additional requirements for entry to Higher Level courses).
Final acceptance into a Diploma programme will be made at the discretion of the Principal and IB Diploma Coordinator.

## Entry to a Non-Diploma Programme (IB Courses Programme)

Students may take individual IB Courses in Grades 11 and 12. The IB Diploma Coordinator and counsellors will advise students in this situation.

## External Applicants

Students who have attended other schools, whether in Dar es Salaam or overseas, are required to sit entrance tests in at least Mathematics and English

## Final acceptance into a Diploma programme will be made at the discretion of the Principal and IB Diploma Coordinator.

## Diplomas, Courses and College/University Acceptance

Each academic subject is graded on a scale of 1 (minimum) to 7 (maximum). The award of the IB Diploma requires a minimum of 24 points and the satisfactory completion of other components. In addition, there are certain excluding conditions that apply and bonus points that can be awarded. The maximum Diploma score, including bonus points, is 45 points ( $42+3$ maximum bonus points for Extended Essay and TOK).

If a student successfully completes the Diploma requirements and has taken two Group 1 'Studies in Language and Literature' courses, they will be awarded the Bilingual Diploma.

If students do not gain 24 points and/or do not fulfil all the other necessary Diploma requirements, then they are awarded certificates in the individual subjects.

Having an IB Diploma is a rather impressive achievement, and will allow students to choose from a wide range of competitive Universities worldwide. Many North American colleges award advanced placement and course credits, for up to one year, based on IB Diploma grades. Courses students will also gain access to a range of universities and colleges worldwide.

## Transcripts

Many universities require schools to send transcripts of students' grades to them upon application. IST's transcripts include the Achievement grades for Semester 1 and Semester 2 in Grades 9, 10, 11 and 12. They do not include the mock exam grades in Grade 12.

## The Academic Subjects

All students must study a range of six subjects. For Diploma students three of these subjects must be taken at a Higher Level and three are taken at Standard Level. Provisional IB DP course offerings are set out in the six groups below. Expanded descriptions of each subject are given in separate sections. Additional information is available on the IST website at Diploma Programme.

Please note that subjects may not run if an insufficient number of students opt for them.

Group 1: Studies in Language and Literature

> English A Literature HL / SL
> English A Language and Literature HL / SL
> Swahili A Literature HL / SL
> School Supported Self Taught Literature SL only

Group 2: Language Acquisition
French B HL / SL
Spanish B HL / SL
Swahili B SL
Swahili Ab Initio SL
Spanish Ab initio SL
Group 3: Individuals and Societies
History HL / SL
Economics HL / SL
Geography HL / SL
Psychology HL / SL
Environmental Systems and Societies SL*
Group 4: Sciences
Biology HL / SL
Chemistry HL / SL
Physics HL / SL
Design Technology HL / SL
Environmental Systems and Societies SL*
Group 5: Mathematics

Group 6: The Arts
Mathematics: Applications and Interpretation HL / SL Mathematics: Analysis and Approaches HL / SL

Visual Arts HL / SL
Theatre HL / SL
Music HL / SL
or a second subject from groups 1, 2, 3 or 4

## The Extended Essay

The Extended Essay (compulsory for IB Diploma students only) is an independent research paper of approximately 4000 words in one of the subjects of the IB curriculum. Each student is assigned a supervisor from the school's teaching staff who will assist and advise with the planning, development and completion of the essay. The Extended Essay provides excellent preparation for the kind of research work required at many colleges and universities. These Essays are assessed by an external examiner.

## Theory of Knowledge

TOK is a required course for the full IB Diploma, while it remains only an optional course for the IST High School Diploma. It focuses on developing skills of critical analysis and thought. In the course each student examines various Ways of knowing, including sense perception, emotion, language, reasoning, imagination, intuition, faith and memory, as well as various Areas of knowledge, including the arts, mathematics, history, ethics, natural science, human science, indigenous knowledge systems and religious knowledge systems. At the forefront of discussions and class activities will be the central questions, all of which revolve around the core TOK concepts: belief, certainty, culture, evidence, explanation, experience, interpretation, values, truth, and technology. In class, we use knowledge questions to examine the knowledge claims made from various knowledge perspectives. Some of the core knowledge questions discussed in TOK classes are:
> How do we know?
$>$ How do we know this is true?
$>$ What makes us be certain about what we claim to know?
$>$ What are the issues of knowledge (its acquisition/ verification/ justification or presentation)?
> What are the links between different ways of knowing and areas of knowledge?

The formal assessment of TOK is based upon an Essay of 1600 words, which is assessed externally, as well as an internally assessed Presentation (10 minutes per candidate).

## CAS

## CAS = "CREATIVITY, ACTIVITY and SERVICE"

All students participate in the CAS programme at IST. CAS aims to challenge and extend a student by developing a spirit of discovery, self-reliance, as well as additional skills and interests. All students during the IB Diploma years are required to participate in a range of experiences and projects that span the $C, A$ and $S$ strands. Throughout their CAS journey, students are required to provide evidence of meeting 7 learning outcomes. Each student also initiates a CAS project that follows the CAS stages. CAS is an integral part of the IB Diploma Programme at IST, the benefits of which stay with students far beyond their two years at IST. Completion of CAS is an IST Graduation requirement.

## Personal and Social Education (PSE)

The majority of the time is spent in preparation for further education with units on the college/university application process, college admissions testing, the transition from high school to college, and college life. Taught by the high school counselors, time is also devoted to other important personal and social topics.

# Group 1: LANGUAGE A: LITERATURE <br> Languages Offered: English, Swahili <br> Higher and Standard Level 

## AIMS:

The Language A Literature course at both the Higher and Standard Levels is designed to:

1. Develop students' powers of expression (both oral and written),
2. Introduce students to literature of different genres and from a range of periods and cultures, and to instil in them a lifelong interest in writing of quality,
3. Encourage students to appreciate different cultural perspectives,
4. Give students the skills to analyse literature and make critical and comparative judgements of it.

## COURSE CONTENT:

The Language A: Literature course has just come to the end of a curriculum review and from August 2019, students will be studying the new Literature course.

The course will offer much variety in the selection of texts for study (thirteen at Higher Level, nine at Standard Level) and will focus on different aspects of literature including: readers, writers and texts; time and space; and intertextuality. There will also be varied types of assessment (commentaries, essays, and an oral presentation). Emphasis is placed on in-depth literary analysis and critical personal response.

## ASSESSMENT:

## Internal:

Individual Oral

## External:

Paper 1: Unseen Text Analysis
Paper 2: Literary Essay
Essay (HL Only)

## REQUIREMENTS:

Candidates at Higher Level must have a very effective command of the English language and a love of reading.

# Group 1: LANGUAGE A: LANGUAGE AND LITERATURE Languages Offered: English <br> Higher and Standard Level 

## AIMS:

The Language A: Language and Literature course at both the Higher and Standard Levels is designed to:

1. Develop students' powers of expression (both oral and written),
2. Introduce students to both literary and non-literary texts from a variety of genres and media and from a range of periods and cultures, and to instil in them a lifelong interest in writing of quality.
3. Allow students to explore how language develops in specific cultural contexts,
4. Give students the tools that will allow them to analyse a variety of texts and gain an understanding of the role of language in constructing meaning and understanding.

## COURSE CONTENT:

The Language A: Language and Literature course has just come to the end of a curriculum review and from August 2019, students will be studying the new Language and Literature course.

During the course, students will read a very wide range of non-literary texts in addition to a large selection of literary texts (six at Higher Level, four at Standard Level). The course will be divided into three parts: readers, writers and texts; time and space; and intertextuality. Assessment throughout the course is varied and includes essays, oral presentations and written commentaries. Emphasis is placed on in-depth analysis of both literary and non-literary texts, and critical personal response.

## ASSESSMENT:

## Internal:

Individual Oral

## External:

Paper 1: Unseen Text Analysis
Paper 2: Literary Essay
Essay (HL Only)

## REQUIREMENTS:

Candidates at Higher Level must have a very effective command of the English language and should have a keen interest in global cultural, political and social events.

## Group 1: LANGUAGE A: SCHOOL SUPPORTED SELF-TAUGHT LITERATURE Standard Level only

## AIMS:

This course is offered to students who wish to study their native language and its literature even though it is not offered within the school curriculum. Students will have to find a suitably qualified tutor. The Self-Taught Literature Coordinator will work closely with the tutor and student to ensure that the requirements of the course are fulfilled. The aim of the course is identical to that for Language A: Literature.

## COURSE CONTENT:

The course content is identical to that for Language A Literature.

## ASSESSMENT:

## Internal:

Individual Oral

## External:

Paper 1: Unseen Text Analysis
Paper 2: Literary Essay

## REQUIREMENTS:

Candidates must have a very effective command of the target language.
Highly motivated students should take School Supported Self Taught Literature Standard Level, since they must secure a tutor and organise lessons often outside of school time. Students and their tutors will need to liaise with the Independent Languages Coordinator to discuss specific requirements.

Please be aware that families are responsible for locating and paying for an appropriate tutor (it is possible to work with a qualified tutor online). IST will consult with the tutor but cannot guarantee the quality of the tutor.

Please note that payment of tutors for Independent Languages is not the responsibility of the school. In addition, some southern hemisphere languages (e.g. Afrikaans) are not be available in the May session, the IB advises that in this event exams should be taken in the preceding November session.

## Group 2: Language selection

The table below shows recommendations from the IBO for language placement. IST will use this as a guideline and have discretion in helping students choose the appropriate language and level.

Group 2 is intended for Language Acquisition purposes, either beginners' course or for students with prior experience in the language, in a language different from their mother tongue. At IST we encourage the students to have continuity in their language choice studied at MYP. However, students can start a new language in their transition to DP. Either option should be challenging enough so that it provides a meaningful learning experience. This comes directly from the IBO and IST both supports it and will act in accordance.

Students who successfully complete two Language A courses are eligible for a Bilingual Diploma.

Please speak to the Diploma Coordinator, the Head of Language Acquisition, or the Principal if you have further questions about language choices.

|  | MYP | DP |
| :--- | :--- | :--- |
|  | Phase 1 | Ab initio |
| PHASE AT THE END <br> OF G10 | Phase 2 | Ab initio / Language B -SL |
|  | Phase 3 | Language B -SL |
|  | Phase 4 | Language B -SL/HL |

## Group 2: Language Acquisition

## French, Swahili and Spanish - Standard and Higher Level


#### Abstract

AIMS: Language B is an additional language-learning course designed for students with some previous learning of that language. It may be studied at either SL or HL. The main focus of the course is on language acquisition and development of language skills. These language skills should be developed through the study and use of a range of written and spoken material. Such material will extend from everyday oral exchanges to literary texts, and should be related to the culture(s) concerned. The material should be chosen to enable students to develop mastery of language skills and intercultural understanding. The level placement is made in consultation with the department and at the discretion of the school.


## COURSE CONTENT:

The topics common to both levels-is divided into five areas and are a required area of study.

- Identities - explore the nature of self and what it is to be human.
- Experiences - explore and tell stories of the events and experiences and journeys that shape our lives.
- Social organizations - explore the ways in which groups of people organise themselves or are organised through common systems or interests.
- Sharing the planet - explore the challenges and opportunities faced by individuals and communities in the modern world.
- Human ingenuity - Explore the ways in which human creativity \& innovation affect our world.

HL students read two works of literature.

## ASSESSMENT:

## Internal:

Oral assessment $25 \%$

## External:

Reading Comprehension \& Listening examination $50 \%$
Written examination $25 \%$

## REQUIREMENTS:

Students in Phase 3 or above are required to take language B. Phase 2 students may be eligible if this is in agreement with the language teacher and IBDP Coordinator. Please note that native speakers of a language may not take a language acquisition course in that language.

## Group 2: AB INITIO LANGUAGES

## Spanish and Swahili - Standard Level only

## AIMS:

The course is designed for students who have insufficient prior knowledge to follow a Language B programme or those who want to take up a new language. Ab Initio is only open to beginners with no or minimum knowledge of the language. The course aims at developing the student's ability to communicate in speech and in writing in order to deal adequately with familiar and practical needs. This is a demanding course.

## COURSE CONTENT:

The language ab initio course is organized into five themes:

## - identities

- Sharing the planet
- Social organisation
- Human ingenuity
- Experiences

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 understanding. Through the development of receptive, productive and interactive skills, students should be able to respond and interact appropriately in a defined range of everyday situations.

## ASSESSMENT:

## Internal:

oral assessment $25 \%$

## External:

Reading Comprehension and Listening examination 50\%
Written examination $25 \%$

## REQUIREMENTS:

Students must have had none or very little exposure to the target language (students who finished MYP at phases 1 or 2 may choose Ab Initio). Given the intense nature of the Ab Initio course, applicants will need to have shown that they possess good ATL's in order to pursue an ab initio course.

## Group 3: Individuals and Societies

## ECONOMICS

## Higher and Standard Level

## AIMS:

The aims of the course are to provide students with the core knowledge, the analytical framework and the critical thinking skills that will enable them to understand how humans can make the best use of their scarce resources. It also promotes an awareness and understanding of internationalism in economics and enables a student to recognise their own tendencies for bias.

## COURSE CONTENT:

The core content for Higher Level and Standard Level includes: an introduction to economics, microeconomics, macroeconomics, international trade theory, and economic development.

## ASSESSMENT:

There are three external examination papers for the Higher Level:

## Internal:

School-based assessment (portfolio) 20\%

## External:

Written examinations 80\%

There are two external examination papers for Standard Level:

## Internal:

School-based assessment (portfolio)
20\%

## External:

Written examinations
80\%

## REQUIREMENTS:

Students should have an interest in keeping up with current events worldwide, have strong reading skills, and an ability to write analytically and evaluate evidence.

Group 3: Individuals and Societies
GEOGRAPHY
Higher and Standard Level

## Aims:

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

## Course Content:

## Part 1: Core theme-(SL/HL)

1. Population distribution, change and possibilities
2. Climate change- vulnerability and resilience
3. Consumption, sustainability and security

## Part 1: Extension to the core ( HL )

1. Places, power and networks
2. Global development and diversity
3. Global risks and resilience

## Part 2: Optional themes (SL/HL)

Two optional themes are required at SL. Three optional themes are required at HL.
A. Freshwater-drainage basins
B. Oceans and Coastal Margins
C. Extreme Environments
D. Geophysical Hazards
E. Leisure, Sport and Tourism
F. Food and Health
G. Urban Environments

## ASSESSMENT:

Higher Level:
Internal: School-based assessment (fieldwork) 20\%
External: Written examination 80\%

Standard Level:
Internal: School-based assessment (fieldwork)
25\%
External: Written examination 75\%

## REQUIREMENTS:

A compulsory, residential fieldwork trip is part of the course
Students should have an interest in keeping up with current events worldwide
Students should be curious and inquisitive about the world around us

## Group 3: Individuals and Societies <br> HISTORY <br> Higher and Standard Level

## AIMS:

The DP History course at IST focuses on twentieth century world history. It is based on a comparative and multi-perspective approach to history. The course encourages students to develop critical thinking, research skills and international-mindedness. The course fosters an understanding of multiple interpretations of history.

## COURSE CONTENT:

Both SL and HL students will cover these topics:

- The Move to Global War: Italian, German, and Japanese Expansion
- Authoritarian and Single Party States: Stalin, Mao, and Castro
- The Cold War: Russia, United States, China and southeast Asia, the Middle East and Latin America

HL students will also complete three topics on Europe.

## ASSESSMENT:

Higher Level:
Internal: school-based historical investigation - 20\%
External: three written examinations - 80\%

Standard Level:
Internal: school-based historical investigation-25\%
External: two written examinations - 75\%

## REQUIREMENTS:

As with any Group 3 subject, DP History requires students to write at a high level. Students will also be required to critically evaluate historical evidence and complete a significant amount of reading in preparation for classes.

# Group 3: Individuals and Societies PSYCHOLOGY <br> Higher and Standard Level 


#### Abstract

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


## Course Content:

## Year 1: Core (SL \& HL)

Introduction to Psychological Research
The Biological Approach to Behaviour
The Cognitive Approach to Behaviour
The Sociocultural Approach to Behaviour

## Year 2: Options

SL students study 1 of the Options below
HL students study 2 of the Options below
Abnormal Psychology
Psychology of Human Relationships

## Year 2: Qualitative research methodology (HL students only)

Quantitative and Qualitative Research Methods in Psychology

## Year 2: Internal Assessment (SL \& HL)

A replication of a simple experiment with a written report detailing the experimental method, results, and conclusions.

## ASSESSMENT:

Higher Level:
Internal:_School-based assessment (research study) 20\%
External:Written examinations (essays) 80\%
Standard Level:
Internal: School-based assessment (research study) 25\%
External: Written examinations (essays) 75\%

## REQUIREMENTS:

Interest in the subject, an ability to read extensively, write analytically and evaluate critically. An achievement level of at least 5 in Individuals and Societies or English.

## Group 3 and Group 4: Individuals and Societies / Sciences

## ENVIRONMENTAL SYSTEMS AND SOCIETIES (ESS)* - Standard Level (*this course can count as a group 3 or a group 4 subject)

## TRANS-DISCIPLINARY:

Environmental Systems and Societies (ESS) is a trans-disciplinary subject, uniting the group 3 (Individuals and Societies) and group 4 (Sciences) subjects while presenting a unique set of aims, objectives and assessment criteria.


#### Abstract

AIMS: The aim of ESS is to provide students with a holistic awareness of the interrelationship between the physical environment and societies. The understandings and skills of the ESS course allow students to adopt an informed personal response to the range of environmental issues faced by society and to be critically aware that resources are finite and often unevenly distributed/ exploited. Students will be constantly engaged with the significant choices that they make in their own lives, which in turn will allow them to develop a deeper reflection and appreciation of environmental issues and the different responses to them. They will evaluate various aspects of past, current, and future issues from scientific, ethical, and socio-political perspectives. Scientific principles and methodologies within a 'systems approach' are employed to disentangle the complex issues surrounding the impact of society on the environment.


## COURSE CONTENT:

1. Foundations of Environmental Systems and Societies
2. Ecosystems and Ecology
3. Biodiversity and Conservation
4. Water and Aquatic Food Production Systems and Societies
5. Soil Systems and Terrestrial Food Production Systems and Societies
6. Atmospheric Systems and Societies
7. Climate Change and Energy Production
8. Human Systems and Resource Use

## ASSESSMENT:

## Internal:

School-based assessment (practical activities and individual investigation) 25\%

## External:

Written examination (Paper $1=25 \%$, Paper $2=50 \%$ )

## REQUIREMENTS:

There are no prerequisites to participate in the course. However, it is recommended that students have a general understanding of science concepts as well as an interest in environmental issues. Students taking ESS and Geography will see some common content between the courses, and many of the case studies will center on current events in Tanzania. As with all other Group 3 subjects, this course has significant writing demands.

## Group 4: Sciences PHYSICS

## Higher and Standard Level

## AIMS:

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles to the vast distances between galaxies.
This course is designed for students interested in the study of Physics on both a practical and theoretical level. Students develop competence in the collection and analysis of data derived from investigations and laboratory work and also the ability to analyse, evaluate and synthesise scientific information.

## COURSE CONTENT

In the course students learn to construct abstract models such as analogies and mathematical systems to explain phenomena, then link these abstract concepts to reality through controlled experiments. The Standard Level course is a subset of the Higher Level programme. The course covers the following topics: Mechanics, Thermal Physics, Waves, Electricity and Magnetism, Atomic, Nuclear and Particle Physics and Energy Production. The HL course also includes units of Gravitational and Electric fields, Electromagnetic Induction and Quantum Physics. The optional units that we will study one of (at SL and HL) are Astrophysics, Relativity, Engineering Physics and Imaging.

## ASSESSMENT:

## Internal:

School-based assessment (40-60 hours of practical investigations with 1 externally moderated selfdirected lab investigation project)

## External:

Written examination 80\%

## REQUIREMENTS:

Students should have a strong Mathematical background and must be studying Mathematics Standard or Higher level.
There is a very big step up from MYP Science to DP Physics in terms of the level of understanding required, the mathematics we apply and the detail in which we study a topic. There is not a great difference in difficulty between Physics at SL and HL though we would recommend that students choosing either course at DP level should have be working at a level 5 or above in MYP Science. Students should have strong analytical skills and the A (knowledge and understanding) and C (processing and evaluating) criteria at MYP are particularly good indicators of whether a student would be suitable for the course.

Entry to Higher Level is for students who have a genuine interest in the subject and/or want to go onto further study the subject at university (e.g. Engineering, Aerospace, Energy, Oil and Gas industry or Telecommunications)

## Group 4: Sciences <br> CHEMISTRY <br> Higher and Standard Level

## AIMS:

The aims of the course are to familiarise students with the principles of chemistry and to develop analytical and problem solving skills. The course offers a broad and strong foundation for science, engineering or medical related degrees at university.

## COURSE CONTENT:

Chemistry is a branch of science in which we study the materials that comprise our environment. We do this by investigating their properties, their composition and the way they react. The course contains the following topics:

- Stoichiometric relationships
- Atomic structure
- Periodicity
- Chemical bonding and structure
- Energetics
- Chemical Kinetics
- Equilibrium
- Acids and bases
- Redox processes
- Organic chemistry
- Measurement and data processing
- Medicinal chemistry


## ASSESSMENT:

## Internal:

School-based assessment (40-60 hours of practical investigations with 1 externally moderated selfdirected lab investigation project)

## External:

Written examination 80\%

## REQUIREMENTS:

Entry to Higher Level is for students who have a strong background in the subject. Students will often be expected to solve problems requiring a sound level of Mathematics. To take the Standard Level course requires some background knowledge along with a genuine interest.

# Group 4: Sciences BIOLOGY <br> Higher and Standard Level 

## AIMS:

Biology examines singular and emergent properties of living things; from the biochemistry of life to the interactions of communities in the biosphere. It forms an introduction to many disciplines of further study, including medicine, veterinary medicine, dentistry, agriculture, forestry, fisheries, nursing, and pharmacy. Biochemistry understandings and theoretical concepts of different topics in Biology are covered in a wide range of core and additional higher level topics. It is, therefore, suitable to the science specialist who might go on to further Biological studies at university. The Standard Level course is designed to meet the needs of a more varied group of students, including a nonscience specialist who may not necessarily need preparation for higher level university science courses but can still pursue the rigour of the Group 4 assessment requirements.

## COURSE CONTENT:

For Standard Level the compulsory core section covers:

- Cell biology
- Molecular biology
- Genetics
- Ecology
- Evolution and biodiversity
- Human physiology

For Higher Level the course covers all of the Standard Level material and is extended in these areas:

- Nucleic Acids and metabolism
- Photosynthesis and respiration
- Plant biology
- Genetics and evolution
- Human and animal physiology

Classes will complete one option from the following:

- Neurobiology and behavior
- Biotechnology and bioinformatics
- Ecology and conservation
- Human physiology


## ASSESSMENT:

## Internal:

School-based assessment (40-60 hours of practical investigations with 1 externally moderated selfdirected lab investigation project)

## External:

Written examinations

## REQUIREMENTS:

Entry to Higher Level is for students who have a genuine interest and background in the subject. To take the Standard Level course requires some background knowledge along with genuine interest.

## Group 4: Sciences

## DESIGN TECHNOLOGY

Higher and Standard Level


#### Abstract

AIMS:

This course is designed for students interested in the study of design and technology in a global society on both a practical and theoretical level. Students develop competence in investigation and analysis of various design concepts and apply their knowledge and skills through problem solving practical projects. This course is recommended to students with an interest in architecture, interior and environmental design, industrial or product design, graphics and engineering.


## COURSE CONTENT

Students learn about the role of the designer in society, the nature of materials and the environment from which resources are attained. Students explore the concepts of invention, innovation and the use and application of appropriate technology. The theory of the topics is studied concurrently with and in relation to practical based projects which helps students understand the links between abstract concepts in a real world context. The course covers the following core topics:

- Topic 1: Human factors and Anthropometrics
- Topic 2: Resource management and sustainable production.
- Topic 3: Modelling
- Topic 4: Raw materials to final production
- Topic 5: Innovation and Design
- Topic 6: Classic design

Additional higher level core topics include:

- Topic 7: User centred design.
- Topic 8: Sustainability.
- Topic 9: Innovation and markets
- Topic 10: Commercial production

Both the core and option topics are taught throughout the first year and should prepare students for their Group 4 Project at the end of Year 1 and the Major Project in Year 2. Throughout the first year, students are assessed through a series of short practical projects, investigations and reports. The Standard Level course is a subset of the Higher Level programme.

## Group 4: Sciences

DESIGN TECHNOLOGY (continued)

## Higher and Standard Level

## ASSESSMENT:

## Internal:

Externally-moderated school-based assessment (Major design project)

## External:

## Written examination

SL (2 papers 30\% Multiple Choice Paper 1+30\% Paper 2 )
HL (3 papers 20\%Multiple Choice Core +HL +20\%Paper 2 +20\%Paper 3 HL material)

## REQUIREMENTS:

Entry to Higher Level is for students with a genuine interest and a strong background in the subject. Standard level builds on the concepts and ideas studied at MYP/GCSE level whilst Higher level explores core topics in greater depth. Students should have a strong Science background as Design Technology is situated in Group 4 with the other experimental Sciences; however, a creative and inquiring mind is of equal importance.

## Group 5: MATHEMATICS: Applications and Interpretation Higher and Standard Level

## AIMS:

Applications and interpretation SL and HL is appropriate for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take Mathematics: Applications and interpretation will be those who enjoy mathematics best when seen in a practical context. This subject is aimed at students who will go on to study subjects such as social sciences, natural sciences, statistics, business, some economics, psychology, and design, for example.

## COURSE CONTENT:

Mathematics HL covers all the material in Mathematics SL but goes into more depth on these topics, and generally the questions on these topics are more challenging. Additional material is also included within each topic.

Candidates will cover the following topics:

- Number and algebra
- Functions
- Geometry and trigonometry
- Statistics and probability
- Calculus


## ASSESSMENT:

## Standard level

## Internal:

20\%
Mathematical Exploration - This is an individual piece of written work that involves investigating an area of mathematics.

## External: <br> 80\%

Written examination - This consists of two papers, both requiring a graphical display calculator. Paper 1 contains short-response questions; Paper 2 contains extended-response questions. Each paper is worth $40 \%$.

## ASSESSMENT:

Higher level

## Internal:

Mathematical Exploration - This is an individual piece of written work that involves investigating an area of mathematics.

## External:

Written examination - This consists of three papers, all requiring a graphical display calculator. The first two papers, worth $30 \%$ each, are based on the core syllabus. Paper 1 contains short-response questions; Paper 2 contains extended-response questions; Paper 3 contains two compulsory extended-response problem-solving questions and is worth $20 \%$.

## REQUIREMENTS:

The mathematics department advises students on the most appropriate course placement. This advice is based on previous academic performance as well as a student's approaches to learning.

## Group 5: MATHEMATICS: Analysis and Approaches Higher and Standard Level


#### Abstract

AIMS: Mathematics: Analysis and approaches at SL and HL is appropriate for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will also be fascinated by exploring real and abstract applications of these ideas, with and without the use of technology. Students who take Mathematics: Analysis and approaches will be those who enjoy the thrill of mathematical problem solving and generalization. This subject is aimed at students who will go on to study subjects with substantial mathematics content such as mathematics itself, engineering, physical sciences, or economics for example.


## COURSE CONTENT:

Mathematics HL covers all the material in Mathematics SL but goes into more depth on these topics, and generally the questions on these topics are more challenging. Additional material is also included within each topic.

Candidates will cover the following topics:

- Number and algebra
- Functions
- Geometry and trigonometry
- Statistics and probability
- Calculus


## ASSESSMENT:

## Standard level

## Internal: <br> 20\%

Mathematical Exploration - This is an individual piece of written work that involves investigating an area of mathematics.

## External: <br> 80\%

Written examination - This consists of two papers, each worth $40 \%$ and are based on the syllabus. Paper 1 is non-calculator; Paper 2 requires a graphical display calculator. Both papers contain compulsory short-response and extended-response questions.

## ASSESSMENT:

Higher level

## Internal:

20\%
Mathematical Exploration - This is an individual piece of written work that involves investigating an area of mathematics.

## External:

Written examination - This consists of three papers, with only paper 1 being non-calculator. The first two papers, worth $30 \%$ each, are based on the syllabus. Paper 1 contains short-response questions; Paper 2 contains extended-response questions; Paper 3 contains two compulsory extendedresponse problem-solving questions and is worth $20 \%$.

## REQUIREMENTS:

This is a more demanding course than applications and interpretation. It is for candidates with a strong background, interest, and ability in mathematics. The mathematics department advises students on the most appropriate course placement. This advice is based on previous academic performance as well as a student's approaches to learning.

## Group 6: The Arts

Background
The arts provide students with a forum for safe expression, communication, exploration, imagination, and cultural and historical understanding. Current brain research confirms that Arts education strengthens student problem-solving and critical thinking skills, adding to overall academic achievement, school success, personal development, and preparation for the work world. The marketplace is beginning to place more value and demand on creative thinking, synthesis, and design, which are central to all IB Arts subjects. In this way, over and above the academic rigor that is required in all IB subjects, the arts encourage students to develop vital skills necessary for success in a wide range of careers.

In the IB Diploma, students may choose one subject from group 6, and IST strongly supports this. Alternatively, students may choose a second subject from groups 1 through 4 in lieu of a group 6 subject, if they wish. While this structure is designed to allow students to study specific subjects in order to meet admissions requirements for particular university programs, it can compromise the value of an Arts Education in Grades 11-12. This claim is supported by the fact that students can choose not to study an Arts subject in the IB Diploma Programme and instead choose to study another subject.

If enough IST students choose an elective course (the second group 1-4 choice) rather than an Arts course when entering grade 11, this can result in IST not being able to offer some Arts courses due to a lack of subscription*. In recognition of current research and the demands of a 21st century marketplace, IST would like to encourage students to study an arts subject and will incorporate the following procedure in the Grade 11 subject selection process:

IST will attempt to offer a minimum of two of the three Group 6 subjects (Visual Arts, Music, Theatre) to promote arts education in Grades 11-12. Group 6 Arts subjects that will run are subject to student interest (subscription) and the availability of qualified staff to teach the subject. The Secondary Principal, in consultation with the IB Diploma Coordinator, will decide which Group Six courses will be offered to students. This decision will be communicated to students and their families following the Grade 10 academic counselling process and after most Grade 10 students have announced their departure and newly admitted Grade 11 students have selected their courses.

## Notes:

*IST requires a certain amount of formal interest to consider offering any subject in the Diploma, and the decisions to offer such courses are at the discretion of the school.

## Group 6: The Arts <br> VISUAL ARTS <br> Higher and Standard Level


#### Abstract

AIMS The aim of visual art is to make artwork that is influenced by personal and cultural contexts. Students become informed, critical observers and makers of visual culture. They develop skills, techniques and processes in a wide variety of media with the aim of communicating concepts and ideas


## COURSE CONTENT:

The Visual Art course has three components:

## Part 1 - Comparative Study

Analysis of artists, genres and artistic processes is ongoing throughout the course. The comparative study is a final independent piece study that compares the artwork of at least 2 artists in written and visual forms. It is not an 'essay', does not have a word limit but it is an academic piece of writing that should show evidence of understanding in line with the given assessment criteria.

## Part 2 - Process Portfolio

This consists of practical, experimental and alternative explorations usually in the form of a visual journal. This journal charts the artistic process and artistic development of the student. The content of the portfolio exhibits a direct correlation to the pieces presented for exhibition and should consist of planning, process documentation, reflection, media exploration as well as research on a wide variety of artists, genres and cultures.

## Part 3 - Exhibition

Throughout the two-year programme students will carry out independent art work for the culminating exhibition in March. The comparative study and the the process portfolio is digitalized and externally examined. The exhibition is internally assessed and externally moderated. There is no formal written examination.

## ASSESSMENT:

Part 1 Comparative Study 20\%
Part 2 Process Portfolio 40\%
Part 3 Exhibition 40\%

## REQUIREMENTS:

There are no prerequisites for this course. This course does require initiative, commitment, imagination, self-discipline, self-motivation, a passion for the art making process and the ability to generate work independently.

## Group 6: <br> THEATRE <br> Higher and Standard Level

## AIMS:

This course aims to develop student's understanding of theatre in its radically different forms, styles and traditions. In a range of diverse productions and performances, students will undertake the roles of creator, performer, director and designer. DP Theatre is both academic and practical, requiring an investigation into theory as well as practical exploratory work.

## COURSE CONTENT:

## 1. Presenting Theatre

This area addresses the staging and presentation of theatre, as well as the presentation of research and ideas through both practical and written work. Students present theatre through the roles of creator, performer, director and designer.

## 2. Theatre Processes

Students explore the skills, techniques and processes involved in theatre-making. They will explore these processes through the roles of creator, performer, director and designer.

## 3. Theatre in Context

Students investigate the personal, theoretical and cultural contexts of theatre practices from around the world. As well, they investigate the context that informs their own work in theatre.

## ASSESSMENT:

There is no final written examination.

## Collaborative Project

Students collaboratively create and present an original piece of theatre for a specified audience with members of their ensemble.

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Internally Assessed
Higher Level 25\%
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Standard Level 35\%

## Director's Notebook

Students choose a play text that they have not studied and develop ideas as to how it could be staged for an audience.

Higher Level
20\%
Standard Level 35\%

## Group 6:

## THEATRE

## Higher and Standard Level (continued)

## Research Presentation

Students deliver a 15-minute presentation to their peers in which they outline and physically demonstrate their research into an unfamiliar theatre practice.

## Externally assessed <br> Higher Level 20\%

Standard Level 30\%

## Solo Theatre Piece (HL only)

Students create and present a solo theatre piece based on an aspect of a theatre theorist. that they have not previously studied.

| Externally assessed | Higher Level | $35 \%$ |
| :--- | :--- | :--- |
|  | Standard Level | N/A |

## REQUIREMENTS:

Anyone who is committed to theatre and performance arts and who wants to develop their collaboration skills, communication skills, creativity and self-confidence will enjoy and benefit from IB Diploma Theatre. While previous experience in theatre is not essential, it is recommended and will be a great advantage to the student. Students must be willing to participate in IST's external productions and events as part of the course.

# Group 6: The Arts <br> MUSIC <br> Higher and Standard Level 

## AIMS:

This course aims to give students the opportunity to explore and enjoy the diversity of music throughout the world. Students will be able to develop a wide range of musical skills through academic and practical work. They will be allowed to develop their potential as musicians both personally and collaboratively

## COURSE CONTENT:

## Higher Level:

This course is designed for the student who is a music enthusiast, who is passionate about creating music, and who may intend to pursue music at university/ college level. It comprises 3 parts: Performance, Composition and Musical Perception and Analysis. This consists of the study of a prescribed work, the study of musical styles and a musical investigation.

Standard Level: There are three options:

1. Solo Performance Option: This course is designed for the student who has a background in musical performance. There are 2 parts: Performance (voice or instrument) and Musical Perception and Analysis.
2. Group Performance Option: This course is designed for students with a general interest in music particularly members of ensembles, e.g. Band, Choir. There are 2 parts: Group Performance and Musical Perception and Analysis.
3. Composition Option: This course is designed for the student who has a background in musical composition.
There are 2 parts: Composition (2 contrasting pieces) and Musical Perception and Analysis.

## ASSESSMENT:

## Internal:

School-based assessment (portfolio) SL - Performance or Composition 50\%

## HL- Performance <br> 25\%

Composition ..... 25\%

## External:

Written examination 30\%
Musical Links Paper (research project) $20 \%$

## REQUIREMENTS:

An ability to read musical notation and be active in playing an instrument/singing is important. New students need to consult the Music Department to talk about past musical experience and which option is the most suitable.

## Deadlines for changing between subjects and levels:

While we hope that students will have their choices finalised by the end of Grade 10, it is recognised that students may have a change of plan over the long June / July holiday or after commencing the Diploma programme. It is possible to switch subjects and/or levels in the first few weeks of the programme. The time limit on this varies from subject to subject because of the nature of the individual subjects. It is our hope that the vast majority of students are settled in the Diploma classes by the end of August in Grade 11. Please see below for a guide to these deadlines.

## Group 1: Studies in Language and Literature

- Change from Lang A HL to Lang A SL anytime in Grade 11 (dependant on finding a suitable HL course option).
- Change from A SL to A HL should be as soon as possible, but up until December of Grade 11


## Group 2: Language Acquisition (Language $B$ and ab initio)

- Changes between or to an ab initio language can happen only up to week 4 of term 1 in Grade 11
- Changes between or to a language B should happen by October of Grade 11.
- From HL to SL or SL to HL can be any time during Grade 11, on a case-by-case basis


## Group 3: Individuals and Societies

Changes between subjects need to happen in the first 4 weeks of term 1 in Grade 11.
Changes from SL-HL:

- History: by the end of September of Grade 11
- Geography: by the end of December of Grade 11
- Economics: by the end of December of Grade 11
- Psychology: by the end of Grade 11


## STUDENTS CONSIDERING CHANGING WOULD BE STRONGLY ADVISED TO ATTEND HL LESSONS BEFORE THESE CUT OFF POINTS.

## Group 4: Sciences

- Changes between any Science subjects should be done in the first 4 weeks of term 1 in Grade 11.
- Changing from SL to HL in a Science subject should be done by the end of November of Grade 11.
- Changing from HL to SL in a Science subject can be done at any time before the end of Grade 11.


## Group 5: Mathematics

- Changes from Math SL to Math HL (within the same course) need to happen in the first 3 weeks of term 1 in Grade 11.
- Changes from Math HL to Math SL (within the same course) should happen by the end of Grade 11.
- There should be no changes between courses; for example, changing from Applications and Interpretation to Analysis and Approaches.


## Group 6: Arts

The latest date for joining any of the Arts courses should be by week 4 of term 1 of Grade 11. Changing from SL to HL:

- Visual Arts and Theatre, by the end of Grade 11
- Music by the end of Term 2 of Grade 11

