

**Luanda International School
Guide for Students and Parents 2009-2010**



**Middle Years Programme
International Baccalaureate Organization**

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What is the IBO?

The International Baccalaureate Organization was founded in Geneva, Switzerland in 1968. A group of teachers at the International School of Geneva along with teachers from other international school created the IB Diploma Programme, as a pre-university course for internationally mobile students. The Middle Years Programme (MYP) was added in 1994, followed by the Primary Years Programme (PYP) in 1997.

The IBO now consists of three programmes. The Primary Years Programme (PYP) for children aged 3–12, the Middle Years Programme (MYP) for students aged 11–16, and the Diploma Programme (DP), an internationally recognized pre-university course for students between the ages of 16 and 19 years. Currently, the school is authorized to offer all three IBO Programmes. As of July 2009, there are 2716 schools which offer at least one IBO programme of which 733 offer the MYP.

The MYP within the IBO Continuum

The three IBO Programmes share many educational principles. Each programme is intended to promote the education of the whole person, emphasizing the importance of a broad and balanced education. The three programmes aim to promote:

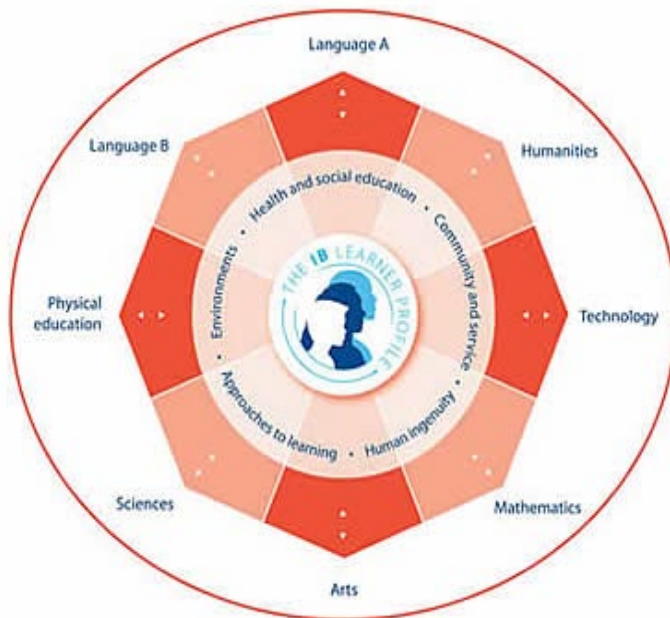
- international understanding
- responsible citizenship
- the importance of learning how to learn, of student-centred inquiry
- communication

The MYP is a coherent and comprehensive curriculum, which provides a framework of academic challenge and life skills appropriate to this age group. As part of the IBO's continuum of programmes, the MYP naturally follows the PYP and can serve as excellent preparation for the Diploma Programme.

The Curriculum Model

The curriculum model of the MYP places the student and the way the student learns at its centre, as the child's development is the basis of the whole educational process. The Areas of Interaction (Health and Social Education, Community and Service, Human Ingenuity, Approaches to Learning and Environments) surrounding the student in the model are the core elements of the MYP. They provide a framework for learning within and across the subject groups. They allow connections among the subjects themselves, and between the subjects and real-life issues.

Each subject group occupies a point around the edge of the octagonal model, reflecting the importance of the traditional disciplines taught to this age group and the skills, knowledge and understandings specific to each. Structured learning is provided in each subject group in each year of the MYP in order to achieve a broad and balanced education throughout the MYP. All the subject groups around the edge of the octagon are of equal importance.



Implementation of the MYP

Luanda International School was authorized to teach the International Baccalaureate's Middle Years Programme (MYP) in June 2006, although the school had been piloting the MYP for two years before that.

Introduction to the Middle Years Programme (MYP)

Currently the Middle Years Programme (MYP) at Luanda International School (LIS) runs in Years 8 to 11, from August 2010 it will run in Years 7 to 11 bringing the school in line with the majority of MYP schools in the world.

The MYP is a mostly skill based curriculum specifically developed for international school but is now increasingly being adopted by national schools in various countries around the world. The MYP has prescribed aims and objectives for each subject group but it is up to individual schools to develop a curriculum which is suitable for the schools individual circumstance.

One of the main differences between the MYP and other programmes is that the MYP concentrates more on skills rather than content. A good MYP student may not have memorised every text book but will have learnt how to identify the information they need to find out, will be able to find it, will know how to process it and will be able to communicate their findings to others.

All teaching in the MYP comes from the perspective of the Learner Profile (page 6) and the Areas of Interaction (page 7). Through these it is hoped that we will encourage our students to become internationally minded lifelong learners.

There are eight subject groups in the MYP. These are:

- The Arts
- Humanities
- Language A
- Language B
- Mathematics
- Physical Education
- Science
- Technology

The MYP does not place any greater importance in one subject group over another, consequently LIS has decided to timetable each subject group for the same amount of teaching time each year. Every student will receive approximately 200 minutes of each subject group each week. In addition to this students will receive a weekly Approaches to Learning lesson (see page 7).

The MYP does not have any external examinations. Students will be continually assessed throughout the year. The school internally moderates the students work throughout the year and a sample of students work is externally moderated annually. This is to ensure the school is upholding the high standards expected of the programme.

In addition to the normal subject groups, in the final year of the MYP all students will complete a personal project (see page 12). This will be externally moderated and is designed as an opportunity for the students to showcase their learning throughout the MYP.

Learner Profile

The Learner profile is centre to all the IBO programmes. It is a description of the qualities we wish to see in our students and all members of the school community. All subjects in the MYP try to encourage these qualities in the students. The attributes and dispositions we strive to encourage in our students are the following:

INQUIRERS:

Their natural curiosity has been nurtured. They have acquired the skills necessary to conduct purposeful, constructive research. They actively enjoy learning and this love of learning will be sustained throughout their lives.

THINKERS:

They exercise initiative in applying thinking skills critically and creatively to make sound decisions and solve complex problems.

COMMUNICATORS:

They receive and express ideas and information confidently in more than one language, including the language of mathematical symbols.

RISK-TAKERS:

They approach unfamiliar situations without anxiety and have the confidence and independence of spirit to explore new roles, ideas and strategies. They are courageous and articulate in defending those things in which they believe.

KNOWLEDGEABLE: They spend time in our schools exploring themes, which have global relevance and importance. In doing so, they acquire a critical mass of significant knowledge.

PRINCIPLED:

They have a sound grasp of the principles of moral reasoning. They have integrity, honesty and a sense of fairness and justice.

CARING:

They show sensitivity towards the needs and feelings of others. They have a sense of personal commitment to action and service.

OPEN-MINDED:

They respect the views, values and traditions of other individuals and cultures and are accustomed to seeking and considering a range of points of view.

WELL-BALANCED:

They understand the importance of physical and mental balance and personal well-being.

REFLECTIVE:

They give thoughtful consideration to their own learning and analyze their personal strengths and weaknesses in a constructive manner.

Areas of Interaction (AOI)

The five areas of interaction make up the core of the MYP. These are a way of looking at what we are learning and help relate the lessons to the real world.

The five areas are:

- Approaches to Learning
- Community and Service
- Health and Social Education
- Environments
- Human Ingenuity

Approaches to Learning (ATL) will be used in all subjects throughout the MYP. It is divided into seven categories; Works Well, Collaborates, Communicates, Uses Information, Reflect, Think and Connect Ideas. Different levels of understanding are expected in each category as the students progress through the school.

All the units of work in the MYP will be taught from the perspective of one of the last four Areas of Interaction. Each subject will cover all of the AOI each year.

A more detailed description of the Areas of Interaction can be found on page 11.

Assessment

Each subject group has a series of criteria (between three and six). These criteria are used throughout in MYP in each subject group. These criteria can be adapted to tasks especially with the younger years. The criteria assess subject specific skills rather than content. They are designed to encourage good work practises and to develop the students understanding of the whole subject, rather than just memorising various facts.

Whenever a student is carrying out a MYP assessed task they must have the assessment criteria with them. The assessment criteria will inform the students what they have to do to achieve any particular level. Students are able to look back at the criteria to find out what they have to improve to achieve a higher level on their next assessment. Parents can use the criteria to check their child's homework.

Many parents are used to a system of grading which uses percentages and converts them into a letter (see example on the right). The MYP uses a similar system to this but with two main differences. The MYP converts to a number instead of a letter and the MYP converts from a raw score instead of a percentage (see example below). The raw score is made up from the level the student has achieved in each assessment criteria (using a best fit policy – this is when the level awarded in each assessment

None MYP school	
Grade	Percentage
A	90 – 100 %
B	80 – 90 %
C	70 – 80 %
D	60 – 70 %
E	50 – 60 %
FAIL	< 50%

MYP Schools	
Final Level	Raw Score
7	26-28
6	22-25
5	18-21
4	13-17
3	9-12
2	5-8
1	0-4

criteria represents the general understanding of the student. This is not the highest level achieved or the average level). As each subject has different numbers of criteria with different maximum marks, there is a conversion table for each of the eight subject groups (the example is for Mathematics).

A Level Seven is an extremely high level of achievement (it is rare for more than a couple of students a year to achieve a Level Seven in a particular subject.)

Each MYP level has a description of what degree of knowledge and understanding are required for each grade. This can be found on page 15.

Glossary of terms

The Middle Years Programme has many terms which parents may not have met before. Below is a list of the more common phrases and acronyms which you might come across in relation to the Middle Years Programme.

AOI	Areas of Interaction. There are five areas of interaction. Details of these can be found on page 11.
ATL	Approaches to Learning. One of the five AOI. ATL focus on learning how to learn.
Assessment criteria	Each MYP assessed task which a student is asked to carry out will be assessed against one or more assessment criteria. These criteria are set by the IBO for each subject group. These assessment criteria may be adapted by the teacher for any particular task or age group. Students should always refer to the assessment criteria when completing work.
DP	Diploma Programme. The final of the three IBO programmes for 16-19 year olds. This programme cumulates in a series of external examinations.
Grade descriptors	A general description of what degree of knowledge and understanding is required to achieve a particular Level. The descriptors can be found on page 15.
IBO	International Baccalaureate Organization. The organization which accredits the school and oversees the implementation of the programmes.
Learner Profile	A series of ten qualities which all the three programmes of the IBO try to encourage in the students. Details of these can be found on page 6.
Level of achievement	A number between 1 and 7 which indicates the achievement of a student in a particular subject. Level 7 is the highest grade.
Moderation	A selection of students work in each subject is sent off to be remarked by the IBO. This occurs each year and involves work of students in their final year of the MYP. This is not to check the standard of the students work but is to check the marking of the teacher and the difficulty of the work set.
MYP	Middle Years Programme. The second of the three IBO programmes for 11-16 year olds. The work of students in the final year of this course is externally assessed to ensure the rigor of the schools teaching.
Personal Project	A project carried out by each student in the final year of the MYP. This project takes just under a year to complete and is the students' opportunity to demonstrate their understanding of the MYP. See page 12.
PYP	Primary Years Programme. The first of the three IBO programmes for 5-12 year olds.
Subject group	There are eight subject groups in the MYP. Each student must study a minimum of 50 hours of each subject group annually.
Unit	A series of lessons all focusing on the same broad topic.
Unit question	Each unit has a unit question. This is a broad open-ended question which by the end of the unit the students should be able to have a good attempt at answering
Validated grades	Schools can opt to award validated grades in the final year of MYP. LIS is currently doing this. To award validated grades the school must send in student work to be moderated in each subject. Students will be awarded an official MYP certificate if they have fulfilled all of the required components of the course.

The MYP at LIS

The Middle Years Programme provides a curriculum that allows students to develop the knowledge, attitudes and skills they need to participate effectively in life in the twenty-first century. The concept of balance is fundamental to the Middle Years Programme. The course objectives include skills and processes as well as a framework of concepts; the aim is to ensure that students are not only knowledgeable about a subject area, but also develop a genuine understanding of principles and an ability to apply these in new contexts, in preparation for further learning.

The MYP promotes the principle of concurrent learning whereby students deal with a balanced curriculum each year. As the students mature and develop thinking skills, they explore the disciplines with increasing depth and increase their understanding of how they are linked to each other and issues in the world outside of school. It also encourages the use of a variety of teaching and learning methodologies to produce a climate where students discover how they learn best in different contexts.

The MYP emphasizes the development of the whole child: affective, cognitive, creative and physical; its effective implementation depends on the school's concern for the whole educational experience, including what children learn outside the classroom. By balancing formative and summative assessment, and using a range of activities, the student is allowed to use and demonstrate a full range of thinking skills. This is reinforced by the assessment strategies used by teachers, which also combine teacher-led assessment, group and/or peer evaluation, and student self-assessment.

The Fundamental Concepts of the MYP Intercultural Awareness

This concept is concerned with developing students' attitudes, knowledge and skills as they learn about their own and others' social and national cultures. It not only fosters tolerance and respect, but also leads to empathy and understanding.

The MYP requires an approach to teaching and learning which includes and extends traditional school subjects. The MYP emphasizes the disciplined study of traditional subject groups. However, the *Areas of Interaction* provide a focus for developing links between the disciplines, so that students will learn to see knowledge as an interrelated whole.

The MYP stresses the central importance of communication, verbal and non-verbal, as a vehicle to realize the aims of the Middle Years Programme. A good command of expression in all of its forms is fundamental to learning. In most MYP subject groups, communication is a key objective and assessment criterion, as it supports understanding and allows student reflection and expression. The IBO places particular emphasis on language acquisition, which does more than promote cognitive growth: it is crucial for maintaining cultural identity, personal development and intercultural understanding.

The Areas of Interaction

The five areas of interaction give the MYP its distinctive core. They are taught in a coherent and creative way over the four years of the programme primarily through the subjects and through interdisciplinary teaching. The five areas are:

- approaches to learning
- community service
- health and social education
- environments
- human ingenuity

Approaches to learning

How do I learn best? How do I know? How do I communicate?

Approaches to learning is concerned with developing the intellectual discipline, attitudes, strategies and skills that will result in critical, coherent and independent thought and the capacity for problem-solving and decision-making. Central to this is 'learning how to learn' and developing an awareness of thought processes and their strategic use.

Community and Service

How do we live in relation to each other? How can I contribute to the community? How can I help?

Community and service extends beyond the classroom, requiring students to participate in the communities in which they live. The emphasis is on developing community awareness and concern, a sense of responsibility, and the skills needed to make an effective contribution to society.

Health and social education

How do I think and act? How am I changing? How can I look after myself and others?

Health and social education aims to educate the whole person and should prepare students for a physically and mentally healthy life, aware of potential hazards and able to make informed choices. It should also develop in students a sense of responsibility for their own well-being and for the physical and social environment.

Environments

Where do we live? What resources do we have or need? What are my responsibilities?

Environments aims to develop students' awareness of their interdependence with the environment so that they accept responsibility for maintaining an environment fit for the future: each day students are confronted with global environmental issues both political and economic, which require balanced understanding.

Human Ingenuity

Why and how do we create? What are the consequences?

Human Ingenuity is concerned with the products of the creative genius of people and their impact on society and on the human mind. Students learn to appreciate the human capacity to influence, transform, enjoy and improve the quality of life. This area of interaction therefore encourages students to see the relationships between science, aesthetics, technology and ethics.

The Personal Project

The personal project is a significant body of work produced by each student over an extended period in the last year of the Middle Years Programme. It is an important aspect of the MYP as it is seen as a product of the student's own initiative and creativity. The Project must reflect a personal appreciation of the areas of interaction and the application of skills acquired through approaches to learning.

The personal project offers students a great deal of flexibility and many opportunities for differentiation of learning and expression according to their individual needs. It is a rich opportunity for students to complete an extended piece of work that challenges their own creativity and thinking about issues of concern to themselves. Creativity is encouraged by the aims and objectives of the personal project; the results are usually rewarding, and sometimes spectacular.

Students may discover that completing a personal project is an excellent preparation for future studies. It is also very rewarding for supervisors to work closely with individual students to see what they can achieve.

The personal project may take many forms, for example:

- an original work of art (visual, dramatic, or performance)
- a written piece of work on a special topic (literary, social, psychological, or anthropological)
- a piece of literary fiction (that is, creative writing)
- an original science experiment
- an invention or specially designed object or system
- the presentation of a developed business, management, or organizational plan (that is, for an entrepreneurial business or project), a special event, or the development of a new student or community organization.

Assessment

Summary of General Principles

All MYP schools are responsible for organizing relevant assessment and reporting procedures according to the objectives of the Middle Years Programme. The IBO provides no external examinations in the Middle Years Programme, however the teachers rely on their professional expertise to carry out a wide variety of assessment activities based on the prescribed assessment criteria.

Samples of assessed student work are sent annually from each subject to the IBO office in order to undergo a moderation process. This process results in a detailed report regarding the types of assessment set, the marking and the recording of the levels of attainment.

The LIS assessment philosophy states that:

- 1 Assessment is consciously designed to improve student performance.
- 2 Reflection is an essential and integral part of assessment.
- 3 Educative assessment is anchored in authentic tasks.
- 4 Feedback is central to all learning and teaching.
- 5 Educative assessment provides students and teachers with feedback that they can use to revise their performance.
- 6 Assessment provides a direction of vision for the teachers, the learners, the parents, the administration and the larger school community.
- 7 Assessment should be sensitive to cultural, linguistic, racial, class, learning, physical and gender differences.

Criterion-related assessment

The MYP assessment model is also described as criterion-related, as it is based upon pre-determined criteria that all students should have access to. The MYP identifies a set of objectives for each subject group, which are directly related to the assessment criteria of that particular subject group. The level of student success in reaching the objectives of each subject group is measured in terms of levels of achievement described in each assessment criterion.

The kind of generic application of broadly constructed criteria that is used in MYP assessment practices is called “criterion-related” assessment. This differs from the term criterion-referenced assessment in that it does not require a mastery of each descriptor and better describes the MYP “best-fit” approach.

Support for student learning

The single most important aim of MYP assessment is to support and encourage student learning. The MYP places an emphasis on assessment processes that involve the gathering and analysis of information about student performance and that provide timely feedback to students on their performance. MYP assessment aims to identify what students know, understand, can do and feel at different stages in the learning process and to provide a basis for practice. Students and teachers will be actively engaged in assessing student progress as part of the development of their wider critical-thinking and self-assessment skills.

Even though the MYP prescribes objectives and assessment criteria that are described as final (to be used to determine student grades at the end of the programme), the MYP assessment model insists on students being monitored and assessed throughout the programme using criteria that are related to the objectives. This formative assessment is a feature of all teaching and learning in the MYP and is viewed as a necessary and important part of the learning process.

Summative assessment

The purposes of summative assessment are to support learning and also to contribute to the determination of an achievement level; this usually happens at the end of a learning period such as the end of an MYP unit of work, a semester or a school year. As students are assessed continually in the MYP, teachers will be in a position to determine a level of achievement that is also supported by evidence from assessments undertaken during a learning period.



Grade Descriptors

Each MYP level has a description of what degree of knowledge and understanding are required for each grade. These should be used as a general guide to the degree of understanding for a particular student.

	Descriptor
Level 1	Minimal achievement in terms of the objectives.
Level 2	Very limited achievement against all the objectives. The student has difficulty in understanding the required knowledge and skills and is unable to apply them fully in normal situations, even with support .
Level 3	Limited achievement against most of the objectives, or clear difficulties in some areas. The student demonstrates a limited understanding of the required knowledge and skills and is only able to apply them fully in normal situations with support .
Level 4	A good general understanding of the required knowledge and skills, and the ability to apply them effectively in normal situations. There is occasional evidence of the skills of analysis, synthesis and evaluation.
Level 5	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them in a variety of situations. The student generally shows evidence of analysis, synthesis and evaluation where appropriate and occasionally demonstrates originality and insight.
Level 6	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them in a wide variety of situations. Consistent evidence of analysis, synthesis and evaluation is shown where appropriate. The student generally demonstrates originality and insight.
Level 7	A consistent and thorough understanding of the required knowledge and skills, and the ability to apply them almost faultlessly in a wide variety of situations. Consistent evidence of analysis, synthesis and evaluation is shown where appropriate. The student consistently demonstrates originality and insight and always produces work of high quality .

Subject Groups: Descriptions and Aims

The MYP subject guides published by the IBO outline a framework of concepts and skills intended to provide adequate direction and advice to schools, and ensure commonality among MYP schools around the world. This framework allows us sufficient flexibility to organize our curriculum according to our own context. All MYP schools are, however, required to structure their curriculum to allow their students to achieve the aims and objectives of each subject group, expressed by the IBO in terms of final achievement at the end of the Middle Years Programme.

Aims and Objectives

The objectives of each subject group are skills-based and broad enough to allow a variety of teaching and learning approaches.

The aims and objectives of the subject groups address all aspects of learning including knowledge, understanding, skills and attitudes.

- | | |
|----------------|--|
| Attitudes: | How the student will be able to apply what has been learned in new situations. |
| Skills: | How the student will be able to interpret, apply or predict aspects of the subject. |
| Understanding: | The facts that the student should be able to recall to ensure competence in the subject. |
| Knowledge: | How the student is changed by the learning experience. |

English Language A

Subject description

At LIS Language A is the language of instruction – English. In accordance with the MYP guidelines, the study of the Language A provides the basic tools of communication by enabling efficient learning and practice of other subjects within the school. It is important when developing social contacts, and is necessary to encourage self-expression. The English Language A courses are taken by all students and all other courses, except for World Languages are taught in English. Based on diagnostic testing, English language support for students with limited English background is provided by an EAL specialist teacher.

The language A course is aimed at exposing students to a wide range of English media, enhancing their understanding of different forms of expression, values and ideas as well as encouraging their personal, moral and spiritual development. This is done through the study of novels; short stories, popular culture, published media, classic and contemporary drama, poetry, creative writing, writing for purpose and independent reading tasks. Students develop an appreciation of the ways in which writers and speakers express themselves, and learn to construct and convey meaning in their own reading, writing, speaking and listening.

As already mentioned students have continual opportunities to take responsibility for their learning, particularly through formative and summative assessment, target setting and personal reflection. Connections are made with other subject areas and also beyond the classroom via interdisciplinary units of work and the MYP areas of interaction.

AIMS

The aims of the teaching and study of Language A are to encourage and enable the student to:

- Use the language as a vehicle for thought, creativity, reflection, learning and self-expression
- Use language as a tool for personal growth, social interaction and for developing relationships within the international community.
- Comprehend more clearly aspects of their own culture and those of other cultures by exploring interdependence of human beings through a variety of works
- Explore the many facets of language through the use of media and information technology
- Develop the skills involved in reading writing, speaking, listening and viewing in a variety of contexts
- Respond appropriately to a variety of texts
- Read widely to promote a lifelong interest in language and literature
- Develop a critical and creative approach to studying and analysing literature.
- Develop language skills through interdisciplinary work
- Consider the role of literature both culturally and historically
- Reflect on the learning process in various ways and at various stages
- Empathize with real people and fictional characters as and when appropriate

World Languages: Portuguese A

Subject description

The Portuguese Language A courses are taken by native and quasi-native Portuguese students. The Portuguese A courses provide students with an awareness of the personal, social and cultural significance of language and literature, equipping students, through expertise in the communicative use of language, with a valuable social and educational tool. Through engaging with texts from a range of cultures, Language A students further their own personal, moral and spiritual development, deepening their understanding of human nature and values, and broadening their intercultural awareness. Students develop an appreciation of the ways in which writers and speakers achieve their effects, and learn to construct and convey meaning in their reading, writing, speaking and listening. Students develop as autonomous learners through an assessment policy based on formative feedback, target setting, and students' reflections on their portfolios. Holistic learning is developed through Interdisciplinary Units of Work, and attention to the MYP Areas of Interaction.

Aims

The aims of the teaching and study of language A are to encourage and enable the student to:

- use the language as a vehicle for thought, creativity, reflection, learning and self-expression
- use language as a tool for personal growth, social interaction and for developing relationships within the international community
- comprehend more clearly aspects of their own culture and those of other cultures by exploring the interdependence of human beings through a variety of works
- explore the many facets of the language through the use of media and information technology
- develop the skills involved in speaking, listening, reading, writing and viewing in a variety of contexts
- respond appropriately to a variety of texts
- read widely to promote a lifelong interest in language and literature
- develop a critical and creative approach to studying and analysing literature
- develop language skills through interdisciplinary work
- consider the role of literature both culturally and historically
- reflect on the learning process in various ways and at various stages
- empathize with real people and fictional characters as and when appropriate.

Spanish and Portuguese Language B

Subject description

Language B is defined as a modern foreign language learned in school. Learning an additional language expands students' cognitive and analytical abilities. It fosters communication with other speakers of the language and appreciation of other cultures. It increases the possibilities of communication beyond a student's own language and culture; as a result it enhances students' self-knowledge and contributes to their knowledge of the world. This reflects the importance that the MYP places on intercultural awareness and on providing students with opportunities to discover that there are multiple ways of viewing the world.

Aims

The aims of the study of a modern foreign language are to:

- enable the student to use the language effectively as a means of practical communication.
- offer insight into the life and civilization of the communities where the language is spoken, and into the local and standard aspects of language.
- encourage integration with the local community, where relevant.
- encourage positive attitudes towards speakers of other languages and an appreciation of, and empathy for, other cultures.
- provide a sound basis of communicative skills necessary for future study, work and leisure.
- develop an appreciation of literature in the target language and, more particularly, in the language B (advanced) option.
- develop understanding of the nature of language and the process of language learning.
- complement other areas of study by providing access to more varied sources of information.
- begin to develop an understanding of the cultural patterns that affect the thinking, feeling and acting of the societies in which the language is spoken.
- understand that total language learning comprises the integration of linguistic, cultural and social components.
- develop curiosity, interest and enjoyment in the target language.

Mathematics

Subject Description

The IB MYP Mathematics at Luanda International School sets out to give students an appreciation of the usefulness, power and beauty of mathematics. Mathematics is considered both as a means of modeling systems using a universal language and exploring that language for its own sake.

Aims

The aims for MYP mathematics are to enable students to:

- develop a positive attitude toward the continued learning of mathematics
- appreciate the usefulness, power and beauty of mathematics, and recognize its relationship with other disciplines and with everyday life
- appreciate the international dimensions of mathematics and its varied cultural and historical perspectives
- gain knowledge and develop understanding of mathematical concepts
- develop mathematical skills and apply them
- develop the ability to communicate mathematics with appropriate symbols and language
- develop the ability to reflect upon and evaluate the significance of their work and the work of others
- develop patience and persistence when solving problems
- develop and apply information and communication technology skills in the study of mathematics.

Science

Subject description

Science is the study of the natural world, and of the way that humans interact with it. It is traditionally separated into three strands, Biology, Chemistry and Physics. The LIS science course is a mixture of these three divisions. We place a strong influence on developing practical skills through a hands-on approach, and on gaining an understanding of how scientific knowledge is acquired. The impact of scientific developments on the environment, individuals and society is also emphasized.

Biology, Chemistry and Physics are included in each year level of the curriculum. Each of the units concentrates on one or more of the three sciences but connections are made to the other two other areas of sciences when appropriate. The curriculum is designed to enhance the students' understanding of the nature of the real world and thus make connections between disciplines. The topics in science were chosen on the basis of their significance, relevance, engagement and challenge to the students.

Aims

MYP sciences aim to provide a worthwhile educational experience for all students whether or not they go on to study science beyond the MYP. Participation in MYP sciences should enable students to:

- develop skills that are relevant and useful to the study and practice of science in everyday situations.
- acquire understanding and knowledge of the concepts, principles and applications of science.
- become confident and responsible citizens in a rapidly changing world, able to take or develop an informed interest in matters of scientific import.
- recognize the usefulness and limitations of a scientific approach and to appreciate its applicability to other disciplines and to everyday life.
- develop an awareness of the conditions, which threaten or enhance health.
- develop a positive attitude to the need for the conservation of natural resources and the preservation of the environment.
- realize that science does not provide the answers to all problems.
- develop curiosity, interest and enjoyment in science and its methods of enquiry.
- develop an awareness of science as a cooperative activity between individuals.
- develop an awareness of science as an increasingly international activity involving cooperation at all levels.
- develop an awareness of the influences and limitations imposed on science by social, economic, technological, political, ethical and cultural factors.
- develop an awareness of the historical evolution of scientific knowledge and understanding.
- develop and apply their information technology skills in the study of science.

Humanities: History Strand

Subject Description

Throughout the course the fundamental concepts of “time”, “cause and consequence”, “continuity and change”, and “similarity and difference” are developed and facilitated through a thematic and/or a chronological approach to the teaching of history. History is a combination of an account of the past and a study of how and why these past events occurred and their consequences. Students deal with tasks involving the increasing analysis of different types of evidence and the investigation and interpretation of past events. No single aspect should exclude the others. It is hoped that students will enjoy history and realize the relevance of studying and valuing the past for its own sake.

Aims

The aims of MYP history are to enable students, through the fundamental concepts of “time”, “cause and consequence”, “continuity and change”, “similarity and difference” to:

- discover an interest in, and an enjoyment of the past.
- develop a knowledge and understanding of the past.
- develop an understanding of history and culture from a local to a global perspective.
- appreciate the relationship between technology and historical change.
- develop the skills necessary for the effective study of history.
- cultivate an enquiring mind.
- develop critical thinking and historical imagination through working with, and understanding, the fragmentary evidence of the past.
- develop the realization that there are many different interpretations of the past.
- develop an awareness of the links between history and geography.

Humanities: Geography Strand

Subject Description

Geography involves the study of the development and spatial arrangement of various environments. In a world that is constantly changing this discipline helps the student to grasp the dynamic quality of spatial realities and to understand the changes, which have taken, place in different environments. It enables the student to study the environment as well as recognizing that, whilst natural forces shape the Earth, humans are important agents of change in their environment and the action taken by one society may affect the entire world.

This course is designed to lead students from an understanding of their immediate natural and social environment to an appreciation of spatial phenomena on local, regional, national and global scales. An important dimension of the geography is the fostering of an awareness of the challenges to humankind, as well as of our individual and collective responsibilities. This is done through the use and application of a body of major geographical concepts.

Aims

The aims of MYP geography are to enable students to:

- observe, classify, analyse, explain and relate, in order to allow them to understand the role of space, and to give them the opportunity to use space effectively.
- analyse, according to a variety of subjective viewpoints, the ways in which societies live in, locate, organise, compete for, and perceive space.
- acquire a critical and sympathetic awareness of interaction between humans and the environment, and to appreciate the role of subjectivity in the perception of space.
- organise their spatial knowledge at local, regional, national and global levels, in a world where information comes from an increasing variety of sources.
- develop a sense of place and an understanding of geographical scale; to appreciate inequalities and differences in levels of development.
- develop an awareness of the links between geography and history.

The Arts

Subject description

The Arts are a form of human expression through activity. They contribute to a school curriculum offering a distinctive way of learning through the form of visual, aural and tactile affective communication. Students work cooperatively and individually fostering an awareness of and constructive involvement in the world as expressed in the central intercultural Areas of Interaction of IB MYP. The arts are a powerful media for the exploration of their own and other cultures. In this respect they are a powerful educational tool for the exploration of different areas of the curriculum.

Aims

Participation in MYP arts should enable students to:

- experience and develop curiosity, interest and enjoyment in their own creativity and that of others.
- explore through the processes of visual and performing arts.
- acquire and develop skills needed for the creation of visual and performing artwork.
- use the language, concepts and principles of visual and performing arts.
- communicate their thoughts and ideas through visual and performing arts.
- create visual and performing artwork.
- reflect on, appreciate and evaluate their work and the work of others.
- develop receptiveness to visual and performing art forms across time, place and cultures, and perceive the significance of these art forms as an integral part of life.

Design/Information Technology

Subject description

The intention of the syllabus is that students should gain knowledge of the nature of information processing and the broad range of its applications, together with a general understanding of how an information processing system is designed to suit a particular application and how such a system works. The syllabus concentrates on the principles of information processing so that, although students will study contemporary hardware, software and applications as examples, they should be well equipped to appreciate future developments in the technology and its applications.

Aims

The aims of this subject are to:

- develop in students an appreciation of the range and power of computer applications;
- develop students' abilities to solve problems using computing techniques;
- develop an awareness in students of the place of computing in society and issues computing raises in society;
- provide students with a firm understanding of the basic techniques and knowledge required for computing applications;
- foster a desire to use computers within other interests.

Physical Education

Subject description

Many different lifetime and team sports will be taught covering rules, skills and strategies. The focus in class will always be to learn new skills and have as much participation as possible in order to have students raise their heart rates and be physically active in class. A wide range of activities are studied, such as: fitness testing, ultimate Frisbee, softball, flag football, movement composition, touch rugby, volleyball, basketball, swimming, futsal, soccer, floor hockey and gymnastics. Assessment tasks include teacher observation, written tests, student compositions, projects, fitness assignments and peer and self-assessments.

The course is designed to meet the physical, social, emotional and cognitive needs of students in the middle years. The emphasis is on developing knowledge, skills and attitudes that allow our students to participate actively, responsibly and intelligently in physical activity.

Aims

The aims of the teaching and study of physical education are to encourage and enable the student to develop:

- an appreciation and understanding of the value of physical education and its relationship to a healthy, balanced lifestyle
- an interest in the promotion of health and wellness
- the motivation to participate fully in all aspects of physical education
- their optimal level of physical fitness
- effective communication strategies, verbal, non-verbal and written
- the skills and understanding necessary to participate successfully in a variety of physical activities, for example, learning, practicing, refining, adapting, thinking, interacting
- the ability to reflect critically on all aspects of physical education, including being a critical performer
- an understanding of international perspectives on physical activity, sport and health education
- a lifelong interest in and enjoyment of physical activities as a participant

Course Outlines for Year Eight

The Arts

Visual Arts

The Visual Arts course follows the IB MYP philosophies. Students develop their knowledge of Art forms and ideas, through inquiry based units of work, involving independent research. Inherent in the course is that students learn to interpret, derive and create meaning through Art. Students aim to create mature Artworks that respond to societal / cultural / historical / personal contexts. The focal point of the course is the Development Workbook (DW); in this sketchbook, students are expected to record their research, experimentation, ideas, planning and reflections & evaluations in both written and visually creative forms. The DW forms a chronological record of a student's artistic development. The Art programme is sequential, as the student moves through the MYP programme they are expected to display greater maturity and independence in their Artwork and personal research. Homework and deadlines are an essential part of the MYP Visual Arts course which must be adhered to. Exposure to MYP key requirements, aims and objectives are similarly re-iterated across the MYP subject areas which aids student understanding, particularly important for students who join LIS part way through the MYP course. The course offers students opportunities to respond to unit themes with independent paths of research and artistic development.

Drama

As an introduction to Drama the students engage in the techniques of building an ensemble. This involves movement, vocal games and exercises and role playing. These activities are designed to develop confidence and creativity and to acquaint the students with performance discipline. Vocal skills are developed by presenting poetry in groups, in a theatrical form and through life performances.

The students will add to their knowledge and understanding of the performing arts by research into the use of puppets in a variety of cultures. Then they will use the puppets that they will make in Design/Computer Technology to perform a number of short plays, some of which may be adapted from plays they will write in English classes.

Music

In the year 8 music course each student will develop his/her musicianship as a listener, performer and composer. Students will expand and build upon knowledge and skills they have gained through music in the PYP. They will expand their individual performing skills on a range of classroom instruments, including pitched and unpitched percussion, guitar and keyboard. They will also participate in small group and whole class performances, thereby developing their ensemble performing skills. Students will learn new creative approaches and apply these in their own group compositions. They will also develop their confidence in the use of notation. They will also develop their listening skills and their knowledge and understanding of a range of musical genres and styles; there will be a focus on developing students' ability to describe and appraise music using appropriate technical vocabulary. Ongoing reflection, along with self-evaluation and peer-evaluation will allow students to identify their progress and set goals for further musical development. The

developmental workbook will provide a vehicle for the documentation of the musical processes used and for reflection and goal-setting.

Our two units in year 8 will be:

1. Making an arrangement: students will learn a range of techniques for adapting existing melodies to create interesting and imaginative arrangements. They will experiment with these techniques and ideas, and work in groups to create their own arrangements. They will also learn to recognise and describe these techniques in music of various styles and genres.
2. Music for percussion: through performance, listening and research, students will learn about a range of musical traditions from around the world in which percussion instruments are used; they will learn about the rich and exciting variety of percussion instruments used in different cultures

Design/Computer Technology

Year 8 Students are gradually introduced to the Design Cycle and the use of the Design Workbook and a variety of research and citation skills. The initial project follows the 5 stages of the Design Cycle closely; the students explore, collect and do broad research into product packaging ranging from breakfast cereal to high-end electronics. The students then choose a product and create packaging that is innovative and enhances the product. Other units are in development but will include making puppets for a drama production.

English (Language A)

This course will concentrate on strengthening reading, writing and speaking skills, it will also introduce viewing and presenting skills. The class will work with a range of texts, both fiction and non-fiction. The Year 8 Language A curriculum is designed to introduce students to a range of literary genre. The literature represents the work of international authors and covers a range of time periods. Outside of school reading will be encouraged through regularly scheduled library lessons. Oral expression is an important part of the Language A programme and the students will learn how to present material orally to the class and participate in panel discussions and debate. Study skills, time management and organization will continue to be an integral part of the Language A programme. At the Year 8 level in the Language A programme the students are assessed in 4 criteria (A –Content, B – Organization, C – Language Usage, D – Style) this is to aid the student in seeing the differences between language usage and style and also to understand how they are related.

Portuguese (Language A)

These courses will concentrate on strengthening reading, writing and speaking skills for which the class will work with texts and different aspects of literature. Students will learn to understand the meaning of words and recognize dominant and secondary ideas in texts. They will speak in a variety of situations, read or recite aloud with expression, participate in discussions and express feelings and personal ideas. They will also read for information, infer meaning from different contexts, begin to sequence structure and support ideas with evidence from texts.

Spanish and Portuguese (Language B)

This course will concentrate on the four interactive skills (listening, reading, speaking, and writing) and cultural awareness. Oral expressions, listening and reading comprehensions as well as grammatical structures will be worked into each quarter and will be determined by the topic areas studied and the needs of the students. By the end of Year 8, students are expected to have acquired the knowledge and ability to respond spontaneously to stimuli, express personal opinions, understand and draw conclusions from a variety of topic areas and read texts with some guidance.

Humanities

This course is designed to promote an international perspective by awakening in young people an interest in the cultures and attitudes of people with backgrounds different than their own; by making them aware of the fundamental, positive values of the common heritage of human beings; and by encouraging intercultural understanding and exchange through the study of selected topics in Physical and Human Geography (Rivers, Coasts, Natural Disasters; Site and Settlement, and Migration) and History (Ancient History to approximately 400 AD). Students learn to read and interpret maps, tables, and charts, use primary and secondary sources, do guided and independent research, identify the location of countries, and apply skills, knowledge and understanding of Geographic and Historical Concepts. A variety of resources, including class textbooks, Library books, and the Internet will be used.

Mathematics

The LIS Mathematics curriculum has been developed to encompass five branches. The math curriculum is progressive from one year to the next. For students to successfully complete the Year 8 course, they will need to:

Numeracy: Solve problems with basic order of operations. Calculate fractions as percents and decimals. Solve problems using directed numbers. Explore numbers using even, odd, square and prime numbers. Compare rational numbers and integers. Estimate using whole numbers and decimals.

Algebra: Solve one-step algebraic equations. Express real-life situations as algebraic expressions. Investigate problems using a table of values, leading to linear expression.

Geometry: Investigate problems involving triangles, circles, quadrilaterals.

Physical Education

Physical Education contributes to the overall education of the students by helping them to lead full and valuable lives through participation in purposeful physical activity. The MYP is designed to help students understand the need for exercise, not only at school but also in later life, and to encourage active participation. The curriculum is divided into short duration courses that are revisited in greater depth each year with students taking increasing responsibility for content, organization and assessment. Students develop personal qualities such as commitment, enthusiasm and fairness and the ability to plan and organize their own sporting activities. This enables students to achieve physical competence in a wide variety of sporting activities giving them the self esteem, confidence and will to adopt an active, healthy lifestyle.

Science

In Year Eight the following units and content are being studied

Units	Content
Microbes and Diseases	<ul style="list-style-type: none">• Characteristics of different microbes• Effect of microbes in a disease context• Defence against microbes; internal and external• Causes of non-communicable diseases• Scientific method
Matter	<ul style="list-style-type: none">• States of matter• Changes of state• Particle model• Physical and chemical changes
Acids/Bases	<ul style="list-style-type: none">• pH scale• Neutralization• Everyday applications of neutralization
Forces and their effect	<ul style="list-style-type: none">• Newton's law• Unbalanced/balanced forces• Safety• Density• Weight and mass
Light and Sound	<ul style="list-style-type: none">• Basic properties of light and sound• Sound pollution• Mixing of light• Hearing• Sight
Food and Digestion	<ul style="list-style-type: none">• Food types• Parts of digestive system• Process of digestion• Balanced diet• Energy

Course Outlines for Year Nine

The Arts

Visual Arts

The Visual Arts course follows the IB MYP philosophies. Students develop their knowledge of Art forms and ideas, through inquiry based units of work, involving independent research. Inherent in the course is that students learn to interpret, derive and create meaning through Art. Students aim to create mature Artworks that respond to societal / cultural / historical / personal contexts. The focal point of the course is the Development Workbook (DW); in this sketchbook, students are expected to record their research, experimentation, ideas, planning and reflections & evaluations in both written and visually creative forms. The DW forms a chronological record of a student's artistic development. The Art programme is sequential, as the student moves through the MYP programme they are expected to display greater maturity and independence in their Artwork and personal research. Homework and deadlines are an essential part of the MYP Visual Arts course which must be adhered to. Exposure to MYP key requirements, aims and objectives are similarly re-iterated across the MYP subject areas which aids student understanding, particularly important for students who join LIS part way through the MYP course. The course offers students opportunities to respond to unit themes with independent paths of research and artistic development.

Music

In the year 9 music course each student will develop his/her musicianship as a listener, performer and composer. Students will develop their individual performing skills on a range of classroom instruments, including pitched and unpitched percussion, guitar and keyboard. They will also have opportunity to develop their vocal skills. They will participate in small group and whole class performances, developing effective rehearsal strategies and ensemble performing skills. Students will learn new creative approaches and will apply these in their own original pieces. They will develop their aural skills in learning new music, and will also develop their skills with notation. They will also develop their listening skills and their knowledge and understanding of a range of music from different genres, cultures and geographical contexts; there will be a focus on developing students' ability to describe and appraise music using appropriate technical vocabulary. Ongoing reflection, along with self-evaluation and peer-evaluation will allow students to identify their progress and set goals for further musical development. The developmental workbook will provide a vehicle for the documentation of the musical processes used and for reflection and goal-setting.

Our two units in year 9 will be:

1. Music of Africa: through performance, listening and research students will learn about the traditions, musical characteristics and instruments of musics from various regions and countries of Africa – including that of Angola. The learning of a piece for whole class performance will be done by ear and memory only – mimicking the ways of learning used in African societies.
2. Music for films: students will learn about the role and function of music in a range of film genres. They will explore different creative techniques used by film music composers, and apply these to create a piece of music to accompany a short film clip. Students will also work on group performances of pieces of classic film music.

Drama

What is theatre?

In this year students research the origins of Ancient Greek theatre and become acquainted with the features of these performances and the amphitheatres in which they were held. To develop their creative skills in writing and performing, each student devises a character with a conflict and scripts a monologue for this character. After drafting this script, the students rehearse and perform the monologue to an audience, focusing on the vocal and physical presentation of the character.

Design/Computer Technology

The students create a mobile for a baby or toddler that will stimulate the development of the child and entertain them. The students initially identify the age and gender of their client and following research and experimentation the students create and test their mobile. Other units are in development, the term two major project will be to create a short animated film.

English (Language A)

English in Year 9 aims to develop and refine students' ability to compose and comprehend spoken and written English fluently and critically for a range of purposes. Students are required to practice their English by reading, writing, listening to and speaking English regularly. This will be achieved by; undertaking units of work with a focus based on subject matter and issues related to the MYP areas of interaction. *Textbooks:* Elements of Literature, 2nd Course (HBJ)

Portuguese (Language A)

In addition to the skills learnt previously, students will be able to familiarize themselves with specialized vocabulary in a variety of contexts. They will also analyze summaries, as well as memorizing and retelling their important points. On top of that, they will defend their personal views in a variety of discussions, interpret data in a variety of forms and prepare different types of compositions

Spanish and Portuguese (Language B)

This curriculum is seen as an intermediate consolidation and expansion of the previous years' work. Students are expected to demonstrate the ability to effectively communicate within the 4 interactive skills.

Humanities

This course combines the study of History, Geography, Environmental issues, and aspects of Economics and the Arts through a number of units of enquiry chosen from the following: Human Evolution, Colonization, Trade and Aid, Legacies and Civilizations, Human Population, and Oceans at Risk. The students will strengthen skills in written and oral expression through essay writing, responsive journals, debate, editorial and dramatization. The objectives of the course are to instil an interest in history, geography and current events as part of the framework of modern life, to make connections between historical events and the impact those events have had on the future, and to appreciate the study of history as an extension of man's search for self-knowledge. Some specific skills that will be refined are: reading time lines, understanding map projections, reading primary and secondary source material, analyzing sources of history, reading for details, checking fact and opinion, using documents and visual evidence, asking questions, and recognizing trends. *Textbook: World Cultures* (Prentice Hall) and others

Mathematics

The LIS mathematics curriculum has been developed to encompass five branches. The mathematics curriculum is progressive from one year to the next. For students to successfully complete the Year 9 course, they will need to:

Numeracy: Solve expressions using the order of operations. Investigate problems involving a positive exponent. Investigate problems using square roots. Review estimating using whole numbers and decimals. Calculate fractions as percents and decimals. Express numbers using scientific and standard notation. Solve linear equations. Evaluate equations using a problem solving strategy. Solve equations with polynomials.

Investigate equations in the Cartesian plane. Solve equations using factorisation.

Geometry: Investigate problems by applying Pythagoras' Theorem. Investigate problems using perimeter, area, and volume or various geometric figures. Rotate and translate figures. Identify figures by the type of transformations

Statistics: Collect and interpret data. Create tables and graphs. Calculate the mean, median, and mode.

Physical Education

The Physical Education Programme contributes to the overall education of the students by helping them to lead full and valuable lives through participation in purposeful physical activity. The programme in Secondary School is designed to help students understand the need for exercise, not only at school but also in later life, and to encourage active participation. The curriculum is divided into short duration courses that are revisited in greater depth each year with students taking increasing responsibility for content, organization and assessment. Students develop personal qualities such as commitment, enthusiasm and fairness and the ability to plan and organize their own sporting activities. This enables students to achieve physical competence in a wide variety of sporting activities giving them the self esteem, confidence and will to adopt an active, healthy lifestyle.

Science

In Year Nine the following units and content are being studied

Units	Content
Thermal Energy	<ul style="list-style-type: none">• Temperature vs Thermal energy• Thermal energy transfer• Conduction, convection and radiation• Latent heat• Specific heat capacity
Respiratory and the Circulatory Systems	<ul style="list-style-type: none">• Respiration (aerobic and anaerobic)• Parts of circulatory system• Effect of exercise on pulse rate• Circulatory diseases• Composition of atmosphere
Photosynthesis and plants	<ul style="list-style-type: none">• Experiments as evidence• Leaf structure• Transpiration• Carbon cycle
Speeding up	<ul style="list-style-type: none">• Distance, speed and acceleration• Space relations• Safety
Metals and Metal Reactions	<ul style="list-style-type: none">• Metals and non-metals in the periodic table• Properties of metals• Uses of Metals• Extraction of metals from ores• Reactions of metals
Energy and Chemistry	<ul style="list-style-type: none">• Endothermic and Exothermic Processes• Measuring Energy Changes• Combustion• Fuels• Chemical cells and batteries

Course Outlines for Year 10

The Arts

Visual Arts

The Visual Arts course follows the IB MYP philosophies. Students continue to develop and draw upon their knowledge of Art forms and ideas, through inquiry based units of work, involving independent research. Inherent in the course is that students interpret, derive and create meaning through Art. Students are expected to create mature Artworks that respond to societal / cultural / historical / personal contexts. The focal point of the course is the Development Workbook (DW); in this sketchbook, students are expected to record their research, experimentation, ideas, planning and reflections & evaluations in both written and visually creative forms. The DW forms a chronological record of a student's artistic development. The Art programme is sequential, as the student moves through the MYP programme they are expected to display greater maturity and independence in their Artwork and personal research. Homework and deadlines are an essential part of the MYP Visual Arts course which must be adhered to. The course offers students opportunities to respond to unit themes with independent paths of research and artistic development.

Music

In the year 10 music course each student will develop his/her musicianship as a listener, performer and composer. Students will develop their individual performing skills on a range of classroom instruments, including pitched and unpitched percussion, guitar and keyboard. They will also have opportunity to develop their vocal skills. They will participate in small group and whole class performances, developing effective rehearsal strategies and ensemble performing skills. Students will learn new creative approaches and will apply these in their own original pieces. They will develop their skills with notation as a means of accessing new music and of recording their own compositions. They will also develop their listening skills and their knowledge and understanding of a range of music from different genres, styles and historical contexts, and there will be a focus on developing students' ability to describe and appraise music using appropriate technical vocabulary. Ongoing reflection, along with self-evaluation and peer-evaluation will allow students to identify their progress and set goals for further musical development. The developmental workbook will provide a vehicle for the documentation of the musical processes used and for reflection and goal-setting.

Our two units in year 10 will be:

1. Exploring the Voice: through listening, performance, research, improvisation and composition, students will learn about the creative potential of the human voice and about vocal music – beyond conventional singing. They will learn about different types of voice and vocal ranges and about special vocal techniques used in western and non-western cultures. They will explore some contemporary experimental compositions for the human voice, and apply the ideas used in their own creative work.
2. Compose and perform a song: students will learn about songs based on standard chord sequences; they will learn some theory about chords and about word-setting and will apply this in the composition of a song using a standard chord sequence. Students will investigate the development of pop music from the 1960s to 1980s. They will work on a class performance of a song from this period.

Drama

Theatre Around the World

In this year students explore theatre in other cultures and non-text theatre. After theoretical research and some practical experience, the students devise a scenario from the Italian theatrical tradition, Commedia Dell' Arte and perform it to an invited audience. The students also investigate and research African story-telling techniques, sharing their work with other Year groups.

Design/Computer Technology

The students explore the myriad of uses and unusual properties and then create something from paper, ranging from a kite to paper lanterns to origami puzzles. Each project must highlight one of the properties of paper. Other units are in development, the term two major project will be to create a short animated film.

English (Language A)

In Year 10 the Language A MYP continues to develop students' skills in reading, writing, viewing, listening and speaking with a greater emphasis on the appreciation and analysis of literature as a means to enhance self-expression and communication. Language A English Assessment is based on summative (e.g. projects and tests) and formative (e.g. class exercises, participation and homework etc.) tasks all of which follow the Language A criteria for assessment (A -Content, B -Organization and C -Language Usage and Style).

Portuguese (Language A)

The Language A course allows students both to strengthen and increase the previously acquired knowledge. In class, students are given the opportunity to study in depth some of the main literary works written in Portuguese. At the same time students are asked to present a personal reflection (in written or oral form) on a minimum of three literary works not studied in class (at least one per term). The course is organized in order to prepare students for the Diploma. Therefore and along with the written component the oral component is now at the core of the course. Grammar structures are reviewed according to the students' difficulties and needs.

Spanish and Portuguese (Language B)

In these courses, there is a great emphasis on the acquisition and strengthening of the students' speaking, listening, reading and writing skills, which are all regularly assessed throughout the school year with the 5 MYP language B assessment criteria. In the Modern Language Department, we believe that learning a foreign language should be fun, and with this in mind, we use work units based on topics relevant and interesting for this age group. These materials allow the students to do oral activities and presentations, write different texts such as emails and also analyze texts of different sorts. In addition to this, they broaden their vocabulary, practice previously learnt structures and words, and study new tenses, expressions and sentence structures. The materials used for these units are authentic and through

Humanities

This course combines the study of History, Physical and Human Geography, Environmental issues, and aspects of Economics and the Arts. In the study of History, students study events during the 14th – 16th Centuries in Europe, Asia, and Africa. Topics in Geography include Glaciations, and through the lens of history, the geo-political organization of the world and urbanization. The students will strengthen skills in written and oral expression through essay writing, responsive journals, debate, editorial and dramatization.

The objectives of the course are to instil an interest in history, geography and current events as part of the framework of modern life, to make connections between historical events and the impact those events have had on the future, and to appreciate the study of history as an extension of man's search for self-knowledge. Some specific skills that will be refined are: reading time lines, reading primary and secondary source material, analyzing sources of history, reading for details, checking fact and opinion, using documents and visual evidence, asking questions, and recognizing trends.

Mathematics

The LIS mathematics curriculum has been developed to encompass five branches. The math curriculum is progressive from one year to the next. For students to successfully complete the Year 10 course, they will need to:

Numeracy: Use and apply all the number skills from preceding years. Perform numerical calculations without the aid of a calculator. Limits of accuracy. Increase and decrease a given quantity in a given ratio.

Algebra: Use functional notation $f(x)$. Expand brackets of the form $(ax + b)(cx + d)$. Graph functions. Perform transpositions of formulas. Factor quadratics. Solve quadratic equations by factorisation. Review and extend the equation of a line to the form $y - b = m(x - a)$. Perform direct and inverse variation.

Geometry and Trigonometry: Perform transformations (rotations, reflections, shears, stretches). Explore vectors (definition; addition, subtraction, multiplication by a scalar; magnitude and direction). Plot coordinates in three dimensions using isometric paper. Solve problems using sine, cosine and tangent ratios for right-angled triangles. Use trigonometric identities. Evaluate three-dimensional problems using trigonometry and Pythagoras' Theorem.

Statistics: Read and draw frequency density histograms. Calculate the mean from grouped data. Calculate the probability for single events. Create tree diagrams for both independent and dependant events. Calculate possibility spaces.

Problem solving: Students should be able to apply skills and concepts from above categories and from previous years

Texts: Higher Mathematics for GCSE (Collins) Algebra (McDougal Littell)

Physical Education

The Physical Education MYP contributes to the overall education of the students by helping them to lead full and valuable lives through participation in purposeful physical activity. The in Secondary School is designed to help students understand the need for exercise, not only at school but also in later life, and to encourage active participation. The curriculum is divided into short duration courses that are revisited in greater depth each year with students taking increasing responsibility for content, organization and assessment. Students develop personal qualities such as commitment, enthusiasm and fairness and the ability to plan and organize their own sporting activities. This enables students to achieve physical competence in a wide variety of sporting activities giving them the self esteem, confidence and will to adopt an active, healthy lifestyle.



Science

In Year Ten the following units and content are being studied

Units	Content
Atomic Theory	<ul style="list-style-type: none">• Atomic structure• Electron Configuration• Classifying Elements• Groups• Chemical Bonding• Naming and Formulae of Compounds
Responding to the environment	<ul style="list-style-type: none">• Nervous System• Reflex arch• The eye• Reaction Rates• Homeostasis• Brain function• Muscular and Skeletal System
Waves	<ul style="list-style-type: none">• Electromagnetic spectrum• Longitudinal vs. transverse waves• Transmission of waves (reflection, refraction, diffraction)• Properties of waves• Use of data logging equipment• Artificial devices to aid hearing and sight
Electromagnetism	<ul style="list-style-type: none">• Voltage, Current, Charge and Resistance• Ohmic and non-ohmic conductors• Electromagnetism• Static electricity• Uses of electromagnetism• Concerns about the uses of electromagnetism
Ecology and Cycles	<ul style="list-style-type: none">• Classification• Food chains/webs• Trophic Levels• Carbon/Nitrogen Cycles• Population Studies and Field Work
Organic Chemistry	<ul style="list-style-type: none">• Parts of crude oil• Fractional distillation• Alkanes and alkenes• Polymerization• Cracking• Biotechnology

Course Outlines for Year Eleven

The Arts

Visual Arts

The Visual Arts course follows the IB MYP philosophies. Students continue to develop and draw upon their knowledge of Art forms and ideas, through inquiry based units of work, involving independent research. Inherent in the course is that students interpret, derive and create meaning through Art. Students are expected to create mature Artworks that respond to societal / cultural / historical / personal contexts. The focal point of the course is the Development Workbook (DW); in this sketchbook, students are expected to record their research, experimentation, ideas, planning and reflections & evaluations in both written and visually creative forms. The DW forms a chronological record of a student's artistic development. The Art MYP is sequential, as the student moves through the MYP programme they are expected to display greater maturity and independence in their Artwork and personal research. Homework and deadlines are an essential part of the MYP Visual Arts course which must be adhered to. The Year 11 course offers the students the opportunity to follow independent paths of research and artistic development to create a project that is the culmination of their learning and skill development. This independent work is very relevant and useful for students intending to study Visual Arts in the Diploma Programme and those who wish to pursue other artistic and creative paths.

Drama

Making Theatre

In this year students participate in a formal production open to the public. Their role may vary according to each year's particular production but the purpose of this unit is to develop the students' performance skills. The art of making theatre involves designing and making costumes, designing and applying make-up, designing and creating sound, designing and operating lighting, designing and coordinating programmes and publicity and a multitude of other arts and crafts. In groups, the students take a design or technical responsibility for the production involving research, design and construction. For this current year the students are designing and making costumes for the comedy about the Trojan War, For Our Sport.

Music

In the year 11 music course each student will develop his/her musicianship as a listener, performer and composer. Students will develop their individual performing skills on a range of classroom instruments, including pitched percussion, guitar and keyboard. They will participate in small group and whole class performances, developing effective rehearsal strategies and ensemble performing skills. Students will learn new creative approaches and will apply these in their own original pieces. They will develop their skills with notation as a means of accessing new music and of recording their own compositions. They will also develop their listening skills and their knowledge and understanding of a range of music from different genres, styles and historical and cultural contexts, and there will be a focus on developing students' ability to describe and appraise music using appropriate technical vocabulary. Ongoing reflection, along with self-evaluation and peer-evaluation will allow students to identify their progress and set goals for further musical development.

The developmental workbook will provide a vehicle for the documentation of the musical processes used and for reflection and goal-setting.

Our two units in year 11 will be:

1. Variations: through listening, performing, improvising and composing students will learn about variation form and will be introduced to a wide range of techniques for creating variations on a given melody. Musical examples for investigation will be drawn from western art music from the 18th century onwards. Students will apply techniques learned in their own compositions in variation form
2. The Blues: students will learn about the historical, geographical and social factors which gave rise to blues music; they will learn to identify the important characteristic of this style, and will learn about its importance in the development of other styles, such as jazz and pop and rock music. By learning about chord sequence, bass line, melody and improvisation using the blues scale, students will build their own small group performances of an instrumental blues.

Design/Computer Technology

The students are making books, after extensive research they will create a book entirely of their own design and with a function identified by the student. Dairies, recipe books, scrap books, children's stories and many more would be good projects to explore. Other units are under development, term two students will be designing and making clocks and other time keeping devices, term three is expected to be an open unit, the students will design their own project and write their own unit plans.

English (Language A)

In Year 11 the Language A English programme develops skills in reading writing and speaking with an emphasis on the appreciation and analysis of literature as a means to enhance self-expression and communication. Language A English Assessment is based on summative (e.g. projects and tests) and formative (e.g. class exercises, participation and homework etc.) tasks all of which follow the Language A criteria for assessment (Content, Organization and Language Usage and Style).

Portuguese (Language A)

The Language A course allows students both to strengthen and increase the previously acquired knowledge. In class students are given the opportunity to study in depth some of the main literary works written in Portuguese. At the same time, students are asked to present a personal reflection (in written or oral form) on a minimum of three works not studied in class (at least one per term). The course is organized in order to prepare students for the Diploma. Therefore and along with the written component the oral component is now at the core of the course. Grammatical structures are reviewed according to the students' difficulties and needs.

Spanish and Portuguese (Language B)

In these courses, there is a great emphasis on the acquisition and strengthening of the students' speaking, listening, reading and writing skills, which are all regularly assessed throughout the school year with the 5 MYP language B assessment criteria.

In the Modern Language Department, we believe that learning a foreign language should be fun, and with this in mind, we use work units based on topics relevant and interesting for this age group. These materials allow the students to do oral activities and presentations, write different texts such as emails and also analyze texts of different sorts. In addition to this, they broaden their vocabulary, practice previously learnt structures and words, and study new tenses, expressions and sentence structures. The materials used for these units are authentic and through these and their native speaking teachers, students get immersed in the target language for the duration of the course.

Humanities

This course takes the form of a synthesis of the different strands in Humanities. It includes units of study on physical and human geography, colonialism in the eighteenth and nineteenth centuries, globalisation and human rights issues. Students will strengthen their written and oral skills through essay writing, interpretation of data, debates, group and individual projects and class discussion.

We hope to instil interest in Humanities and enable students to see the connections between aspects of the subject. Ultimately, we aim to ensure that students have the necessary critical thinking skills to be able to confidently embark on the individual Humanities courses, Economics and History that we currently offer at Diploma level. These include researching information, analyzing documents, checking fact and opinion, asking questions and recognizing trends, and presenting a balanced argument.

A variety of resources are used including class textbooks, library books, student work packs, DVDs and the internet.

Mathematics

The LIS mathematics curriculum has been developed to encompass five branches. The math curriculum is progressive from one year to the next. For students to successfully complete the Year 11 course, they will need to:

Numeracy: Use and apply all the number skills from preceding years. Perform numerical calculations without the aid of a calculator.

Algebra: Complete the square and state min and max turning points on the graphs of the function. Prove and use the quadratic formula. Perform linear programming. Evaluate simultaneous equations with one quadratic and one linear, using substitution. Evaluate matrices (order, addition, multiplication, determinant and inverse, for systems of equations, use in rotations and transformations). Solve equations using the inverse of a function.

Geometry and Trigonometry: Use the sine and cosine rules. Explore $\text{Area} = \frac{1}{2}bc\sin A$.

Explore the periodic nature of trig functions and their graphs ($0 \leq x \leq 360$). Find bearing and navigation using the above.

Statistics: Read and draw cumulative frequency graphs. Use standard deviation (most basic cases). Explore mutually exclusive and independent events. Explore conditional probability (introduction).

Discrete Mathematics: Investigate problems involving networks.

Problem solving Students should be able to apply skills and concepts from above categories and from previous years.

Texts: Higher Mathematics for GCSE (Collins)

Physical Education

The Physical Education Programme contributes to the overall education of the students by helping them to lead full and valuable lives through participation in purposeful physical activity. The programme in Secondary School is designed to help students understand the need for exercise, not only at school but also in later life, and to encourage active participation. The curriculum is divided into short duration courses that are revisited in greater depth each year with students taking increasing responsibility for content, organization and assessment. Students develop personal qualities such as commitment, enthusiasm and fairness and the ability to plan and organize their own sporting activities. This enables students to achieve physical competence in a wide variety of sporting activities giving them the self esteem, confidence and will to adopt an active, healthy lifestyle.

Science

In Year Eleven the following units and content are being studied

Units	Content
Stoichiometry	<ul style="list-style-type: none">• Avogadro's number• Quantifying chemical reactions• Balancing Equations• Solutions• Gases• Limiting Reagents
Population and Reproduction	<ul style="list-style-type: none">• Population Growth• Predator/Prey Relationships• Sexual/Asexual Reproduction• Human Reproduction
Mechanics	<ul style="list-style-type: none">• Velocity/speed• Acceleration• Equations of motion• Kinetic energy• Gravitational potential energy• Momentum• Newton's Laws• Energy conservation
Rates of Reaction	<ul style="list-style-type: none">• Ways of measuring rate of reactions• Temperature and rate• Particle Size and rate• Concentration and rate• Catalysts and enzymes• Industrial importance of rate
Radiation	<ul style="list-style-type: none">• How we use radiation• Impact of its uses• How it is viewed by society• Ethical considerations of its uses
Genetics	<ul style="list-style-type: none">• Variation and Normal Distribution• Cell Structure• Monohybrid Inheritance• Genetic Diseases

References and Further Information

Much of the information above has been taken directly from the IBO websites. More detailed information can be found on the following websites

The three IBO programmes <http://www.ibo.org/programmes/>

The MYP <http://www.ibo.org/myp/>

IBO facts and figures <http://www.ibo.org/general/who.cfm>

