



MERCEDES COLLEGE

COMPASSION LOYALTY JUSTICE INTEGRITY RESPONSIBILITY MUTUAL RESPECT

International Baccalaureate Middle Years Programme

Curriculum Handbook 2016

(Updated April 2016)

Contents

Contents	2
Introduction	3
Background Information	4
The IB mission statement <i>“Education for life”</i>	4
The Middle Years Programme	4
The IB Learner Profile	5
MYP Fundamental Concepts	5
Teaching and learning in the IB	6
Global Contexts	6
Approaches to Learning	7
Assessment	8
Conversion of International Baccalaureate MYP Grades	9
Personal Project	9
MYP Certification	9
Areas of Study	10
Curriculum Outline	10
Lesson Allocation	11
Religious Education	13
The Arts	15
Design	18
Individuals and Societies	21
Language and Literature	23
Language Acquisition	26
Mathematics	30
Physical and Health Education	34
Science	36
Study Extension Program (STEP)	39
Homework Guidelines	40
Assessment Guidelines	41
Glossary of MYP Terms	42
Command terms	45
Curriculum Contact Details	47

Introduction

The curriculum for Mercedes College is provided by the International Baccalaureate (IB). The Primary Years Programme (PYP) is undertaken from Reception to Year 5; the Middle Years Programme (MYP) is studied by students in Years 6 to 10; and the Diploma Programme (DP) is available in Years 11 and 12. The South Australian Certificate of Education (SACE) is also offered at Years 11 and 12.

The MYP provides a common framework that is consistent across all levels and areas of study within the College.

In the programme model for the MYP, the first ring around the student at the centre describes the features of the programme that help students develop disciplinary (and interdisciplinary) understanding.

- Approaches to learning (ATL)—demonstrating a commitment to approaches to learning as a key component of the MYP for developing skills for learning.
- Approaches to teaching—emphasizing MYP pedagogy, including collaborative learning through inquiry.
- Concepts—highlighting a concept-driven curriculum.
- Global contexts—showing how learning best takes place in context.

The second ring describes some important outcomes of the programme.

- Inquiry-based learning may result in student-initiated action, which may involve service within the community.
- The MYP culminates in the personal project in MYP year 5.

The third ring describes the MYP's broad and balanced curriculum.

- The MYP organizes teaching and learning through eight subject groups: language and literature, language acquisition, individuals and societies, sciences, mathematics, arts, physical and health education, and design.
- Discrete disciplines are taught and assessed within some subject groups: for example, history or geography within the individuals and societies subject group; biology, chemistry and physics within the sciences subject group.
- The distinction between subject groups blurs to indicate the interdisciplinary nature of the MYP. The subject groups are connected through global contexts and key concepts.

At Mercedes College a strong emphasis is placed on the rigour of the individual areas of study while promoting links between these. The MYP provides students with an excellent knowledge and range of skills that are the foundation for future study.

Students are indeed fortunate to have the opportunity to undertake the MYP as an international curriculum. We hope that they pursue excellence within the MYP and wish them every success.

The staff at Mercedes College look forward to guiding and sharing the students' MYP journey.

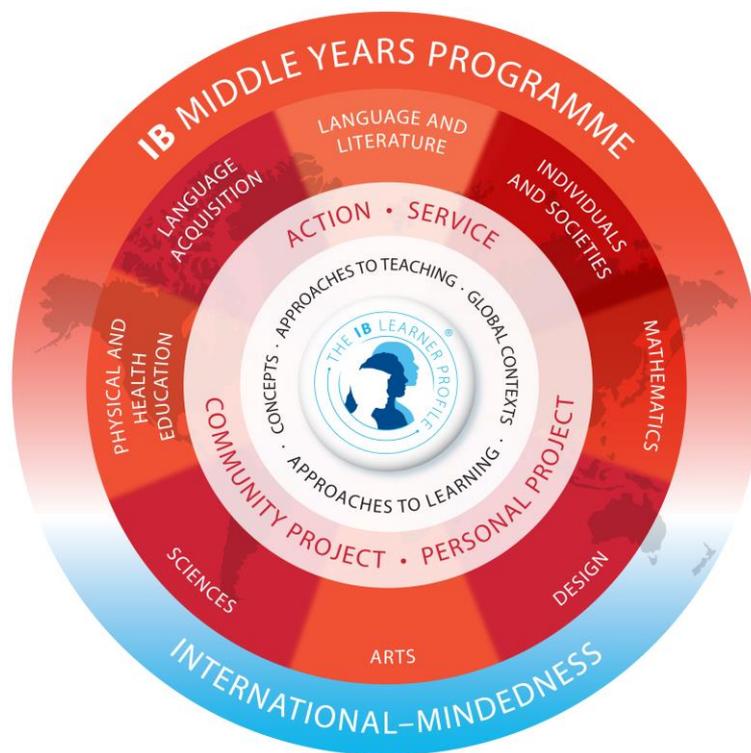
If you have any questions, concerns or comments about the MYP curriculum please do not hesitate to contact one of the following staff members.

Yours sincerely,

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Background Information

Historical Background

The International Baccalaureate (IB) offers three programmes:

- the Primary Years Programme (PYP) for students aged 3 –12, available since 1997
- the Middle Years Programme (MYP), designed as a five-year programme for students aged 11–16, available since 1994
- the Diploma Programme (DP), an internationally recognized pre-university course of study for students aged 16–19, available since the late 1960s.

The MYP began as an initiative formulated by groups of practising teachers and administrators in international education who wanted to develop a curriculum for the middle years of schooling. It was intended that this curriculum would share much of the same philosophy as the DP and would prepare students for success in the DP. The first draft of the MYP curriculum was produced in 1987 when a group of practitioners created a framework that allowed for a degree of diversity. In this framework, emphasis was placed on developing the skills and attitudes, the understanding of concepts and the knowledge needed to participate in an increasingly global society. The MYP grew out of the work and vision of practising teachers in schools.

The MYP has been designed as a coherent and comprehensive curriculum framework that provides academic challenge and develops the life skills of students from the ages of 11 to 16. These years are a critical period in the development of young people. Success in school is closely related to personal, social and emotional well-being. At a time when students are establishing their identity and building their self-esteem, the MYP can motivate students and help them to achieve success in school and in life beyond the classroom. The programme allows students to build on their personal strengths and to embrace challenges in subjects in which they might not excel. The MYP offers students opportunities to develop their potential, to explore their own learning preferences, to take appropriate risks, and to reflect on, and develop, a strong sense of personal identity.

The IB mission statement “Education for life”

The International Baccalaureate 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 organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

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.

The Middle Years Programme

The Middle Years Programme (MYP) provides a framework of academic challenge and life skills for students aged 11-16 years. The five-year programme offers an educational approach that embraces yet transcends traditional school subjects. It follows naturally the Primary Years Programme and serves as excellent preparation for the Diploma Programme and the South Australia Certificate of Education.

The MYP aims to develop in students:

- The disposition and capacity to be lifelong learners;
- The capacity to adapt to a rapidly changing reality;
- Problem solving and practical skills and intellectual rigour;
- The capacity and self-confidence to act individually and collaboratively;
- An awareness of global issues and the willingness to act responsibly;
- The ability to engage in effective communication across frontiers;
- Respect for others and an appreciation of similarities and differences.

The IB Learner Profile

IB programmes promote the education of the whole person, emphasizing intellectual, personal, emotional and social growth through all domains of knowledge. By focusing on the dynamic combination of knowledge, skills, independent critical and creative thought and international-mindedness, the IB espouses the principle of educating the whole person for a life of active, responsible citizenship. Underlying the three programmes is the concept of education of the whole person as a lifelong process. The learner profile is a profile of the whole person as a lifelong learner.

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.

IB learners 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.

MYP Fundamental Concepts

From its beginning, the MYP was guided by three principles that have had special currency for learners aged 11–16, inspired by the IB mission: **holistic learning**, **intercultural awareness** and **communication**. These fundamental concepts of the programme provided a strong foundation for teaching and learning in the MYP. They represent an early attempt to establish a philosophy of international education that the IB now recognizes more fully with the adoption of the IB learner profile across the IB continuum.

Holistic learning, intercultural awareness and communication are implied in, or are a part of, the IB learner profile, especially in the attributes “balanced”, “open-minded” and “communicators”.

Contemporary MYP educators have continued to focus on how best to meet the needs of adolescents, who are confronted with a vast and often bewildering array of choices in a complex and rapidly changing world.

A focus on higher-order thinking skills gives students opportunities to explore their expanding concerns and their growing awareness of themselves and the world in ways that develop sound judgment.

Teaching and learning in the IB

Teaching and learning in the IB grows from an understanding of education that celebrates the many ways people work together to construct meaning and make sense of the world. Represented as the interplay between asking (inquiry), doing (action) and thinking (reflection), this constructivist approach leads towards open classrooms where different views and perspectives are valued. An IB education empowers young people for a lifetime of learning, both independently and in collaboration with others. It prepares a community of learners to engage with complex global challenges through a dynamic educational experience framed by inquiry, action and reflection.

Inquiry

Sustained inquiry frames the written, taught and assessed curriculum in IB programmes. IB programmes feature structured inquiry, drawing from established bodies of knowledge and complex problems. In this approach, prior knowledge and experience establish the basis for new learning, and students' own curiosity, together with careful curriculum design, provide the most effective stimulus for learning that is engaging, relevant, challenging and significant.

Action

Principled action, as both a strategy and an outcome, represents the IB's commitment to teaching and learning through practical, real-world experience. IB learners act at home, as well as in classrooms, schools, communities and the broader world. Action involves learning by doing, enhancing learning about self and others. IB World Schools value action that encompasses a concern for integrity and honesty, as well as a strong sense of fairness that respects the dignity of individuals and groups.

Challenging learning environments help students to develop the imagination and motivation they require in order to meet their own needs and the needs of others. Principled action means making responsible choices, sometimes including decisions not to act. Individuals, organizations and communities can engage in principled action when they explore the ethical dimensions of personal and global challenges. Action in IB programmes may involve service learning, advocacy and educating one's self and others.

Reflection

Critical reflection is the process by which curiosity and experience can lead to deeper understanding. Learners must become critically aware of the way they use evidence, methods and conclusions. Reflection also involves being conscious of potential bias and inaccuracy in their own work and in the work of others.

An IB education fosters creativity and imagination. It offers students opportunities for considering the nature of human thought and for developing the skills and commitments necessary not only to recall information but also to analyse one's own thinking and effort in terms of the products and performances that grow from them.

Driven by inquiry, action and reflection, IB programmes aim to develop a range of skills and dispositions that help students effectively manage and evaluate their own learning. Among these essential approaches to learning are competencies for research, critical and creative thinking, collaboration, communication, managing information and self-assessment.

Global Contexts

Students at the MYP age range learn best when their learning experiences have context and are connected to their lives and to the world that they have experienced. When learning becomes meaningful and relevant, students are more likely to be engaged

Teaching and learning in the MYP involves understanding concepts in context. Global contexts provide a common language for powerful contextual learning, identifying specific settings, events or circumstances that provide more concrete perspectives for teaching and learning. When teachers select a global context for learning, they are answering the following questions.

- Why are we engaged in this inquiry?
- Why are these concepts important?
- Why is it important for me to understand?
- Why do people care about this topic?

MYP global contexts provide common points of entry for inquiries into what it means to be internationally minded, framing a curriculum that promotes multilingualism, intercultural understanding and global engagement. These contexts build on the powerful themes of global significance that structure teaching and learning in the PYP, creating relevance for adolescent learners.

Global context	Focus question(s) and description
Identities and relationships	Who am I? Who are we? Students will explore identity; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities and cultures; what it means to be human.
Orientation in space and time	What is the meaning of “where” and “when”? Students will explore personal histories; homes and journeys; turning points in humankind; discoveries; explorations and migrations of humankind; the relationships between, and the interconnectedness of, individuals and civilizations, from personal, local and global perspectives.
Personal and cultural expression	What is the nature and purpose of creative expression? Students will explore the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.
Scientific and technical innovation	How do we understand the world in which we live? Students will explore the natural world and its laws; the interaction between people and the natural world; how humans use their understanding of scientific principles; the impact of scientific and technological advances on communities and environments; the impact of environments on human activity; how humans adapt environments to their needs.
Globalization and sustainability	How is everything connected? Students will explore the interconnectedness of human-made systems and communities; the relationship between local and global processes; how local experiences mediate the global; the opportunities and tensions provided by world interconnectedness; the impact of decision-making on humankind and the environment.

Approaches to Learning

Through approaches to learning (ATL) students develop skills that have relevance across the curriculum that help them “learn how to learn”. ATL skills provide a solid foundation for learning independently and with others as well as help students prepare for, and demonstrate learning through, meaningful assessment. They provide a common language that students and teachers can use to reflect on, and articulate on, the process of learning. While ATL skills are not formally assessed in the MYP, they contribute to students’ achievement in all subject groups

IB programmes identify five ATL skill categories, expanded into developmentally appropriate skill clusters.

ATL skill categories	MYP ATL skill clusters
Communication	I. Communication
Social	II. Collaboration
Self-management	III. Organization IV. Affective V. Reflection
Research	VI. Information literacy VII. Media literacy
Thinking	VIII. Critical thinking IX. Creative thinking X. Transfer

Assessment

The MYP uses a criterion-referenced model of assessment. Assessment throughout the five years of the programme is against criteria linked to specific objectives. The IB publishes criteria and descriptors, for years 1,3 and 5 of the programme, which cannot be changed by individual schools and are therefore common to all students across the world. The College uses the published criteria and descriptors for all students

For each assessment criterion, a number of band descriptors are defined. These describe a range of achievement levels with the lowest represented as 1. The descriptors concentrate on positive achievement, although failure to achieve may be included in the description for the lower levels. Detailed band descriptors are included with summative assessment tasks.

Teachers at the College internally assess the work of students who undertake the MYP. There are no external exams in any year of the programme. A final grade from 1 to 7 is determined based on the total level of achievement gained in subject criteria against grade boundaries. The final grade is cross-referenced with the general grade descriptors outlined in the table below:

Grade	Boundary guidelines	Descriptor
Grade 1	1–5	Produces work of very limited quality. Conveys many significant misunderstandings or lacks understanding of most concepts and contexts. Very rarely demonstrates critical or creative thinking. Very inflexible , rarely using knowledge or skills.
Grade 2	6–9	Produces work of limited quality. Expresses misunderstandings or significant gaps in understanding for many concepts and contexts. Infrequently demonstrates critical or creative thinking. Generally inflexible in the use of knowledge and skills, infrequently applying knowledge and skills.
Grade 3	10–14	Produces work of an acceptable quality. Communicates basic understanding of many concepts and contexts, with occasionally significant misunderstandings or gaps. Begins to demonstrate some basic critical and creative thinking. Is often inflexible in the use of knowledge and skills, requiring support even in familiar classroom situations.
Grade 4	15–18	Produces good -quality work. Communicates basic understanding of most concepts and contexts with few misunderstandings and minor gaps. Often demonstrates basic critical and creative thinking. Uses knowledge and skills with some flexibility in familiar classroom situations, but requires support in unfamiliar situations.
Grade 5	19–23	Produces generally high -quality work. Communicates secure understanding of concepts and contexts. Demonstrates critical and creative thinking, sometimes with sophistication. Uses knowledge and skills in familiar classroom and real-world situations and, with support , some unfamiliar real-world situations.
Grade 6	24–27	Produces high -quality, occasionally innovative work. Communicates extensive understanding of concepts and contexts. Demonstrates critical and creative thinking, frequently with sophistication. Uses knowledge and skills in familiar and unfamiliar classroom and real world situations, often with independence .
Grade 7	28–32	Produces high -quality, frequently innovative work. Communicates comprehensive , nuanced understanding of concepts and contexts. Consistently demonstrates sophisticated critical and creative thinking. Frequently transfers knowledge and skills with independence and expertise in a variety of complex classroom and real-world situations.

Conversion of International Baccalaureate MYP Grades

The following table is provided to assist in comparing IB MYP grading to other common assessment models and descriptors commonly used around the world.

IB MYP Grade	GPA	A to E Grade	Description	Percentile
7	4	A+	Excellent	95 and above
6	3.7	A-	Very Good	83-94
5	3.0	B	Very Good	70-82
4	2.7	B-	Good	56-69
3	2	C	Good	41-55
2	1.0	D+	Limited	21-40
1	0	E	Limited	20 or below

Personal Project

The Personal Project is a requirement of the MYP for all schools. The Personal Project holds a very important place in the programme as it provides an excellent opportunity for students to produce a truly creative piece of work of their choice and to demonstrate the skills they have developed in approaches to learning. This project is not tied to a particular subject but rather encourages students to explore a wide range of interests.

Although the global contexts are not awarded individual grades, they are central to the experience of the Personal Project, which is intended to be the culmination of the student's involvement with the five global contexts. The project is completed during the last year of the student's participation in the MYP (Year 10).

The student works through a process and method of their choice under the supervision of a mentor who is usually one of the teachers at the College. The Personal Project must be accompanied by a report that describes the student's method and approach followed by a personal response to the issues concerned. The Personal Project is assessed against the criteria published by the IB.

MYP Certification

By completing the requirements of IB Middle Years Programme, students will be eligible to receive a Mercedes College MYP certificate. Minimal requirements include:

- Participation in the programme for at least the final two years (Year 9 and 10)
- Meeting expectations of Community and Service to the satisfaction of the College
- Gaining a grade total of at least 42 points (out a possible maximum of 70) from the nine subject groups (including Religious Education) and the Personal Project
- No subject can receive a grade of 1
- Personal Project must receive a grade of 3 or higher

Certificates include:

- **Certificate of Distinction** for students who achieve a grade total of **56** or higher
- **Certificate of Merit** for achieving a **7** in any individual subject
- **MYP Certificate** for meeting the requirements of the programme
- **MYP Participation** for students who have engaged in the programme but have not met the minimum requirements

Areas of Study

At each year level of the programme students must study a subject from each of the eight areas of learning.

At Mercedes College these are:

Arts: Visual Arts (Art or Media); Performing Arts (Music or Drama)

Design: Design

Language and Literature: English (our language of instruction)

Language Acquisition: French, Indonesian or Language Appreciation (Year 10 new students only)

Individuals and Societies: History, Geography and Civics & Citizenship

Mathematics: Mathematics, Extension Mathematics

Sciences: Physics, Chemistry and Biology

Physical and Health Education: Physical and Health Education

These areas of study are supported by compulsory lessons in **Religious Education** as well as the Growth and Personal Skills (**GPS**) programme.

In Year 10, the SACE Stage 1 core requirement of the **Personal Learning Plan** is undertaken.

Curriculum Outline

Areas of Study (Subject Name)	Year				
	6	7	8	9	10
Arts:					
Art	✓	✓	✓	✓	✓
Drama	✓	✓	✓	✓	✓
Music	✓	✓	✓	✓	✓
Media	✓	✓	✓	✓	✓
Design	✓	✓	✓	✓	✓
Individuals and Societies					
Geography	✓	✓	✓	✓	
History	✓	✓	✓	✓	✓
Civics and Citizenship		✓			✓
Business and Economics					✓
Language and Literature					
English	✓	✓	✓	✓	✓
Language Acquisition					
French	✓	✓	✓	✓	✓
Indonesian	✓	✓	✓	✓	✓
Language Appreciation					✓
Mathematics	✓	✓	✓	✓	✓
Physical and Health Education	✓	✓	✓	✓	✓
Science	✓	✓	✓	✓	✓
Religious Education	✓	✓	✓	✓	✓
STEP				✓	✓
Personal Learning Plan (SACE)					✓

Lesson Allocation

Year 6 Course

AREA OF STUDY	SUBJECT	LESSONS
Religious Education	Religious Education	3
GPS	Growth & Personal Skills	1
Arts (semester rotations)	Visual Art (Art / Media)	4
	Performing Art (Drama / Music)	
Design	Design	2
Individuals and Societies	History/Geography/Civics & Citizenship	4
Language and Literature	English	5
Language Acquisition	French	2
	Indonesian	2
Mathematics	Mathematics	5
Physical and Health Education	Physical Education & Health	4
Science	Science	4

Year 7 Course

AREA OF STUDY	SUBJECT	LESSONS
Religious Education	Religious Education	3
GPS	Growth & Personal Skills	1
Arts (semester rotations)	Visual Art (Art / Media)	4
	Performing Art (Drama & Music)	
Design	Design	2
Individuals and Societies	History/Geography/Civics & Citizenship	4
Language and Literature	English	5
Language Acquisition	French OR Indonesian	4
Mathematics	Mathematics	5
Physical and Health Education	Physical Education & Health	4
Science	Science	4

Year 8 Course

AREA OF STUDY	SUBJECT	LESSONS
Religious Education	Religious Education	3
GPS	Growth & Personal Skills	1
Arts – Semester One	Visual Art (Art / Media)	2
	Performing Art (Drama & Music)	2
Arts – Semester Two	Musical Production	4
Design	Design	2
Individuals and Societies	History/Geography/Civics & Citizenship	4
Language and Literature	English	5
Language Acquisition	French OR Indonesian	4
Mathematics	Mathematics	5
Physical and Health Education	Physical Education & Health	4
Science	Science	4

Year 9 Course

AREA OF STUDY	SUBJECT	LESSONS
Religious Education	Religious Education	2/4
GPS	Growth & Personal Skills	1
Electives	Art, Drama, Media, Music, Design	4
Individuals and Societies	History / Geography / Citizenship	4/5
Language and Literature	English	5
Language Acquisition	French OR Indonesian	4
Mathematics	Mathematics	5
Physical and Health Education	Physical Education & Health	4
Science	Science	4
	STEP	3/0

Year 10 Course

AREA OF STUDY	SUBJECT	LESSONS
Religious Education	Religious Education	3
GPS	Growth & Personal Skills	1
Electives	Art, Drama, Media, Music, Design or STEP (semester only)	4
Individuals and Societies	History / Geography	4
Language and Literature	English	5
Language Acquisition	French OR Indonesian OR Language Appreciation	4
Mathematics	Mathematics or Extended Mathematics	5
Physical and Health Education	Physical Education & Health	4
Science	Science	4
SACE	Personal Learning Plan	2

Religious Education

Overview

"We should be as the compass that goes round its circle without stirring from its centre – our centre is God, from whom all our actions should spring." (Catherine McAuley)

The faith formation of young people is the outcome of the inter-relationship between them, their families and the Church of which the school is a part. This inter-relationship takes place within Australian and World culture. The ethos, the pervading spirit, and the character of Mercedes College, underpinned by the Mercy Keys of Compassion, Loyalty, Justice, Integrity, Responsibility, and Mutual Respect, is critical in the faith formation of our students. This formation takes place in a context where people live out personally and communally the values of the Gospels. This formation incorporates a number of mutually informing components:

- Liturgy
- Religious Education classroom programme
- Support for justice in all of school life
- Retreats and reflection days
- Outreach or community service
- The formation of the spirituality of the students
- Prayer
- Everyday experience

Crossways Foundation Document states that the basis of our teaching in Catholic schools is based on "Religious Education supporting the integration of faith, life and culture".

"The mission of the Church, its entire work, is evangelisation - that is, to proclaim and live the reign of God. This is shaped through Word, sacrament, witness and service. Evangelisation happens in the context of the interpersonal relationship between the universal Church, Australian church, the local Church and other agencies including Catholic schools. Partnerships between families, parishes and Catholic schools need to be understood in light of this communion."

"Students come from a variety of cultural backgrounds and live in diverse family structures. Students are influenced by global and cultural forces, including those of the mass media, internet and entertainment industry. Students are affected by socio-economic factors, politics and health and employment issues. One of the most important challenges for evangelisation and education is to make meaningful connections with the worlds of the

"The fundamental task of the Catholic school is to create a synthesis between culture, faith and life ... by integration all the different aspects of human knowledge through the subjects taught, in the light of the Gospel."

"The Catholic school, in partnership with parents and families, educates the whole person, taking into account the students' intellectual, moral, spiritual, religious, physical and social development. In nurturing the intellectual faculties, the Catholic school develops a capacity for sound judgement and introduces the students to the cultural heritage handed down to them by former generations. The Catholic school promotes values drawn from the Tradition in order to prepare students for more active participation in the world. Hence, education in the Catholic school is understood as both a work of love and a service to society."

"The Key Learning Area of Religious Education makes a critical contribution to the life and learning of the Catholic school. The purpose of Religious Education is to deepen students' understanding of the Tradition and to develop an appreciation of its significance in their lives, so that they may participate effectively in the life of the Church and wider society." (Crossways, Religious Education Framework for SA Catholic Schools)

Units of Study

Years 6-9

The units studied will be selected from the following topics.

<ul style="list-style-type: none"> • Created in the Image of God • God and Revelation • Textual Interpretation (Scripture) • Church and Community 	<ul style="list-style-type: none"> • Discipleship and the Reign of God • Moral Decision Making • Religious Authority for Ethics • Social Justice and Ethical Issues 	<ul style="list-style-type: none"> • Sacraments and Sacramentality • Prayer and Liturgy • The Liturgical Year of the Church • Religious Traditions
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Year 10

Students undertake the following units of study:

<ul style="list-style-type: none">• <i>Created in the Image of God</i>• <i>Religious Authority for Ethics</i>• <i>Church and Community</i>• <i>Discipleship and the Reign of God</i>	<ul style="list-style-type: none">• <i>Moral Decision Making</i>• <i>Sacraments and Sacramentality</i>• <i>Prayer and Liturgy</i>• <i>Religious Traditions</i>
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Assessment Tasks

Assessment can take many forms including tests, research assignments, oral reports, cooperative/group learning tasks, worksheets, bookwork and creative expression.

Assessment Criteria

As in all other subject areas, assessment has an important function in Religious Education. The areas of consideration are:

CRITERION A Knowledge and Understanding

Maximum 8

Knowledge and Understanding are fundamental to Religious Education and can be assessed through a wide variety of tasks (tests, examinations, written assignments, oral interviews and presentations, extended writing, projects, exhibits, etc.)

CRITERION B Investigating

Maximum 8

Through Religious Education, students demonstrate and further develop their skills in literacy, information and communication technologies, analysis and comparison.

CRITERION C Communicating

Maximum 8

Students demonstrate an ability and willingness to physically and extensively involve themselves in all aspects of the Religious Education Programme.

CRITERION D Thinking Critically

Maximum 8

This criterion covers the student's ability to express ideas with clarity and coherence, to structure work in a sustained and logical fashion and support with relevant examples.

Area of Study Contact(s):

Religious Education Coordinator:

6 - 10 Mrs Tamara Smith

11 - 12 Mrs Helen Ayliffe

The Arts

The aim of art is to represent not the outward appearance of things, but their inward significance.

Aristotle

Overview

The arts are a universal form of human expression and a unique way of knowing that engage us in effective, imaginative and productive activities. Learning through the arts helps us to explore, shape and communicate our sense of identity and individuality. A focus on the individual enhances our self-confidence, resilience and adaptability. It encourages our sense of belonging and community through the recognition of identities. During adolescence, the arts provide an opportunity for age-appropriate and holistic development of the social, emotional, intellectual and personal intelligences of the student.

In MYP arts students have opportunities to function as artists, as well as learners of the arts. Artists have to be curious. By developing curiosity about themselves, others and the world, students become effective learners, inquirers and creative problem-solvers. Students develop through creating, performing and presenting arts in ways that engage and convey feelings, experiences and ideas. It is through this practice that students acquire new skills and master those skills developed in prior learning.

Arts in the MYP stimulate young imaginations, challenge perceptions and develop creative and analytical skills. Involvement in the arts encourages students to understand the arts in context and the cultural histories of artworks, thus supporting the development of an inquiring and empathetic world view. Arts challenge and enrich personal identity and build awareness of the aesthetic in a real-world context.

Aims

The aims of MYP arts are to encourage and enable students to:

- create and present art
- develop skills specific to the discipline
- engage in a process of creative exploration and (self-)discovery
- make purposeful connections between investigation and practice
- understand the relationship between art and its contexts
- respond to and reflect on art
- deepen their understanding of the world.

Objectives

The objectives of MYP arts encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation.

A. Knowing and understanding

Through the study of theorists and practitioners of the arts, students discover the aesthetics of art forms and are able to analyse and communicate in specialized language. Using explicit and tacit knowledge alongside an understanding of the role of the arts in a global context, students inform their work and artistic perspectives.

In order to reach the aims of arts, students should be able to:

- i. demonstrate knowledge and understanding of the art form studied, including concepts, processes, and the use of subject-specific terminology
- ii. demonstrate an understanding of the role of the art form in original or displaced contexts
- iii. use acquired knowledge to purposefully inform artistic decisions in the process of creating artwork.

B. Developing skills

The acquisition and development of skills provide the opportunity for active participation in the art form and in the process of creating art. Skill application allows students to develop their artistic ideas to a point of realization. The point of realization could take many forms. However, it is recognized as the moment when the student makes a final commitment to his or her artwork by presenting it to an audience. Skills are evident in both process and product.

In order to reach the aims of arts, students should be able to:

- i. demonstrate the acquisition and development of the skills and techniques of the art form studied
- ii. demonstrate the application of skills and techniques to create, perform and/or present art.

C. Thinking creatively

The arts motivate students to develop curiosity and purposefully explore and challenge boundaries. Thinking creatively encourages students to explore the unfamiliar and experiment in innovative ways to develop their artistic intentions, their processes and their work. Thinking creatively enables students to discover their personal signature and realize their artistic identity.

In order to reach the aims of arts, students should be able to:

- i. develop a feasible, clear, imaginative and coherent artistic intention
- ii. demonstrate a range and depth of creative-thinking behaviours
- iii. demonstrate the exploration of ideas to shape artistic intention through to a point of realization.

D. Responding

Students should have the opportunity to respond to their world, to their own art and to the art of others. A response can come in many forms; creating art as a response encourages students to make connections and transfer their learning to new settings. Through reflecting on their artistic intention and the impact of their work on an audience and on themselves, students become more aware of their own artistic development and the role that arts play in their lives and in the world. Students learn that the arts may initiate change as well as being a response to change.

In order to reach the aims of arts, students should be able to:

- i. construct meaning and transfer learning to new settings
- ii. create an artistic response that intends to reflect or impact on the world around them
- iii. critique the artwork of self and others.

Units of Study

MYP Arts is defined as **Visual Arts** (Art, Media) and **Performing Arts** (Drama and Music).

The programme in the Middle School is structured to ensure students obtain balance of all four disciplines of Visual and Performing Arts over the two semesters in each year.

Years 6 & 7 (MYP Years 1 & 2)

In Year 6 and Year 7, students are allocated **four lessons** per week, rotating through the four subjects – Art, Media, Music and Drama.

Topics may include:

- | | | |
|--------------------------------|---------------------------|---|
| • Principles of art and design | • Sculpture | • Monologues |
| • Perspective | • Musicianship | • Computer Graphics. |
| • Tone | • Musical theory | • Use of Digital Video camera |
| • Drawing | • Ensemble performance | • Video Editing software |
| • Painting | • Solo performance | • Artistic concepts for film making |
| • Printmaking | • Improvisational theatre | • Aesthetic appreciation for film as an artistic medium |
| • Clay | • Stagecraft | |

Where possible, students in Year 6 and 7 who are already undertaking instrumental lessons will be grouped together in a Music class. These students will have an opportunity to develop their skills in an ensemble environment. This will only be available subject to student demand and timetabling constraints

Choir

There is a Year 6 and a Year 7 Choir that students may wish to join. These are allocated one lesson within the curriculum. Students are taken out of existing classes.

Year 8 (MYP Year 3)

In Semester One, students are allocated **two lessons** for both **Visual Art** and **Performing Art**, rotating through all four Arts disciplines with a view to prepare for the Semester Two Musical

Topics may include:

- principles of art and design
- perspective
- tone
- drawing
- painting
- printmaking
- clay
- sculpture
- musicianship
- musical theory
- Ensemble performance
- Solo performance
- Improvisational theatre
- Stagecraft
- Monologues
- Computer Graphics

In Semester Two, all Year 8 students participate in the Year 8 School Musical through engagement in both the **Visual Arts** and **Performing Arts**.

- **Art** students are involved in the construction of sets, props and costumes.
- **Technical Theatre** students will learn about the technical aspects of a musical production: lighting, sound, stage management and other backstage roles. The technical and backstage crew for the production will be chosen from this class
- **Promotional Media** students design and create tickets, posters and the Musical programme
- **Music** students are involved in performance, ensemble improvisation and sound creation
- **Drama** students are involved in performance and backstage roles. These are auditioned places.

Please note that in Art and Design some tasks from Semester One will be included in the Semester Two course

Years 9 & 10 (MYP Years 4 & 5)

To provide students with the opportunity to experience the Arts in a variety of ways, or to commence specialising in areas of interest, students have the flexibility in their choices.

- **Specialised Study.** Students can begin to specialise in their preferred branch of the Arts by choosing full year programmes in Art, Media, Drama or Music;
- **Broad Study.** Students may undertake single semester programmes in Art, Media, Music or Drama.

Assessment Tasks

Students are assessed against MYP criteria with assessment tasks varying according to the specific MYP subject in the Visual or Performing Arts.

In the Arts, students are assessed on their practical work, knowledge, ability to evaluate and their engagement throughout the course.

Area of Study Contacts:

Coordinator, Visual Arts: Mrs Luisa Stocco

Coordinator, Performing Arts: Mr Anthony Kelly

Coordinator of Music and Performance, Mrs Lauren Vilanova

Design

Overview

Design, and the resultant development of new technologies, has given rise to profound changes in society: transforming how we access and process information; how we adapt our environment; how we communicate with others; how we are able to solve problems; how we work and live.

Design is the link between innovation and creativity, taking thoughts and exploring the possibilities and constraints associated with products or systems, allowing them to redefine and manage the generation of further thought through prototyping, experimentation and adaptation. It is human-centred and focuses on the needs, wants and limitations of the end user.

Competent design is not only within the reach of a small set of uniquely skilled individuals, but can be achieved by all. The use of well-established design principles and processes increases the probability that a design will be successful. To do this, designers use a wide variety of principles which, taken together, make up what is known as the design cycle.

Designers adapt their approach to different design situations, but they have a common understanding of the process necessary to form valid and suitable solutions.

- A designer has a role and responsibility to the community and the environment. Their decisions can have a huge impact and, therefore, their ethics and morals can and should be questioned regularly.
- A designer should have the ability to maintain an unbiased view of a situation and evaluate a situation objectively, highlighting the strengths and weaknesses of a common product or system.
- Good communication is a key trait of any good designer through visual and oral presentation.

Designing requires an individual to be imaginative and creative, while having a substantial knowledge base of important factors that will aid or constrain the process. Decisions made need to be supported by adequate and appropriate research and investigation. Designers must adopt an approach that allows them to think creatively, while conforming to the requirements of a design specification.

Both the ideas of design and the process of design can only occur in a human context. Design is carried out by a community of people from a wide variety of backgrounds and traditions, and this has clearly influenced the way design has progressed at different times. It is important to understand, however, that to design is to be involved in a community of inquiry with certain common beliefs, methodologies, understandings and processes.

MYP design challenges all students to apply practical and creative thinking skills to solve design problems; encourages students to explore the role of design in both historical and contemporary contexts; and raises students' awareness of their responsibilities when making design decisions and taking action.

Inquiry and problem-solving are at the heart of the subject group. MYP design requires the use of the design cycle as a tool, which provides the methodology used to structure the inquiry and analysis of problems, the development of feasible solutions, the creation of solutions, and the testing and evaluation of the solution. In MYP design, a solution can be defined as a model, prototype, product or system that students have developed and created independently.

A well-planned design programme enables students to develop not only practical skills but also strategies for creative and critical thinking.

The MYP expects all students to become actively involved in, and to focus on, the whole design process rather than on the final product/solution.

Aims

The aims of MYP design are to encourage and enable students to:

- enjoy the design process, develop an appreciation of its elegance and power
- develop knowledge, understanding and skills from different disciplines to design and create solutions to problems using the design cycle
- use and apply technology effectively as a means to access, process and communicate information, model and create solutions, and to solve problems
- develop an appreciation of the impact of design innovations for life, global society and environments
- appreciate past, present and emerging design within cultural, political, social, historical and environmental contexts

- develop respect for others' viewpoints and appreciate alternative solutions to problems
- act with integrity and honesty, and take responsibility for their own actions developing effective working practices.

Objectives

The objectives of MYP design encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge.

Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation.

Together these objectives reflect the knowledge, skills and attitudes that students need in order to engage with and solve complex, real-life problems in both familiar and unfamiliar contexts; they represent essential aspects of design methodology.

A Inquiring and analysing

Students are presented with a design situation, from which they identify a problem that needs to be solved. They analyse the need for a solution and conduct an inquiry into the nature of the problem.

In order to reach the aims of design, students should be able to:

- explain and justify the need for a solution to a problem for a specified client/target audience
- identify and prioritize the primary and secondary research needed to develop a solution to the problem
- analyse a range of existing products that inspire a solution to the problem
- develop a detailed design brief which summarizes the analysis of relevant research.

B Developing ideas

Students write a detailed specification, which drives the development of a solution. They present the solution.

In order to reach the aims of design, students should be able to:

- develop a design specification which clearly states the success criteria for the design of a solution
- develop a range of feasible design ideas which can be correctly interpreted by others
- present the final chosen design and justify its selection
- develop accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution.

C Creating the solution

Students plan the creation of the chosen solution and follow the plan to create a prototype sufficient for testing and evaluation.

In order to reach the aims of design, students should be able to:

- construct a logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow to create the solution
- demonstrate excellent technical skills when making the solution
- follow the plan to create the solution, which functions as intended
- fully justify changes made to the chosen design and plan when making the solution
- present the solution as a whole, either:
 - in electronic form, or
 - through photographs of the solution from different angles, showing details.

D Evaluating

Students design tests to evaluate the solution, carry out those tests and objectively evaluate its success. Students identify areas where the solution could be improved and explain how their solution will impact on the client or target audience.

In order to reach the aims of design, students should be able to:

- design detailed and relevant testing methods, which generate data, to measure the success of the solution
- critically evaluate the success of the solution against the design specification
- explain how the solution could be improved
- explain the impact of the solution on the client/target audience.

Recommended resources

As students progress through the different stages of the design cycle, they are constantly experimenting with ideas, researching topics, compiling sources, brainstorming issues, sketching possible solutions, making changes, rejecting proposals and critically evaluating their work. Students are required to maintain a design folder with four sections for Inquiring and Analysing, Developing Ideas, Creating the Solution and Evaluating. In each section, students are to maintain evidence of the design cycle being undertaken.

Many of the projects utilise the Adobe Creative Suite. A USB drive is useful for transferring pictures, video or other files between home and school.

Area of Study Contact:

Coordinator of Technology: Mr. James Burdon

Individuals and Societies

MYP individuals and societies encourages learners to respect and understand the world around them and equips them with the necessary skills to inquire into historical, contemporary, geographical, political, social, economic, religious, technological and cultural factors that have an impact on individuals, societies and environments. It encourages learners, both students and teachers, to consider local and global contexts.

The study of individuals and societies helps students to develop their identities as individuals and as responsible members of local and global communities. These explorations of our common humanity are intrinsically interesting, and disciplines in this subject group are filled with potential for creating in students a lifelong fascination with “the human story” as it continues to evolve in an era of rapid change and increasing interconnectedness. Studies in individuals and societies are essential for developing empathy and international-mindedness, including the idea that “other people, with their differences, can also be right” (IB mission statement).

Aims

The aims of MYP individuals and societies are to encourage and enable students to:

- appreciate human and environmental commonalities and diversity
- understand the interactions and interdependence of individuals, societies and the environment
- understand how both environmental and human systems operate and evolve
- identify and develop concern for the well-being of human communities and the natural environment
- act as responsible citizens of local and global communities
- develop inquiry skills that lead towards conceptual understandings of the relationships between individuals, societies and the environments in which they live.

Objectives

The objectives of any MYP subject state the specific targets that are set for learning in that subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of MYP individuals and societies encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. These objectives relate directly to the assessment criteria with each equally weighted.

A. Knowing and understanding

Students develop factual and conceptual knowledge about individuals and societies.

In order to reach the aims of individuals and societies, students should be able to:

- i. use terminology in context
- ii. demonstrate knowledge and understanding of subject-specific content and concepts through descriptions, explanations and examples.

B. Investigating

Students develop systematic research skills and processes associated with disciplines in the humanities and social sciences. Students develop successful strategies for investigating independently and in collaboration with others.

In order to reach the aims of individuals and societies, students should be able to:

- i. formulate a clear and focused research question and justify its relevance
- ii. formulate and follow an action plan to investigate a research question
- iii. use research methods to collect and record relevant information
- iv. evaluate the process and results of the investigation.

C. Communicating

Students develop skills to organize, document and communicate their learning using a variety of media and presentation formats.

In order to reach the aims of individuals and societies, students should be able to:

- i. communicate information and ideas using an appropriate style for the audience and purpose
- ii. structure information and ideas in a way that is appropriate to the specified format
- iii. document sources of information using a recognized convention.

D. Thinking critically

Students use critical thinking skills to develop and apply their understanding of individuals and societies and the process of investigation.

In order to reach the aims of individuals and societies, students should be able to:

- i. discuss concepts, issues, models, visual representation and theories
- ii. synthesize information to make valid arguments
- iii. analyse and evaluate a range of sources/data in terms of origin and purpose, examining values and limitations
- iv. interpret different perspectives and their implications.

Units of Study

Units for study for History and Geography are determined by the Australian Curriculum (AC)

Year 6

AC History: Australia as a Nation (Federation, ANZAC, First Australians, Migration).

AC Geography: A Diverse and Connected World (Australia and the Asian Region, Connections with Places).

Year 7

AC History: The Ancient World (Investigating the Ancient Past, The Mediterranean World, The Asian World).

AC Geography: Water in the World; Place and Liveability.

Civics and Citizenship: Australia's Democracy.

Year 8

AC History: The Ancient to the Modern World (The Western and Islamic Worlds, The Asia Pacific World, Expanding Contacts).

AC Geography: Landforms and Landscapes; Changing Nations.

Civics and Citizenship: Decision Making and the Role of Courts.

Year 9

AC History: The Making of the Modern World (Making a Better World, Australia and Asia, World War One).

AC Geography: Biomes and Food Security; Geographies of Inter-connections.

Year 10

AC History: The Modern World and Australia (World War Two, Rights and Freedoms 1945-Present, The Globalising World).

AC Geography: Environmental Change and Management; Geographies of Human Wellbeing

Area of Study Contact:

Coordinator, Individuals and Societies 6-12 : Mrs Stephanie Ray

Language and Literature

Language is fundamental to learning, thinking and communicating; therefore it permeates the whole curriculum. Indeed, all teachers are language teachers, continually expanding the boundaries of what students are thinking about. Mastery of one or more languages enables each student to achieve their full linguistic potential.

Students need to develop an appreciation of the nature of language and literature, of the many influences on language and literature, and of its power and beauty. They will be encouraged to recognize that proficiency in language is a powerful tool for communication in all societies. Furthermore, language and literature incorporates creative processes and encourages the development of imagination and creativity through self-expression.

All IB programmes value language as central to developing critical thinking, which is essential for the cultivation of intercultural understanding, as well as for becoming internationally minded and responsible members of local, national and global communities. Language is integral to exploring and sustaining personal development and cultural identity, and provides an intellectual framework to support conceptual development. The six skill areas in the MYP language and literature subject group—listening, speaking, reading, writing, viewing and presenting—develop as both independent and interdependent skills. They are centred within an inquiry-based learning environment. Inquiry is at the heart of MYP language learning, and aims to support students' understanding by providing them with opportunities to independently and collaboratively investigate, take action and reflect.

As well as being academically rigorous, MYP language and literature equips students with linguistic, analytical and communicative skills that can also be used to develop interdisciplinary understanding across all other subject groups. Students' interaction with chosen texts can generate insight into moral, social, economic, political, cultural and environmental factors and so contributes to the development of opinion-forming, decision-making and ethical-reasoning skills, and further develops the attributes of an IB learner. Aims

The aims of the teaching and study of Language and Literature are to encourage and enable the students to:

- use language as a vehicle for thought, creativity, reflection, learning, self-expression, analysis and social interaction
- develop the skills involved in listening, speaking, reading, writing, viewing and presenting in a variety of contexts
- develop critical, creative and personal approaches to studying and analysing literary and non-literary texts
- engage with text from different historical periods and a variety of cultures
- explore and analyse aspects of personal, host and other cultures through literary and non-literary texts
- explore language through a variety of media and modes
- develop a lifelong interest in reading
- apply linguistic and literary concepts and skills in a variety of authentic contexts.

Syllabus

The syllabus that follows is one way of enabling students to realise the objectives of the programme. This has been developed using Australian Curriculum content which organises English into three interrelated strands:

- **Language:** knowing about the English language
- **Literature:** understanding, appreciating, responding to, analysing and creating literature
- **Literacy:** expanding the repertoire of English usage

Content in each strand is grouped into sub-strands that, across the year levels, presents a sequence of development of knowledge, understanding and skills. The sub-strands are:

Language	Literature	Literacy
Language variation and change	Literature and context	Texts in context
Language for interaction	Responding to literature	Interacting with others
Text structure and organisation	Examining literature	Interpreting, analysing and evaluating
Expressing and developing ideas	Creating literature	Creating text
Sound and letter knowledge		

Texts

Texts provide the means for communication, providing important opportunities for learning about aspects of human experience and about aesthetic value. Many of the tasks that students undertake in and out of school involve understanding and producing imaginative, informative and persuasive texts, media texts, everyday texts and workplace texts

While the nature of what constitutes literary texts is dynamic and evolving, they are seen as having personal, social, cultural and aesthetic value and potential for enriching students' scope of experiences.

Literature includes a broad range of forms such as novels, poetry, short stories and plays; fiction for young adults and children, multimodal texts such as film, and a variety of non-fiction. Literary texts also include excerpts from longer texts enable a range of texts to be included within any one year level for close study or comparative purposes.

Years 1-3 (Years 6-8)

A balance of genres and works from World Literature should be read in conjunction with the chosen texts, with a recommended minimum of four works per year.

Years 4 and 5 (Years 9 and 10)

During the last two years in the IB Middle Years Programme a minimum of six works are studied as follows:

- A minimum of four English texts
- A minimum of two works from World Literature (selected by the school)

Non-fiction texts may be included to represent prose writing in Drama and Poetry

Objectives

The objectives of any MYP subject state the specific targets that are set for learning in that subject. They define what the student will be able to accomplish as a result of studying the subject. The objectives of language and literature encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge.

The objectives represent some of the essential processes of language: "Processes are what help mediate the construction of new knowledge and understandings and play an especially important role in language and communication" (Lanning 2013: 19). These objectives relate directly to the assessment criteria with each equally weighted.

Objective A: Analysing

Through the study of language and literature students are enabled to deconstruct texts in order to identify their essential elements and their meaning. Analysing involves demonstrating an understanding of the creator's choices, the relationships between the various components of a text and between texts, and making inferences about how an audience responds to a text (strand i), as well as the creator's purpose for producing text (strand ii). Students should be able to use the text to support their personal responses and ideas (strand iii). Literacy and critical literacy are essential lifelong skills; engaging with texts requires students to think critically and show awareness of, and an ability to reflect on, different perspectives through their interpretations of the text (strand iv).

In order to reach the aims of studying language and literature, students should be able to:

- i. analyse the content, context, language, structure, technique and style of text(s) and the relationships among texts
- ii. analyse the effects of the creator's choices on an audience
- iii. justify opinions and ideas, using examples, explanations and terminology
- iv. evaluate similarities and differences by connecting features across and within genres and texts.

Objective B: Organizing

Students should understand and be able to organize their ideas and opinions using a range of appropriate conventions for different forms and purposes of communication. Students should also recognize the importance of maintaining academic honesty by respecting intellectual property rights and referencing all sources accurately.

In order to reach the aims of studying language and literature, students should be able to:

- i. employ organizational structures that serve the context and intention
- ii. organize opinions and ideas in a sustained, coherent and logical manner
- iii. use referencing and formatting tools to create a presentation style suitable to the context and intention.

Objective C: Producing text

Students will produce written and spoken text, focusing on the creative process itself and on the understanding of the connection between the creator and his or her audience. In exploring and appreciating new and changing perspectives and ideas, students will develop the ability to make choices aimed at producing texts that affect both the creator and the audience.

In order to reach the aims of studying language and literature, students should be able to:

- i. produce texts that demonstrate insight, imagination and sensitivity while exploring and reflecting critically on new perspectives and ideas arising from personal engagement with the creative process
- ii. make stylistic choices in terms of linguistic, literary and visual devices, demonstrating awareness of impact on an audience
- iii. select relevant details and examples to develop ideas.

Objective D: Using language

Students have opportunities to develop, organize and express themselves and communicate thoughts, ideas and information. They are required to use accurate and varied language that is appropriate to the context and intention. This objective applies to, and must include, written, oral and visual text, as appropriate.

In order to reach the aims of studying language and literature, students should be able to:

- i. use appropriate and varied vocabulary, sentence structures and forms of expression
- ii. write and speak in a register and style that serve the context and intention
- iii. use correct grammar, syntax and punctuation
- iv. spell (alphabetic languages), write (character languages) and pronounce with accuracy
- v. use appropriate non-verbal communication techniques.

Area of Study Contact:

Coordinator, English: Mrs Tracey Corrigan

Language Acquisition

Learning to speak another's language means taking one's place in the human community. It means reaching out to others across cultural and linguistic boundaries. Language is far more than a system to be explained. It is our most important link to the world around us. Language is culture in motion. It is people interacting with people.

Savignon (1983)

The ability to communicate in a variety of modes in more than one language is essential to the concept of an international education that promotes multilingualism and intercultural understanding, both of which are central to the IB's mission.

The study of additional languages in the MYP provides students with the opportunity to develop insights into the features, processes and craft of language and the concept of culture, and to realize that there are diverse ways of living, behaving and viewing the world.

The acquisition of the language of a community and the possibilities to reflect upon and explore cultural perspectives of our own and other communities:

- is valued as central to developing critical thinking, and is considered essential for the cultivation of intercultural awareness and the development of internationally minded and responsible members of local, national and global communities
- is integral to exploring and sustaining personal development and cultural identity, and provides an intellectual framework to support conceptual development
- greatly contributes to the holistic development of students and to the strengthening of lifelong learning skills
- equips students with the necessary multiliteracy skills and attitudes, enabling them to communicate successfully in various global contexts and build intercultural understanding.

Aims

The aims of the teaching and learning of MYP language acquisition are to:

- gain proficiency in an additional language while supporting maintenance of their mother tongue and cultural heritage
- develop a respect for, and understanding of, diverse linguistic and cultural heritages
- develop the student's communication skills necessary for further language learning, and for study, work and leisure in a range of authentic contexts and for a variety of audiences and purposes
- enable the student to develop multiliteracy skills through the use of a range of learning tools, such as multimedia, in the various modes of communication
- enable the student to develop an appreciation of a variety of literary and non-literary texts and to develop critical and creative techniques for comprehension and construction of meaning
- enable the student to recognize and use language as a vehicle of thought, reflection, self-expression and learning in other subjects, and as a tool for enhancing literacy
- enable the student to understand the nature of language and the process of language learning, which comprises the integration of linguistic, cultural and social components
- offer insight into the cultural characteristics of the communities where the language is spoken
- encourage an awareness and understanding of the perspectives of people from own and other cultures, leading to involvement and action in own and other communities
- foster curiosity, inquiry and a lifelong interest in, and enjoyment of, language learning.

Objectives

The objectives of MYP language acquisition encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. The student's knowledge and understanding will be developed through:

learning language
learning through language
learning about language (Halliday 1985).

This, in turn, helps students learn how to learn. The cognitive, linguistic and sociocultural aspects of communication are intertwined in each of the four objectives. The student is expected to develop the competencies to communicate appropriately, accurately and effectively in an increasing range of social, cultural and academic contexts, and for an increasing variety of purposes.

“Processes are what help mediate the construction of new knowledge and understandings and play an especially important role in language and communication.” (Lanning 2013: 19). They are designed to enable students to become multiliterate by developing their oral literacy (oracy), visual literacy (visuacy) and written literacy (literacy).

The language acquisition subject group objectives represent some of the essential processes of language and have been organized under the same four communicative processes for each of the six phases in order to assist teachers with planning, teaching and assessing. They are as follows.

A Comprehending spoken and visual text

Comprehending spoken and visual text encompasses aspects of listening and viewing, and involves the student in interpreting and constructing meaning from spoken and visual text to understand how images presented with oral text interplay to convey ideas, values and attitudes. Engaging with text requires the student to think creatively and critically about what is viewed, and to be aware of opinions, attitudes and cultural references presented in the visual text. The student might, for example, reflect on feelings and actions, imagine himself or herself in another’s situation, gain new perspectives and develop empathy, based on what he or she has understood in the text.

As appropriate to the phase, the student is expected to be able to:

- i. listen for specific purposes and respond to show understanding
- ii. interpret visual text that is presented with spoken text
- iii. engage with the text by supporting opinion and personal response with evidence and examples from the text.

B Comprehending written and visual text

Comprehending written and visual text encompasses aspects of reading and viewing, and involves the student in constructing meaning and interpreting written and visual text to understand how images presented with written text interplay to convey ideas, values and attitudes. Engaging with text requires the student to think creatively and critically about what is read and viewed, and to be aware of opinions, attitudes and cultural references presented in the written and/or visual text. The student might, for example, reflect on feelings and actions, imagine himself or herself in another’s situation, gain new perspectives and develop empathy, based on what he or she has understood in the text.

As appropriate to the phase, the student is expected to be able to:

- i. read for specific purposes and respond to show understanding
- ii. interpret visual text that is presented with written text
- iii. engage with the text by supporting opinion and personal response with evidence and examples from the text.

C Communicating in response to spoken and/or written and/or visual text

In the language acquisition classroom, students will have opportunities to develop their communication skills by interacting on **a range of topics of personal, local and global interest and significance**, and responding to **spoken, written and visual text in the target language**.

As appropriate to the phase, the student is expected to be able to:

- i. interact and communicate in various situations
- ii. express thoughts, feelings, ideas, opinions and information in spoken and written form
- iii. speak and write for specific purposes.

D Using language in spoken and/or written form

This objective relates to the correct and appropriate use of the **spoken and written target language**. It involves recognizing and using language suitable to the audience and purpose, for example, the language used at home, the language of the classroom, formal and informal exchanges, social and academic language. When speaking and writing in the target language, students apply their understanding of linguistic and literary concepts to develop a variety of structures, strategies (spelling, grammar, plot, character, punctuation, voice) and techniques with increasing skill and effectiveness.

As appropriate to the phase, the student is expected to be able to:

- i. organize thoughts, feelings, ideas, opinions and information in spoken and written form
- ii. develop accuracy when speaking and writing in the target language.

Language Acquisition at Mercedes College

At Mercedes College, the following Language Acquisition programmes are available:

French	Reception to Year 12
Indonesian	Year 6 to Year 12

All students at Year 6 study both French B and Indonesian B for two lessons per week each. This enables students from our Junior School to continue the development of their French whilst allowing all students to experience Indonesian.

In Year 7, students choose the language they wish to pursue until Year 10.

It should be noted that Indonesian B in Year 7 will only be available if a minimum of 20 students choose it.

Language levels

There are three levels for certification in MYP Language B. These are:

- Language B Experienced (previously Advanced)
- Language B Continuers (prev. Standard)
- Language B Beginners (Prev. Foundation).

Whilst we will encourage students to pursue Experienced or Continuers level of their chosen language, in exceptional cases students may change to Beginners level in the other language at Year 8.

Language B Experienced

As French B is introduced at Mercedes College in the Primary Years Programme, students from this background will remain in dedicated classes in Year 6 and beyond (if they choose to remain with French B) and will be assessed at Experienced level. Language B Experienced students are those who need a greater challenge than that offered through Language B Continuers.

Students do have the option to change class and undertake Continuers level.

Students being registered for certification in their final MYP year for Language B Experienced will show a very high level of competence in the Language B, but will not yet be ready to undertake the language as Language A. Students' higher level of competence may be the result of prior exposure to the language, being able to access the language in the host community, or other special circumstances.

Students continuing to complete Language B at Experienced level in Year 10 will effectively be completing Year 11 French (SACE or IB Diploma) while satisfying MYP evaluation. They can then continue to complete their Year 12 studies in Year 11.

Indonesian B is not available at Experienced Level.

Language B Continuers

Students beginning a language in Year 6 will be assessed at Continuers level in French B or Indonesian B. These students typically will have had little or no formal instruction, and will not be proficient in the language before starting the course.

Students registered for certification in their final MYP year for Language B Continuers will have studied the language for the five years of the MYP. Students will have a high level of competence in the language by the end of the MYP and are capable to pursue their Language B at Year 11 and Year 12 in the SACE or IB Diploma.

Language B Beginners

Students beginning Language B at Year 8 will be assessed at Beginners level in French B or Indonesian B.

Students will have a basic level of competence in the language by the end of the MYP and are capable to pursue their Language B at Year 11 and Year 12 in the SACE or IB Diploma.

Language Appreciation

Students joining the College in Year 9 or 10 with little or no previous language experience in French or Indonesian will undertake this Language Appreciation course. Using Spanish as the principal language, students will be introduced to the importance of a second language in understanding and appreciating different cultures and their perspectives. Students will gain an awareness of international mindedness on a range of contemporary, global issues. This pathway does not allow MYP certification.

Assessment Criteria

In order to measure a student's progress and achievement in each phase of the course, four criteria have been established. These criteria correspond directly to the four objectives.

A: Oral communication—to measure the student's development as a speaker of the language	Maximum 8
B: Visual interpretation—to measure the student's ability to interpret visual text presented with spoken and written text	Maximum 8
C: Reading comprehension—to measure the student's ability to comprehend written text	Maximum 8
D: Writing—to measure the student's development as a writer of the target language	Maximum 8

Area of Study Contact:

Coordinator, Language B (Languages): Miss Emily Putland

Mathematics

Neglect of mathematics works injury to all knowledge, since he who is ignorant of it cannot know the other sciences or the things of the world.

Roger Bacon (1214–1294)

The study of mathematics is a fundamental part of a balanced education. It promotes a powerful universal language, analytical reasoning and problem-solving skills that contribute to the development of logical, abstract and critical thinking. Mathematics can help make sense of the world and allows phenomena to be described in precise terms. It also promotes careful analysis and the search for patterns and relationships, skills necessary for success both inside and outside the classroom. Mathematics, then, should be accessible to and studied by all students.

Studying mathematics, however, should be more than simply learning formulae or rules. Students should not have the impression that all of the answers to mathematics can be found in a book but, rather, that they can be active participants in the search for concepts and relationships. In that light, mathematics becomes a subject that is alive with the thrill of exploration and the rewards of discovery. At the same time, that new knowledge may then be applied to other situations, opening up even more doors for students. MYP mathematics promotes both inquiry and application, helping students to develop problem-solving techniques that transcend the discipline and that are useful in the world outside school.

The MYP mathematics programme is tailored to the needs of students, seeking to intrigue and motivate them to want to learn its principles. Students should see authentic examples of how mathematics is useful and relevant to their lives and be encouraged to apply it to new situations. Mathematics provides the foundation for the study of sciences, engineering and technology. However, it is also evident in the arts and is increasingly important in economics, the social sciences and the structure of language. Students in the MYP are encouraged to use ICT tools to represent information, to explore and model situations, and to find solutions to various problems. These are skills that are useful in a wide range of arenas. MYP mathematics aims to equip all students with the knowledge, understanding and intellectual capabilities to address further courses in mathematics, as well as to prepare those students who will use mathematics in their studies, workplaces and lives in general.

Aims

The aims of the teaching and study of MYP mathematics are to encourage and enable students to:

- enjoy mathematics and to develop curiosity as well as an appreciation of its elegance and power
- develop an understanding of the principles and nature of mathematics
- communicate clearly and confidently in a variety of contexts
- develop logical, critical and creative thinking, and patience and persistence in problem solving
- develop power of generalization and abstraction
- apply and transfer skills to a wide variety of real life contexts
- appreciate how developments in technology and mathematics have influenced each other
- appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
- appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
- appreciate the contribution of mathematics to other areas of knowledge
- develop the knowledge, skills and attitudes necessary to pursue further studies in mathematics
- develop the ability to reflect critically upon their own work and the work of others.
- Reflect on the meaning and relevance of mathematical answers in the context of the real-world.

Objectives

The objectives of MYP mathematics encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge.

Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation.

Together these objectives reflect the knowledge, skills and attitudes that students need in order to use mathematics in a variety of contexts (including real-life situations), perform investigations and communicate mathematics clearly.

Knowledge and Understanding

Knowledge and understanding are fundamental to studying mathematics and form the base from which to explore concepts and develop skills. This objective assesses the extent to which students can select and apply mathematics to solve problems in both familiar and unfamiliar situations in a variety of contexts.

This objective requires students to demonstrate knowledge and understanding of the concepts and skills of the four branches in the prescribed framework (number, algebra, geometry and trigonometry, statistics and probability).

In order to reach the aims of mathematics, students should be able to:

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations
- ii. apply the selected mathematics successfully when solving problems
- iii. solve problems correctly in a variety of contexts.

Investigating Patterns

Investigating patterns allows students to experience the excitement and satisfaction of mathematical discovery. Working through investigations encourages students to become risk-takers, inquirers and critical thinkers. The ability to inquire is invaluable in the MYP and contributes to lifelong learning.

A task that does not allow students to select a problem-solving technique is too guided and should result in students earning a maximum achievement level of 6 (for years 1 and 2) and a maximum achievement level of 4 (for year 3 and up). However, teachers should give enough direction to ensure that all students can begin the investigation.

For year 3 and up, a student who describes a general rule consistent with incorrect findings will be able to achieve a maximum achievement level of 6, provided that the rule is of an equivalent level of complexity.

In order to reach the aims of mathematics, students should be able to:

- i. select and apply mathematical problem-solving techniques to discover complex patterns
- ii. describe patterns as general rules consistent with findings
- iii. prove, or verify and justify, general rules.

Communicating

Mathematics provides a powerful and universal language. Students are expected to use appropriate mathematical language and different forms of representation when communicating mathematical ideas, reasoning and findings, both orally and in writing.

In order to reach the aims of mathematics, students should be able to:

- i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written explanations
- ii. use appropriate forms of mathematical representation to present information
- iii. move between different forms of mathematical representation
- iv. communicate complete, coherent and concise mathematical lines of reasoning v. organize information using a logical structure.

Applying mathematics in real-life contexts

MYP mathematics encourages students to see mathematics as a tool for solving problems in an authentic real-life context. Students are expected to transfer theoretical mathematical knowledge into real-world situations and apply appropriate problem-solving strategies, draw valid conclusions and reflect upon their results.

In order to reach the aims of mathematics, students should be able to:

- i. identify relevant elements of authentic real-life situations
- ii. select appropriate mathematical strategies when solving authentic real-life situations
- iii. apply the selected mathematical strategies successfully to reach a solution
- iv. justify the degree of accuracy of a solution
- v. justify whether a solution makes sense in the context of the authentic real-life situation.

Units of Study

Year 6

Units	Content
Number	Whole number, multiples, factors, rational numbers, order of operations, number sets
Algebra	Pattern recognition, simple equations, forms of number e.g. exponents
Geometry	Mensuration, construction of triangles and rectangles, transformations
Statistics and Probability	Collecting and collating data, presenting data using graphs
Discrete Maths	Sets

Year 7

Units	Content
Number	Ratio and proportions, percentages, estimation, number patterns, scientific notation, powers and roots of 2
Algebra	Language of algebra, flow charts, expansion, equations
Geometry	Mensuration, circle and polygon construction, transformations, number plane
Statistics and Probability	Sample space, outcomes and events, theoretical and experimental probability
Discrete Maths	Tree diagrams

Year 8

Units	Content
Number	Fractions, decimal, ratio, proportion and rates, directed numbers, calculators
Algebra	Algebra, patterns, relations and functions, sequences, laws
Geometry	Planes, lines, classifying triangles
Statistics and Probability	Data collection, data analysis, measures of central tendency
Discrete Maths	Trees, networks

Year 9

Units	Content
Number	Powers and roots, calculators and computers
Algebra	Algebra, equations, inequalities, factorisation, linear functions
Geometry	Pythagoras' Theorem, similarity and congruence
Statistics and Probability	Stem and leaf plots, box and whisker plots, mean, mode, median and range
Discrete Maths	Logic

Year 10

Units	Content
Number	Number sets, theory and power of roots
Algebra	Expressions and factorisation, linear and quadratic functions
Geometry	Similarity and congruence, shape and perspective in 3D, trigonometry
Statistics and Probability	Graphical representations, range, standard deviation etc.

Levels of Mathematics

Topics and skills of the framework for mathematics are organized so that students can work at two levels of challenge: **standard mathematics** and **extended mathematics**.

Standard mathematics aims to give all students a sound knowledge of basic mathematical principles while allowing them to develop the skills needed to meet the objectives of MYP mathematics.

Extended mathematics consists of the standard mathematics framework supplemented by additional topics and skills. This level provides the foundation for students who wish to pursue further studies in mathematics: for example, mathematics higher level (HL) as part of the IB Diploma Programme. Extended mathematics provides greater breadth and depth to the standard mathematics framework.

In Years 6-8 (MYP years 1 to 3), students take a common differentiated mathematics course. Extended mathematics is provided during the final year of the MYP with entry based on assessment results in Year 9.

Assessment Tasks

Generally, criteria A, B and D are assessed with different kinds of tasks. Criterion C is often used to assess constructed responses and reports in combination with criterion B or D.

Criterion	Typical assessment tasks
Criterion A (knowing and understanding)	Classroom tests Examinations Assignments that include both familiar and unfamiliar situations
Criterion B (investigating patterns)	Mathematical investigations of some complexity that allow students: <ul style="list-style-type: none">• to choose their own mathematical techniques• to reason from the specific to the general
Criterion C (communicating)	Investigations and real-life problems Reports that: <ul style="list-style-type: none">• require logical structure• allow multiple forms of representation to present information
Criterion D (applying mathematics in real-life contexts)	Opportunities to use mathematical concepts to solve real-life problems

Assessment Criteria

Assessment for mathematics courses in all years programme is criterion-related, based on four equally weighted assessment criteria:

CRITERION	Maximum
A Knowledge and Understanding	8
B: Investigating Patterns	8
C: Communicating	8
D: Applying mathematics in real-life contexts	8

Area of Study Contacts:

Coordinator, Mathematics 6-12: Mr Luke Borda

Mathematics Key Teacher (MYP): Mr Adam Starrs

Physical and Health Education

Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity.

John F Kennedy

Overview

MYP physical and health education aims to empower students to understand and appreciate the value of being physically active and develop the motivation for making healthy life choices. To this end, physical and health education courses foster the development of knowledge, skills and attitudes that will contribute to a student's balanced and healthy lifestyle. Through opportunities for active learning, courses in this subject group embody and promote the holistic nature of well-being. Students engaged in physical and health education will explore a variety of concepts that help foster an awareness of physical development and health perspectives, empowering them to make informed decisions and promoting positive social interaction.

Physical and health education focuses on both learning about and learning through physical activity. Both dimensions help students to develop approaches to learning (ATL) skills across the curriculum. Physical and health education contributes a unique perspective to the development of the attributes of the IB learner profile, promoting the health of individuals and communities.

Through physical and health education, students can learn to appreciate and respect the ideas of others, and develop effective collaboration and communication skills. This subject area also offers many opportunities to build positive interpersonal relationships that can help students to develop a sense of social responsibility. At their best, physical and health education courses develop the enjoyment, engagement and confidence in physical activity that students need in order to achieve and maintain a balanced, healthy life.

Physical activity and health are of central importance to human identity and global communities. They create meaningful connections among people, nations, cultures and the natural world, and they offer a range of opportunities to build intercultural understanding and greater appreciation for our common humanity.

Aims

The aims of MYP physical and health education are to encourage and enable students to:

- use inquiry to explore physical and health education concepts
- participate effectively in a variety of contexts
- understand the value of physical activity
- achieve and maintain a healthy lifestyle
- collaborate and communicate effectively
- build positive relationships and demonstrate social responsibility
- reflect on their learning experiences.

Objectives

The objectives of MYP physical and health education encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation.

Together these objectives reflect the knowledge, skills and attitudes that students need in order to develop an active and healthy life; they represent essential aspects of physical, personal and social development.

A. Knowing and understanding

Students develop knowledge and understanding about health and physical activity in order to identify and solve problems.

In order to reach the aims of physical and health education, students should be able to:

- i. explain physical health education factual, procedural and conceptual knowledge
- ii. apply physical and health education knowledge to analyse issues and solve problems set in familiar and unfamiliar situations
- iii. apply physical and health terminology effectively to communicate understanding.

B. Planning for performance

Students through inquiry design, analyse, evaluate and perform a plan in order to improve performance in physical and health education.

In order to reach the aims of physical and health education, students should be able to:

- i. design, explain and justify plans to improve physical performance and health
- ii. analyse and evaluate the effectiveness of a plan based on the outcome.

C. Applying and performing

Students develop and apply practical skills, techniques, strategies and movement concepts through their participation in a variety of physical activities.

In order to reach the aims of physical and health education, students should be able to:

- i. demonstrate and apply a range of skills and techniques effectively
- ii. demonstrate and apply a range of strategies and movement concepts
- iii. analyse and apply information to perform effectively.

D. Reflecting and improving performance

Students enhance their personal and social development, set goals, take responsible action and reflect on their performance and the performance of others.

In order to reach the aims of physical and health education, students should be able to:

- i. explain and demonstrate strategies that enhance interpersonal skills
- ii. develop goals and apply strategies to enhance performance
- iii. analyse and evaluate performance.

Units of Study

Year 6 Practical Component:

Athletics, Basketball, Cricket, Dance, Football Codes, Golf, Sofcrosse, Ultimate Frisbee, Volleyball

Theoretical Component:

Am I Healthy?; What is a Drug?; Harassment and Bullying; You are what you eat; Roles in Sport; Puberty and Change

Year 7 Practical Component:

Athletics, Dance, Netball, Soccer, Sofcrosse, Softball, Tennis, Touch

Theoretical Component:

Taking on Responsibility; Image; Culture and Sport; Working in Groups; Skill Building

Year 8 Practical Component:

Aerobics, Athletics, Australian Rules, Basketball, Cricket, Golf, Hockey, Tennis

Theoretical Component:

Exercise and Diet; Principles of Play; Alcohol; First Aid and Aquatics; Puberty Re-Visited

Year 9 Practical Component:

Athletics, Dance, Minimal Impact Camping, Netball, Soccer, Softball, Table Tennis, Touch

Theoretical Component:

Fitness Profile; Drugs; Cyber Citizenship; Body Systems; Sex and Sexuality

Year 10 Practical Component:

Aerobics, Athletics, Flag Football, Golf, Lawn Bowls, Touch

Theoretical Component:

Body Systems; Ethics in Sport; Fitness and Training; Skill Acquisition

Assessment Tasks

Assessment tasks vary from one unit of study to another. Some incorporate theoretical components as well as the generation of practical skills. In the practical area, these can be demonstrated individually or in groups (teams). In the theoretical area, videos and other research support materials may be sourced by students to generate assignments set on rules, strategies, technologies and understanding of health topics.

Area of study contacts:

Coordinator, Physical Education (6-12): Mr. Stuart Wuttke

Coordinator, Physical Education (MYP): Mr. Jarrad McCabe

Science

The scientific mind does not so much provide the right answers as asks the right questions.

Claude Levi-Strauss

Overview

MYP Science at Mercedes College is structured on the *Australian Curriculum Science (ACS)* www.australiancurriculum.edu.au/Science/Rationale. As such each of our Science units in the MYP is related to one of the ACS sub-strands (Biological sciences, Chemical sciences, Earth and Space sciences, Physical sciences).

With inquiry at the core, the MYP sciences framework aims to guide students to independently and collaboratively investigate issues through research, observation and experimentation. The MYP sciences curriculum must explore the connections between science and everyday life. As they investigate real examples of science applications, students will discover the tensions and dependencies between science and morality, ethics, culture, economics, politics, and the environment.

Scientific inquiry also fosters critical and creative thinking about research and design, as well as the identification of assumptions and alternative explanations. Students should learn to appreciate and respect the ideas of others, gain good ethical-reasoning skills and further develop their sense of responsibility as members of local and global communities. These aims are in keeping with and fostered by the ACS strands *Science as a Human Endeavour* and *Science Inquiry Skills*.

Learning science involves more than simply learning technical terminology. The MYP considers all teachers to be language teachers and, thus, MYP sciences should enable students to access, use and communicate scientific knowledge correctly and confidently in oral, written and visual modes.

Aims

The aims of MYP sciences are to encourage and enable students to:

- understand and appreciate science and its implications
- consider science as a human endeavour with benefits and limitations
- cultivate analytical, inquiring and flexible minds that pose questions, solve problems, construct explanations and judge arguments
- develop skills to design and perform investigations, evaluate evidence and reach conclusions
- build an awareness of the need to effectively collaborate and communicate
- apply language skills and knowledge in a variety of real-life contexts
- develop sensitivity towards the living and non-living environments
- reflect on learning experiences and make informed choices.

Objectives

The objectives of MYP sciences encompass the factual, conceptual, procedural and metacognitive dimensions of knowledge. Each objective is elaborated by a number of strands; a strand is an aspect or indicator of the learning expectation.

Together these objectives reflect the holistic nature of science and the real-world work of scientists. They enable students to engage with all aspects of science, either through individual objectives or connected processes.

A. Knowing and understanding

Students develop scientific knowledge (facts, ideas, concepts, processes, laws, principles, models and theories) and apply it to solve problems and express scientifically supported judgments.

Tests or exams must be assessed using this objective.. To reach the highest level students must make scientifically supported judgments about the validity and/or quality of the information presented to them. Assessment tasks could include questions dealing with "scientific claims" presented in media articles, or the results and conclusions from experiments carried out by others, or any question that challenges students to analyse and examine the information and allows them to outline arguments about its validity and/or quality using their knowledge and understanding of science.

In order to reach the aims of sciences, students should be able to:

- i. explain scientific knowledge
- ii. apply scientific knowledge and understanding to solve problems set in familiar and unfamiliar situations
- iii. analyse and evaluate information to make scientifically supported judgments.

B. Inquiring and designing

Intellectual and practical skills are developed through designing, analysing and performing scientific investigations. Although the scientific method involves a wide variety of approaches, the MYP emphasizes experimental work and scientific inquiry.

When students design a scientific investigation they should develop a method that will allow them to collect sufficient data so that the problem or question can be answered. To enable students to design scientific investigations independently, teachers must provide an open-ended problem to investigate. An open-ended problem is one that has several independent variables appropriate for the investigation and has sufficient scope to identify both independent and controlled variables. In order to achieve the highest level for the strand in which students are asked to design a logical, complete and safe method, the student would include only the relevant information, correctly sequenced.

In order to reach the aims of sciences, students should be able to:

- i. explain a problem or question to be tested by a scientific investigation
- ii. formulate a testable hypothesis and explain it using scientific reasoning
- iii. explain how to manipulate the variables, and explain how data will be collected
- iv. design scientific investigations.

C. Processing and evaluating

Students collect, process and interpret qualitative and/or quantitative data, and explain conclusions that have been appropriately reached. MYP sciences helps students to develop analytical thinking skills, which they can use to evaluate the method and discuss possible improvements or extensions.

In order to reach the aims of sciences, students should be able to:

- i. present collected and transformed data
- ii. interpret data and explain results using scientific reasoning
- iii. evaluate the validity of a hypothesis based on the outcome of the scientific investigation
- iv. evaluate the validity of the method
- v. explain improvements or extensions to the method.

D. Reflecting on the impacts of science

Students gain global understanding of science by evaluating the implications of scientific developments and their applications to a specific problem or issue. Varied scientific language will be applied in order to demonstrate understanding. Students are expected to become aware of the importance of documenting the work of others when communicating in science.

Students must reflect on the implications of using science, interacting with one of the following factors: moral, ethical, social, economic, political, cultural or environmental, as appropriate to the task. The student's chosen factor may be interrelated with other factors.

In order to reach the aims of sciences, students should be able to:

- i. explain the ways in which science is applied and used to address a specific problem or issue
- ii. discuss and evaluate the various implications of the use of science and its application in solving a specific problem or issue
- iii. apply scientific language effectively
- iv. document the work of others and sources of information used.

Units of Study

Year	Term 1	Term 2	Term 3	Term 4
6	<ul style="list-style-type: none">• Science Skills• Waste not, want not	<ul style="list-style-type: none">• Disaster!	<ul style="list-style-type: none">• Adapting to Climates	<ul style="list-style-type: none">• Electric Circuits• Green Energy
7	<ul style="list-style-type: none">• Classification• Introduced Species	<ul style="list-style-type: none">• Water Cycle• Clean Water	<ul style="list-style-type: none">• My Carbon Footprint• Pushes and Pulls	<ul style="list-style-type: none">• Earth in Space
8	<ul style="list-style-type: none">• Working Scientifically• Remarkable Rocks	<ul style="list-style-type: none">• Moving Machines• Particle Theory	<ul style="list-style-type: none">• Cells and Immortality• World Problems	<ul style="list-style-type: none">• Clever Compounds
9	<ul style="list-style-type: none">• Sceptical Science• Body Talk and Bionics	<ul style="list-style-type: none">• Ecosystems• Violent Earth	<ul style="list-style-type: none">• Radiation: Friend or Foe?	<ul style="list-style-type: none">• Energy Transfer• Chemistry and Environments
10	<ul style="list-style-type: none">• What's in my Genes?• Rise of the Superbugs	<ul style="list-style-type: none">• Theme Park Physics	<ul style="list-style-type: none">• Periodic Patterns• Controlling Chemistry	<ul style="list-style-type: none">• Big Bang• The Global Warming Debate

Assessment Tasks

Assessment tasks vary according to the units of study. The range of tasks includes research assignments, oral and visual presentations, practical activities and related reports, and topic tests.

Area of Study Contacts:

Coordinator, Science 6-12: Dr. Nicholas Head

Coordinator, Science (MYP): Mrs. Roxanne Russo

Study Extension Program (STEP)

Year 9

The Year 9 STEP course is an approach to learning that endeavours to challenge students both academically and on a personal level. At the core is the realisation that not all young people's needs are met within the classroom-subject-teacher structure. Self confidence, understanding others, organising time, setting objectives, working together, asking questions and helping those less fortunate, are just a few examples of the needs that are not specifically targeted in the curriculum and yet have the potential to make a difference to one's life.

The STEP course attempts to address these needs by setting up a series of situations or activities in which young people can learn other aspects of learning and behaviour. These activities occur in seven modules – each module catering for a specific need. Some of these activities utilise outside instructors and excursions to enrich the learning process. Hence, there is a subject levy to cover these specialist occasions.

Year 10

The STEP programme in Year 10 has been designed to provide fifteen-year-old young people with a series of life shaping experiences and situations. While traditional education approaches to learning are focussed on core literacy and numeracy skills, with other subjects such as Art, Music, Drama and Physical Education broadening this education base, the STEP course has a totally different approach. The central ethos of STEP is: "What makes us human and what do human beings (as young people) need to take them through their life journey?"

The programme's primary function deals with self-esteem and self-development. From these areas seven learning modules have evolved, each with a separate theme, unique concepts, methodologies and a range of thirty activities that students should complete. The word 'should' is deliberately used here to indicate that STEP is 'choice driven, student centred and needs based.'

So what are the seven learning modules?

- Module 1** Theme – *Basic Knowledge*. Objective planning, human relationships, etiquette, mnemonics, public speaking, finance management.
- Module 2** Theme – *Teamwork*. Leadership, observation, delegation, role-play, planning. Learning Scenarios: mechanics, engineering, architecture, gardening, cooking and astrophysics.
- Module 3** Theme – *Service*. Five week (one day per week) shift work at Meals on Wheels or Hutt Street Centre, 7:00am – 8:30am, 9:00am – 11:00am, 11:00am – 1:00pm.
- Module 4** Theme – *Questioning*. Inquiry into issues of the day, e.g. life and death, justice, good and bad, freedom, human conflict.
- Module 5** Theme – *Human Diversity*. A nine day (optional) trek to the Pitjantjatjara Mimili community and Mutitjulu in the far north-west of South Australia.
- Module 6** Theme – *Experiential*. Caving, rock climbing, scuba diving and aeronautics (gliding).
- Module 7** Theme – *Reflection*. Self-evaluation and feedback session.

Other Things You Need To Know

Within the first week of Year 10 STEP, students have to pass a number of tests, such as the 'Commitment Test' (memorising thirty lines in five days using a mnemonics technique) completing 40 personal objectives and a 'Time Trial Test'. All these challenges are designed to check a student's genuine interest.

The course has some homework component, bookwork and a modest level of demand on lunch, recess, after hours, and weekend time. There is no grade for the course. Students are provided with an individual descriptive report at the end of the course.

Some individuals have not chosen to do the program because it does not lead to a Year 11/12 subject. STEP is not about short-term gains, but deals with human qualities, practical experiences and life shaping events. It is about laying foundations for life.

As Year 10 STEP involves many external (to the school) activities and instructors, there is a significant levy (\$550) to the program.

Only twenty two places are available per semester.

Coordinator, STEP: Mr. Steve Wasilewski

Homework Guidelines

Staff at Mercedes College believe that the giving of regular homework assists in the personal and academic development of students. What follows outlines the purposes of homework and suggests ways in which parents can assist student learning at home.

A successful homework program depends on close communication between teacher and parent. Our mutual aim should be to encourage students to take greater responsibility for learning. Homework should aid this development and should, as far as possible, involve parents in their child's learning. At no stage should homework be a frustrating experience and parents are in the best situation to assess their child's ability to complete assignments at home. If a child is unable to complete a homework commitment after reasonable effort, staff should be informed, through a diary note from parents.

Purposes of homework

- To encourage student self discipline.
- To reinforce studies carried out during the day.
- To involve parents in the learning program of their child.
- To encourage student initiative and creativity.
- To enable teachers to assess the level of mastery of work taught in class.
- To prepare students for the demands of further studies at senior secondary and tertiary level.

Role of parent / guardian

- To provide an appropriate place in the home for the student to complete homework set.
- To consult the diary to monitor the amount of homework set each night.
- To encourage and assist the child to complete homework set but not to do the work set. (The teacher is assessing student mastery of work covered in class through homework).

School Diary / Student Planner

The planner is a means of communication between the school and the home. Students are expected to enter all homework set for each night and parents are requested to sign the diary at the end of each week.

Homework time allocation

General guidelines per night:

Year 6	approximately	60 minutes	Year 9	approximately	90 minutes
Year 7	approximately	60 minutes	Year 10	approximately	120 minutes
Year 8	approximately	75 minutes			

At all year levels students should be encouraged to revise work set, to read widely, to continue with an assignment etc., when specific work has not been set by a teacher on a particular night.

Assessment Guidelines

The setting of assignments, projects etc., is an important part of the learning process and provides students with the opportunity to research issues in-depth and respond creatively to aspects of the topic being studied.

Staff have adopted a policy with regard to the late submission of work set. (See *Policy on Academic integrity* in the College Handbook or Student Planner)

The purpose of deadlines is to assist students with their own planning in the development of good organisational skills. It is also unfair to those who meet deadlines to have others being granted additional time without good reason.

The policy for all students from Years 6-10 is as follows:

- Firm deadlines will be set for assignments/projects/extended essays of a summative nature. Students are to enter the due date in their diary.
- Deadlines will be realistic and take into account other pressures such as camps, retreats, etc.
- In cases of genuine illness, compassionate situations or long term absence (notes provided by parents to the satisfaction of staff) students are expected to negotiate an extended deadline. Applications for Extension (located at the back of the student planner) are to be submitted **prior** to the initial deadline.

All staff are therefore expected to:

- Be realistic but firm about setting deadlines;
- Be fair in cases of genuine hardship but firm when avoidance is obvious;
- Adhere to the above policy so that students learn to be punctual and consistent in their study habits.

In cases where students are absent and work has been missed it is the student's responsibility to approach the teacher to identify what has to be done to catch up.

Glossary of MYP Terms

approaches to learning (ATL)	One of the areas of interaction; it is concerned with the development of effective study skills and the ability to reflect on one's own learning.
areas of interaction	The five common themes embedded within and across the academic subjects of the MYP curriculum. They are: <ul style="list-style-type: none">• approaches to learning (ATL)• community and service• health and social education• environments• human ingenuity
assessment criteria	Criteria against which a candidate's performance is measured as evidenced by work produced. MYP subject guides provide assessment criteria for each subject group and the personal project to be used for the final assessment of students.
assessment objective	One of a set of statements for a subject describing the required skills, knowledge and understanding in a subject.
community and service	One of the areas of interaction; it is concerned with the acquisition of experience through social activities within and outside school.
criterion-referenced assessment	An assessment process based on awarding grades against previously agreed criteria. MYP assessment is criterion referenced.
Criterion totals	A student's achievement in a subject is the sum of the levels achieved against all the criteria in that subject. The levels total is then converted to a grade from 1–7 by applying the grade boundaries.
descriptors	These describe the levels of achievement which are assessed in particular skill areas.
environments	One of the areas of interaction; it is concerned with the interdependence of human beings and nature, and with sustainable development.
final assessment	The summative assessment of students at the end of the final year of the MYP.
fundamental concepts	The basic educational principles of the MYP. They include a holistic view of knowledge, intercultural awareness and the importance of communication.
grade boundaries	The lowest and highest marks for a particular grade. These are determined for each subject by the IBO
grades	Schools assess on a 1–7 scale for final assessment. Schools can also use this scale for assessment other than final assessment.
health and social education	One of the areas of interaction; it is concerned with mental and physical health, and the interactions between the individual and community.
holistic education	One of the fundamental concepts of the MYP; it is an interdisciplinary perspective which accentuates the interrelatedness of various disciplines and issues.
human ingenuity	One of the areas of interaction; it is concerned with the products of the creative and inventive genius of people and their impact on society.
interdisciplinary units	Within each of the subject groups, schools may teach individual subjects (eg history and geography within humanities) or an integrated course with elements of each subject every year.
internal	The assessment of a student's work which is carried out by the student's teacher.

assessment

Glossary of MYP Terms (continued)

Middle Years Programme (MYP)	The IBO's programme designed for students between the ages of 11 and 16 years. It is organized according to the fundamental concepts of holistic education, communication and intercultural awareness.
moderation	The procedure by which sample marked work from teachers is reviewed externally to ensure assessment has been carried out according to criteria and standards as laid down. Adjustment of marks by moderators may be necessary (only for schools which request IBO-validated grades).
MYP certificate	The official IB document stating that the candidate has fulfilled the requirements for the award of the MYP certificate.
MYP coordinator	The contact person for IBO offices in an MYP school. This coordinator ensures the effective implementation of the MYP, particularly with respect to the areas of interaction.
objective	One of a set of statements for a subject or the personal project, describing the skills, knowledge and understanding which will be assessed in the course/project. The assessment criteria correspond to the objectives.
personal project	The manifestation of a student's experience of the areas of interaction; completed during the last year of the five-year cycle.
personal project supervisor	The member of staff within a school who is responsible for working directly with the student on the completion of the personal project.
portfolio of work	Selected samples of a student's work in a given discipline, showing achievement against the corresponding assessment criteria.
sample work	Work submitted by schools, on the instructions of IBCA, for review by IBO-appointed moderators.
Subject Groups	The MYP curriculum includes eight subject groups: language A, language B, humanities, the sciences, mathematics, the arts, health & physical education and design technology. Religious education is also included as a compulsory subject at Mercedes and is assessed under the humanities subject group.

Command terms

The command terms listed are used to define the thinking skills that MYP students are expected to demonstrate. The definitions may vary when used in other contexts.

Argue	Challenge or debate an issue or idea with the purpose of persuading or committing someone else to a particular stance or action.
Calculate	Obtain a numerical answer showing the relevant stages in the working.
Classify	Arrange or order by class or category.
Comment	Give a judgment based on a given statement or result of a calculation.
Compare	Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.
Compare and contrast	Give an account of the similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
Construct	Develop information in a diagrammatic or logical form.
Contrast	Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.
Deduce	Reach a conclusion from the information given.
Define	Give the precise meaning of a word, phrase, concept or physical quantity.
Demonstrate	Prove or make clear by reasoning or evidence, illustrating with examples or practical application.
Derive	Manipulate a mathematical relationship to give a new equation or relationship.
Describe	Give a detailed account or picture of a situation, event, pattern or process.
Design	Produce a plan, simulation or model.
Determine	Obtain the only possible answer.
Discuss	Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.
Distinguish	Make clear the differences between two or more concepts or items.
Document	Credit sources of information used by referencing (or citing) following one recognized referencing system. References should be included in the text and also at the end of the piece of work in a reference list or bibliography.
Estimate	Find an approximate value for an unknown quantity.
Evaluate	Assess the implications and limitations; make judgments about the ideas, works, solutions or methods in relation to selected criteria.
Examine	Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.
Exemplify	Represent with an example.
Explain	Give a detailed account including reasons or causes.
Explore	Undertake a systematic process of discovery.
Formulate	Express precisely and systematically the relevant concept(s) or argument(s).
Identify	Provide an answer from a number of possibilities. Recognize and state briefly a distinguishing fact or feature.
Infer	Deduce; reason from premises to a conclusion. Listen or read beyond what has been literally expressed.
Interpret	Use knowledge and understanding to recognize trends and draw conclusions from given

information.

Investigate	Observe, study, or make a detailed and systematic examination, in order to establish facts and reach new conclusions.
Justify	Give valid reasons or evidence to support an answer or conclusion.
Label	Add title, labels or brief explanation(s) to a diagram or graph.
List	Give a sequence of brief answers with no explanation.
Measure	Find the value for a quantity.
Outline	Give a brief account.
Predict	Give an expected result of an upcoming action or event.
Present	Offer for display, observation, examination or consideration.
Prove	Use a sequence of logical steps to obtain the required result in a formal way.
Recall	Remember or recognize from prior learning experiences.
Reflect	Think about deeply; consider.
Recognize	Identify through patterns or features.
Show	Give the steps in a calculation or derivation.
Sketch	Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.
Solve	Obtain the answer(s) using appropriate methods.
State	Give a specific name, value or other brief answer without explanation or calculation.
Suggest	Propose a solution, hypothesis or other possible answer.
Summarize	Abstract a general theme or major point(s).
Synthesize	Combine different ideas in order to create new understanding.
Use	Apply knowledge or rules to put theory into practice.

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