

IBDP Course Syllabus 2017-2018

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Group 1 English A: Language and Literature SL/HL.

Teacher: R White

AIMS

1. Introduce students to a range of texts from different periods, styles and genre
2. Develop in students the ability to engage in close, detailed analysis of individual texts and make relevant connections
3. Develop the students' powers of expression, both in oral and written communication
4. Encourage students to recognize the importance of the contexts in which texts are written and received
5. Encourage, through the study of texts, an appreciation of the different perspectives of people from other cultures, and how these perspectives construct meaning
6. Encourage students to appreciate the formal, stylistic and aesthetic qualities of texts
7. Promote in students an enjoyment of, and lifelong interest in, language and literature.

In addition, the aims of the **language A: literature** course at SL and at HL are to:

8. Develop in students an understanding of the techniques involved in literary criticism
9. Develop the students' ability to form independent literary judgments and to support those ideas.

ASSESSMENT OBJECTIVES

1. Knowledge and understanding
 - Demonstrate knowledge and understanding of a range of texts
 - Demonstrate an understanding of the use of language, structure, technique and style
 - Demonstrate a critical understanding of the various ways in which the reader constructs meaning and of how context influences this constructed meaning
 - Demonstrate an understanding of how different perspectives influence the reading of a text

2. Application and analysis
 - Demonstrate an ability to choose a text type appropriate to the purpose required
 - Demonstrate an ability to use terminology relevant to the various text types studied
 - Demonstrate an ability to analyse the effects of language, structure, technique and style on the reader
 - Demonstrate an awareness of the ways in which the production and reception of texts contribute to their meanings
 - Demonstrate an ability to substantiate and justify ideas with relevant examples

3. Synthesis and evaluation
 - Demonstrate an ability to compare and contrast the formal elements, content and context of texts
 - Discuss the different ways in which language and image may be used in a range of texts.
 - Demonstrate an ability to evaluate conflicting viewpoints within and about a text
 - At HL only: Produce a critical response evaluating some aspects of text, context and meaning

4. Selection and use of appropriate presentation and language skills
 - Demonstrate an ability to express ideas clearly and with fluency in both written and oral communication
 - Demonstrate an ability to use the oral and written forms of the language, in a range of styles, registers and situations
 - Demonstrate an ability to discuss and analyse texts in a focused and logical manner
 - At HL only: Demonstrate an ability to write a balanced, comparative analysis

CONTENT OVERVIEW:

Part I: Language in Cultural Context

Topics to be selected from the following*:

- | | | |
|---|----------------------------|---------------------------------|
| - Language and the Individual | - Language and Communities | - Language and Social Relations |
| - Gender and Sexuality | - Language and Power | - Language and Belief |
| | - Language and Knowledge | - Language and Taboo |
| - Translation | | |
| - History and evolution of the language | | |

*5-6 HL, 2-3 SL	
<p><u>Part II: Language and Mass Communication</u> Topics to be selected from the following*:</p> <ul style="list-style-type: none"> - Stereotypes - Textual Bias - Media Institutions - Use of Persuasive Language Campaigns - Popular Culture - Language and the State - Language and the Presentation of Speeches and - Arts and Entertainment - Role of Editing 	
*5-6 HL, 2-3 SL	
<p><u>Part III: Texts and Contexts</u></p> <ul style="list-style-type: none"> - <i>A Streetcar Named Desire</i> by Tennessee Williams (SL/HL) - <i>Woman At Point Zero</i> by Nawal El Saadawi (SL/HL) - <i>No Exit</i> by Jean Paul Sartre (HL) <p>*3 HL, 2 SL</p>	<p><u>Part IV: Literature</u></p> <ul style="list-style-type: none"> - <i>Things Fall Apart</i> by Chinua Achebe (SL/HL) - <i>Macbeth</i> by William Shakespeare (SL/HL) - Kate Chopin, Short Stories (HL) <p>*3 HL, 2 SL</p>

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
Internal Assessment	Individual Oral Commentary	15%
	Further Oral Activity (x2; best score submitted)	15%
External Assessment:	Written Task 1 (HL: x2; select one to submit) (SL: x3; select one to submit)	20%
	Written Task 2 (HL: x2; select one to submit) (SL: N/A)	
	Paper One	25%
	Paper Two	25%

Group 1. Japanese A Literature SL/HL

Teachers: K Takada , J Yada.

AIMS

1. Introduce students to a range of texts from different periods, styles and genre
2. Develop in students the ability to engage in close, detailed analysis of individual texts and make relevant connections
3. Develop the students' powers of expression, both in oral and written communication
4. Encourage students to recognize the importance of the contexts in which texts are written and received
5. Encourage, through the study of texts, an appreciation of the different perspectives of people from other cultures, and how these perspectives construct meaning
6. Encourage students to appreciate the formal, stylistic and aesthetic qualities of texts
7. Promote in students an enjoyment of, and lifelong interest in, language and literature.

In addition, the aims of the **language A: literature** course at SL and at HL are to:

8. develop in students an understanding of the techniques involved in literary criticism
9. develop the students' ability to form independent literary judgments and to support those ideas.

ASSESSMENT OBJECTIVES

1. Knowledge and understanding
 - Demonstrate knowledge and understanding of individual literary works as representatives of their genre and period, and the relationships between them
 - Demonstrate an understanding of the ways in which cultural values are expressed in literature

- Demonstrate awareness of the significance of the context in which a work is written and received
- Substantiate and justify ideas with relevant examples

2. Analysis, synthesis and evaluation

- Demonstrate an ability to analyse language, structure, technique and style, and evaluate their effects on the reader
- Demonstrate an ability to engage in independent literary criticism on both familiar and unfamiliar literary texts
- Show an ability to examine and discuss in depth the effects of literary techniques and the connections between style and meaning (HL only)

3. Selection and use of appropriate presentation and language skills

- Demonstrate an ability to express ideas clearly and fluently in both written and oral communication, with an effective choice of register and style
- Demonstrate a command of terminology and concepts appropriate to the study of literature
- Demonstrate an ability to express well-organized oral and written arguments
- Demonstrate an ability to write a sustained and detailed literary commentary (HL only)

CRITERION	LEARNING OBJECTIVES
<p>A. 文章の読解と対応</p>	<p>生徒ができるスキル・コンセプト:</p> <ul style="list-style-type: none"> ・ 文学的特徴を理解し識別するとともに分析を行う ・ 批判的思考および独創性を示す ・ 文章の内容に即した関連資料を提供する ・ 文章を理解する力、文章を評価する力を示す
<p>B. 文章に対する深い知識と理解及び対応</p>	<p>生徒ができるスキル・コンセプト:</p> <ul style="list-style-type: none"> ・ 学習した文章に対するしっかりとした理解が見られる ・ 文脈の前後関係を理解した上で文章を読み解く能力を示す ・ 文章に関連した根拠資料や参考資料を用いる能力を示す

<p>C. 言語の使用</p>	<p>生徒ができるスキル・コンセプト:</p> <ul style="list-style-type: none"> ・ 簡潔、明快、的確かつ多様な言葉を使っている ・ 正確で適切かつ多様な文法表現やつづり、文章構成を用いる ・ 的確かつ多様なボキャブラリー、イディオム、スタイルを用いる ・ 効果的な使用域において的確な文学的用語を使用している
<p>D. コミュニケーション スキル</p>	<p>生徒ができるスキル・コンセプト:</p> <ul style="list-style-type: none"> ・ 意図に沿った、効果的かつまとまりのある文章の構成を行う ・ 適切な資料や参考例を必要に応じて上手に取り入れている ・ 時間の制限や定められた言葉の中でアイデアや論理を伝えている ・ 効果的かつ説得力のある、首尾一貫した考えや論理を示している

LIST OF TITLES	
YEAR 1	YEAR 2
<p>Part1 『異邦人』（カミュ）、『ハムレット』（シェイクスピア）、【『人形の家』（イプセン）】</p> <p>Part2 『宮沢賢治詩集』（宮沢賢治）、『鹿鳴館』（三島由紀夫）、【『徒然草』（兼好法師）】</p> <p>Part3 『雨月物語』（上田秋成）、『沈黙』（遠藤周作）、『舞姫・阿部一族』（森鷗外）、【『砂の女』（安部公房）】</p> <p>Part4 『山月記・李陵』（中島敦）、『蜃気楼・或阿呆の一生・歯車』（芥川龍之介）、『GO』（金城一紀）</p> <p>※Part1～ Part3 の作品のうち、【 】で示したものは、HL でのみ扱う作品。</p>	

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
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<p>Internal Assessment S L / H L</p>	<p>1. Individual oral commentary and discussion Part2 の作品を精読し、4 段階の口述試験を行います。口述による解説をしたり、教員とディスカッションをする様子を録音し提出します。</p> <p>2. Individual oral presentation Part 4 の作品を精読し、独自の分析からアイデアを考え構成したプレゼンテーションをクラスの中で行い、評価します。</p>	<p>1. 15% (最高得点 30)</p> <p>2. 15% (最高得点 30)</p>
<p>External Assessment S L / H L</p>	<p>1. Paper 1 Literary commentary (コメンタリー S L 1.5 h / H L 2 h) 初見の抜粋された文章・詩についてコメンタリーを書きます。2000 文字以上書くことを求められます。</p> <p>2. Paper2 Essay (エッセイ S L 1.5 h / H L 2 h) 初見の論題が提示され、学習した Part3 の作品の内容を用いてエッセイを書きます。2000 文字以上書くことを求められます。</p> <p>3. Written assignment (Part1 の作品を使用・エッセイ) Part1 の作品を精読し、4 段階を経て自分で論題を考えます。授業の後各自で 2400-3000 文字のエッセイを書き、提出します。</p>	<p>1. 20% (最高得点 20)</p> <p>2. 25% (最高得点 25)</p> <p>3. 25% (最高得点 25)</p>

Group 2. English B HL

Teachers: C. Yashiro. I Baelde

AIMS
<ol style="list-style-type: none">1. Develop students' intercultural understanding2. Enable students to understand and use the language they have studied in a range of contexts and for a variety of purposes3. Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures4. Develop students' awareness of the role of language in relation to other areas of knowledge5. Develop students' awareness of the relationship between the languages and cultures with which they are familiar6. Provide students with a basis for further study, work and leisure through the use of an additional language7. Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language.

ASSESSMENT OBJECTIVES
<ol style="list-style-type: none">1. Communicate clearly and effectively in a range of situations, demonstrating linguistic competence and intercultural understanding2. Use language appropriate to a range of interpersonal and/or cultural contexts3. Understand and use language to express and respond to a range of ideas with accuracy and fluency4. Organize ideas on a range of topics, in a clear, coherent and convincing manner5. Understand, analyse and respond to a range of written and spoken texts6. Understand and use works of literature written in the target language of study (hl only).

LIST OF TOPICS	
CORE TOPICS (all covered)	OPTION TOPICS (2 selected)
Social Relationships Communication and Media Global Issues Literature (2 works)	Leisure Cultural Diversity Health Science and Technology Customs and Traditions

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
Internal Assessment	1. Individual Oral. 15 minutes preparation time and 8-10 minute presentation and discussion with teacher based on Option Topics.	20
	2. Interactive Oral. Three classroom activities based on Core Topics.	10
External Assessment	1. Paper 1 (1 hour 30 minutes): Receptive skills. Text-handling exercises on five written texts based on Core Topics.	25
	2. Paper 2 (1 hour 30 minutes): Written productive skills.	25
	<u>Section A:</u> One written task of 250-400 words from a choice of five topics based on Option Topics. <u>Section B:</u> Personal Response of 150-200 words to a short stimulus text based on Core Topics. 3. Written Assignment: Receptive and written productive skills. Creative writing of 500-600 words plus a rationale, based on one of the two works of literature.	20

Group 2. Japanese B SL / HL.

Teacher: E.Hikari N.Iwata

AIMS
<ol style="list-style-type: none">1. Develop students' intercultural understanding2. Enable students to understand and use the language they have studied in a range of contexts and for a variety of purposes3. Encourage, through the study of texts and through social interaction, an awareness and appreciation of the different perspectives of people from other cultures4. Develop students' awareness of the role of language in relation to other areas of knowledge5. Develop students' awareness of the relationship between the languages and cultures with which they are familiar6. Provide students with a basis for further study, work and leisure through the use of an additional language7. Provide the opportunity for enjoyment, creativity and intellectual stimulation through knowledge of an additional language.

ASSESSMENT OBJECTIVES
<ol style="list-style-type: none">1. Communicate clearly and effectively in a range of situations, demonstrating linguistic competence and intercultural understanding2. Use language appropriate to a range of interpersonal and/or cultural contexts3. Understand and use language to express and respond to a range of ideas with accuracy and fluency4. Organize ideas on a range of topics, in a clear, coherent and convincing manner5. Understand, analyse and respond to a range of written and spoken texts6. Understand and use works of literature written in the target language of study (HL only).

LIST OF TOPICS	
CORE TOPICS (all covered)	OPTION TOPICS (2 selected)
Social Relationships (社会関係) Communication and Media (コミュニケーションとメディア) Global Issues (国際問題) Literature (2 works) (文学作品) (HL Only)	Leisure (余暇) Cultural Diversity (文化多様性) Health (健康) Science and Technology (科学技術) Customs and Traditions (文化と伝統)

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
Internal Assessment	1. Individual Oral. 15 minutes preparation time and 8-10 minute presentation and discussion with teacher based on Option Topics.	20
	2. Interactive Oral. Three classroom activities based on Core Topics.	10
External Assessment	1. Paper 1 (1 hour 30 minutes): Receptive skills. Text-handling exercises on five written texts based on Core Topics.	25
	2. Paper 2 (1 hour 30 minutes): Written productive skills. <u>Section A:</u> One written task of 500-800 字 from a choice of five topics based on Option Topics. <u>Section B:</u> Personal Response of 300-400 字 to a short stimulus text based on Core Topics.	25
	3. Written Assignment: Receptive and written productive skills. Creative writing of 1000-1200 字 plus a rationale, based on one of the two works of literature.	20

Group 3 Economics SL/HL.

Teacher: W Uricher J Kerrisk

AIMS

1. Encourage the systematic and critical study of: human experience and behaviour; physical, economic and social environments; and the history and development of social and cultural institutions
2. Develop in the student the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments about the nature and activities of the individual and society
3. Enable the student to collect, describe and analyse data used in studies of society, to test hypotheses, and to interpret complex data and source material
4. Promote the appreciation of the way in which learning is relevant both to the culture in which the student lives, and to the culture of other societies
5. Develop an awareness in the student that human attitudes and beliefs are widely diverse and that the study of society requires an appreciation of such diversity
6. Enable the student to recognize that the content and methodologies of the subjects in group 3 are contestable and that their study requires the tolerance of uncertainty.

Economics Aims

7. In addition, the aims of the economics syllabus at SL and HL are to enable students to:
8. Develop an understanding of microeconomic and macroeconomic theories and concepts and their real-world application
9. Develop an appreciation of the impact on individuals and societies of economic interactions between nations
10. Develop an awareness of development issues facing nations as they undergo the process of change.

ASSESSMENT OBJECTIVES

1. Demonstrate knowledge and understanding of specified content
 - Demonstrate knowledge and understanding of the common SL/HL syllabus
 - Demonstrate knowledge and understanding of current economic issues and data

- At HL only: Demonstrate knowledge and understanding of the higher level extension topics
2. Demonstrate application and analysis of knowledge and understanding
 - Apply economic concepts and theories to real-world situations
 - Identify and interpret economic data
 - Demonstrate the extent to which economic information is used effectively in particular contexts
 - At HL only: Demonstrate application and analysis of the extension topics
 3. Demonstrate synthesis and evaluation
 - Examine economic concepts and theories
 - Use economic concepts and examples to construct and present an argument
 - Discuss and evaluate economic information and theories
 - At HL only: Demonstrate economic synthesis and evaluation of the extension topics
 4. Select, use and apply a variety of appropriate skills and techniques
 - Produce well-structured written material, using appropriate economic terminology, within specified time limits
 - Use correctly labelled diagrams to help explain economic concepts and theories
 - Select, interpret and analyse appropriate extracts from the news media
 - Interpret appropriate data sets
 - At HL only: Use quantitative techniques to identify, explain and analyse economic relationships

LIST OF TOPICS	
YEAR 1	YEAR 2
1. The economic way of thinking 2. Microeconomics 3. Microeconomics mathematics (HL option) 4. Macroeconomics 5. Theory of the firm (HL option)	6. International economics 7. Development economics

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
Internal Assessment	Portfolio of three commentaries	20
External Assessment	Paper One Paper Two Paper Three (HL only)	SL 40 / HL 30 SL 40 / HL 30 HL 20

Group 3 History SL/HL
Guide (first exams 2017)

Teacher: R Beaumont

AIMS

1. Encourage the systematic and critical study of: human experience and behaviour; physical, economic and social environments; and the history and development of social and cultural institutions
2. Develop in the student the capacity to identify, to analyse critically and to evaluate theories, concepts and arguments about the nature and activities of the individual and society
3. Enable the student to collect, describe and analyse data/evidence used in studies of society, to test hypotheses, and to interpret complex data and source material
4. Promote the appreciation of the way in which learning is relevant both to the culture in which the student lives, and to the culture of other societies
5. Develop an awareness in the student that human attitudes and beliefs are widely diverse and that the study of society requires an appreciation of such diversity
6. Enable the student to recognize that the content and methodologies of the subjects in group 3 are contestable and that their study requires the tolerance of uncertainty.

History aims.

7. Promote an understanding of history as a discipline, including the nature and diversity of its sources, methods and interpretations.
8. Encourage an understanding of the present through critical reflection upon the past encourage an understanding of the impact of historical developments at national, regional and international levels.
9. Develop an awareness of one's own historical identity through the study of the historical experiences of different cultures.

ASSESSMENT OBJECTIVES

1: Knowledge and understanding

- Demonstrate detailed, relevant and accurate historical knowledge.

- Demonstrate understanding of historical concepts and context.
- Demonstrate understanding of historical sources. (Internal assessment and paper 1)

2: Application and analysis

- Formulate clear and coherent arguments.
- Use relevant historical knowledge to effectively support analysis.
- Analyse and interpret a variety of sources. (Internal assessment and paper 1)

3: Synthesis and evaluation

- Integrate evidence and analysis to produce a coherent response.
- Evaluate different perspectives on historical issues and events, and integrate this evaluation effectively into a response.
- Evaluate sources as historical evidence, recognizing their value and limitations. (Internal assessment and paper 1)
- Synthesize information from a selection of relevant sources. (Internal assessment and paper 1)

4: Use and application of appropriate skills

- Structure and develop focused essays that respond effectively to the demands of a question.
- Reflect on the methods used by, and challenges facing, the historian. (Internal assessment)
- Formulate an appropriate, focused question to guide a historical inquiry. (Internal assessment)
- Demonstrate evidence of research skills, organization, referencing and selection of appropriate sources. (Internal assessment)

LIST OF TOPICS	
YEAR 1	YEAR 2
1. USA Civil rights and South Africa Apartheid 2. Independence movements (e.g Gandhi and India) 3. Meiji and Pre war Imperial Japan and its relations with China and Korea (HL)	4. Hitler`s Germany/Stalin`s Russia 5. Mao`s China 6. Inter war Imperial Japan & post war economy and society (HL)

ASSESSMENT TYPE SL	COMPONENT	IBDP WEIGHT %
Internal Assessment	Historical investigation on any area of the syllabus. Approximately 20 hours.	25% SL 20% HL
External Assessment	<p style="text-align: center;">Paper 1 (1 hour) Two prescribed subjects. Five short- answer/structured questions.</p> <p style="text-align: center;">Paper 2 (1 hour 30 minutes) Choose two world topics. Two extended-response questions.</p> <p style="text-align: center;">Paper 3 (2 hour 30 minutes, HL only). Three extended response questions on selected world region.</p>	<p style="text-align: center;">30% SL. 20%HL</p> <p style="text-align: center;">45% SL 25% HL</p> <p style="text-align: center;">35% HL</p>

Group 3/4 Environmental Systems and Societies SL

Teacher: N Pinkerton

AIMS

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

ASSESSMENT OBJECTIVES

1. Demonstrate knowledge and understanding of relevant:
 - facts and concepts
 - methodologies and techniques

- values and attitudes.

2. Apply this knowledge and understanding in the analysis of:

- explanations, concepts and theories
- data and models
- case studies in unfamiliar contexts
- arguments and value systems.

3. Evaluate, justify and synthesize, as appropriate:

- explanations, theories and models
- arguments and proposed solutions
- methods of fieldwork and investigation
- cultural viewpoints and value systems.

4. Engage with investigations of environmental and societal issues at the local and global level through:

- evaluating the political, economic and social contexts of issues
- selecting and applying the appropriate research and practical skills necessary to carry out investigations
- suggesting collaborative and innovative solutions that demonstrate awareness and respect for the cultural differences and value systems of others.

LIST OF TOPICS

1. Foundations of environmental systems and societies.	5. Soil systems and terrestrial food production systems and societies
2. Ecosystems and ecology	6. Atmospheric systems and societies
3. Biodiversity and conservation	7. Climate change and energy production
4. Water and aquatic food production systems and societies	8. Human systems and resource use

Assessment component	Weighting (%)	Duration (hours)
Paper 1 (case study)	25	1
Paper 2 (short answers and structured essays)	50	2

Internal assessment (individual investigation)	25	10
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Group 4 Biology SL/HL.

Teacher: A Leach, A Mangat

AIMS

1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
2. acquire a body of knowledge, methods and techniques that characterize science and technology
3. apply and use a body of knowledge, methods and techniques that characterize science and technology
4. develop an ability to analyse, evaluate and synthesize scientific information
5. develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
6. develop experimental and investigative scientific skills including the use of current technologies
7. develop and apply 21st century communication skills in the study of science
8. become critically aware, as global citizens, of the ethical implications of using science and technology
9. develop an appreciation of the possibilities and limitations of science and technology
10. develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

ASSESSMENT OBJECTIVES

1. Demonstrate knowledge and understanding of:
 - a. facts, concepts and terminology
 - b. methodologies and techniques
 - c. communicating scientific information.
2. Apply:
 - a. facts, concepts and terminology
 - b. methodologies and techniques
 - c. methods of communicating scientific information.

3. Formulate, analyse and evaluate:
 - a. hypotheses, research questions and predictions
 - b. methodologies and techniques
 - c. primary and secondary data
 - d. scientific explanations.

4. Demonstrate the appropriate research, experimental, and personal skills necessary to carry out insightful and ethical investigations.

LIST OF TOPICS	
<p>Core</p> <ol style="list-style-type: none"> 1. Cell biology 2. Molecular biology 3. Genetics 4. Ecology 5. Evolution and biodiversity 6. Human physiology <p>Additional higher level (AHL)</p> <ol style="list-style-type: none"> 7. Nucleic acids 8. Metabolism, cell respiration and photosynthesis 9. Plant biology 10. Genetics and evolution 11. Animal physiology 	<p>Option</p> <ol style="list-style-type: none"> A. Neurobiology and behaviour B. Biotechnology and bioinformatics C. Ecology and conservation D. Human physiology

ASSESSMENT TYPE	COMPONENT		IBDP WEIGHT %
Internal Assessment	Personal Engagement	This criterion assesses the extent to which the student engages with the exploration and makes it their own.	1.5%

	Exploration	This criterion assesses the extent to which the student establishes the scientific context for the work, states a clear and focused research question and uses concepts and techniques appropriate to the DP level.	5%
	Analysts	This criterion assesses the extent to which the student's report provides evidence that the student has selected, recorded, processed and interpreted the data in ways that are relevant to the research question and can support a conclusion.	5%
	Evaluation	This criterion assesses the extent to which the student's report provides evidence of evaluation of the investigation and the results with regard to the research question and the accepted scientific context.	5%
	Communication	This criterion assesses whether the investigation is presented and reported in a way that supports effective communication of the focus, process and outcomes.	3.5%
External Assessment		Paper One SL/ HL Paper Two SL/HL Paper Three SL/HL	20 / 20 40 / 36 20 / 24

Group 4 Chemistry SL and Chemistry HL

Teacher: N Pinkerton

AIMS

1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
2. acquire a body of knowledge, methods and techniques that characterize science and technology
3. apply and use a body of knowledge, methods and techniques that characterize science and technology
4. develop an ability to analyse, evaluate and synthesize scientific information
5. develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
6. develop experimental and investigative scientific skills including the use of current technologies
7. develop and apply 21st century communication skills in the study of science
8. become critically aware, as global citizens, of the ethical implications of using science and technology
9. develop an appreciation of the possibilities and limitations of science and technology
10. develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

ASSESSMENT OBJECTIVES

1. Demonstrate knowledge and understanding of:
 - a. facts, concepts, and terminology
 - b. methodologies and techniques
 - c. communicating scientific information.
2. Apply:
 - a. facts, concepts, and terminology
 - b. methodologies and techniques
 - c. methods of communicating scientific information.
3. Formulate, analyse and evaluate:
 - a. hypotheses, research questions and predictions

- b. methodologies and techniques
 - c. primary and secondary data
 - d. scientific explanations.
4. Demonstrate the appropriate research, experimental, and personal skills necessary to carry out insightful and ethical investigations.

LIST OF TOPICS	
<p>Core (SL)</p> <ol style="list-style-type: none"> 1. Stoichiometric relationships 2. Atomic structure 3. Periodicity 4. Chemical bonding and structure 5. Energetics/thermochemistry 6. Chemical kinetics 7. Equilibrium 8. Acids and Bases 9. Redox processes 10. Organic Chemistry 11. Measurement and Data processing 	<p>Additional higher Level (HL)</p> <ol style="list-style-type: none"> 12. Atomic structure 13. The periodic table - the transition metals 14. Chemical bonding and structure 15. Energetics/thermochemistry 16. Chemical kinetics 17. Equilibrium 18. Acids and bases 19. Redox processes 20. Organic chemistry 21. Measurement and analysis
<p>Options (one is chosen)</p> <ol style="list-style-type: none"> A. Materials B. Biochemistry C. Energy D. Medicinal chemistry 	

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %	
		SL	HL
Internal Assessment	<p>Individual investigation: Students are assessed on their ability to</p> <ul style="list-style-type: none"> • personally engage with their research • use scientific exploration skills • use scientific analysis 	20	

	<ul style="list-style-type: none"> • evaluate their investigation • communicate their findings and its importance. 		
External Assessment	Paper One	20	20
	Paper Two	40	36
	Paper Three	20	24

Group 4. Physics SL/HL.

Teacher: G Storey

AIMS

Enable students, through the overarching theme of the Nature of science, to:

1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
2. acquire a body of knowledge, methods and techniques that characterize science and technology
3. apply and use a body of knowledge, methods and techniques that characterize science and technology
4. develop an ability to analyse, evaluate and synthesize scientific information
5. develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
6. develop experimental and investigative scientific skills including the use of current technologies
7. develop and apply 21st-century communication skills in the study of science
8. become critically aware, as global citizens, of the ethical implications of using science and technology
9. develop an appreciation of the possibilities and limitations of science and technology
10. develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

ASSESSMENT OBJECTIVES

1. Demonstrate knowledge and understanding of:
 - a. facts, concepts and terminology
 - b. methodologies and techniques
 - c. communicating scientific information.

2. Apply:
 - a. facts, concepts and terminology
 - b. methodologies and techniques
 - c. methods of communicating scientific information.

3. Formulate, analyse and evaluate:

- a. hypotheses, research questions and predictions
- b. methodologies and techniques
- c. primary and secondary data
- d. scientific explanations.

4. Demonstrate the appropriate research, experimental, and personal skills necessary to carry out insightful and ethical investigations.

LIST OF TOPICS	
<p>Core (SL)</p> <ul style="list-style-type: none"> 1. Measurements and uncertainties 2. Mechanics 3. Thermal physics 4. Waves 5. Electricity and magnetism 6. Circular motion and gravitation 7. Atomic, nuclear and particle physics 8. Energy production 	<p>Additional higher Level (HL)</p> <ul style="list-style-type: none"> 9. Wave phenomena 10. Fields 11. Electromagnetic induction 12. Quantum and nuclear physics
<p>Options (one is chosen)</p> <ul style="list-style-type: none"> A. Relativity B. Engineering physics C. Imaging D. Astrophysics 	

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %	
		SL	HL

<p>Internal Assessment</p>	<p>Individual investigation: Students are assessed on their ability to:</p> <ul style="list-style-type: none"> ● personally engage with the investigation (8%) ● use scientific exploration skills (25%) ● use scientific analytical skills (25%) ● evaluate their investigation (25%) ● communicate their findings and its importance (17%) 	<p>20</p>	
<p>External Assessment</p>	<p>Paper One</p>	<p>20</p>	<p>20</p>
	<p>Paper Two</p>	<p>40</p>	<p>36</p>
	<p>Paper Three</p>	<p>20</p>	<p>24</p>

Group 5. Mathematics. SL/HL

Teachers: A Yokoyama, G Storey

AIMS

1. Enjoy mathematics, and develop an appreciation of the elegance and power of mathematics
2. Develop an understanding of the principles and nature of mathematics
3. Communicate clearly and confidently in a variety of contexts
4. Develop logical, critical and creative thinking, and patience and persistence in problem-solving
5. Employ and refine their powers of abstraction and generalization
6. Apply and transfer skills to alternative situations, to other areas of knowledge and to future developments
7. Appreciate how developments in technology and mathematics have influenced each other
8. Appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
9. Appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
10. Appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” the Tok course

ASSESSMENT OBJECTIVES

1. **Knowledge and understanding:** recall, select and use their knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.
2. **Problem-solving:** recall, select and use their knowledge of mathematical skills, results and models in both real and abstract contexts to solve problems.
3. **Communication and interpretation:** transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation.
4. **Technology:** use technology, accurately, appropriately and efficiently both to explore new ideas and to solve problems.

5. **Reasoning:** construct mathematical arguments through use of precise statements, logical deduction and inference, and by the manipulation of mathematical expressions.
6. **Inquiry approaches:** investigate unfamiliar situations, both abstract and real-world, involving organizing and analysing information, making conjectures, drawing conclusions and testing their validity.

LIST OF TOPICS	
YEAR 1	YEAR 2
1. Functions and Equations 2. Differentiation 3. Trigonometry 4. Vectors 5. Statistics Additional HL Topics: Complex Numbers Counting and Binomial Theorem,	6. Algebra 7. Integration 8. Vector Applications 9. Probability Additional HL Topics: Complex Numbers (Advanced) Mathematical Induction HL Option

ASSESSMENT TYPE	COMPONENT	WEIGHT %
Internal Assessment	Mathematical Exploration: A written work that involves investigating an area of mathematics. The emphasis is on mathematical communication (including formulae, diagrams, graphs and so on), with accompanying commentary, good mathematical writing and thoughtful reflection.	20
External Assessment	Paper One Paper Two Paper Three	SL 40 / HL 30 SL 40 / HL 30 HL 20

Group 5 Mathematical Studies SL

Teachers: N. Anderson

AIMS

1. Enjoy mathematics, and develop an appreciation of the elegance and power of mathematics
2. Develop an understanding of the principles and nature of mathematics
3. Communicate clearly and confidently in a variety of contexts
4. Develop logical, critical and creative thinking, and patience and persistence in problem-solving
5. Employ and refine their powers of abstraction and generalization
6. Apply and transfer skills to alternative situations, to other areas of knowledge and to future developments
7. Appreciate how developments in technology and mathematics have influenced each other
8. Appreciate the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics
9. Appreciate the international dimension in mathematics through an awareness of the universality of mathematics and its multicultural and historical perspectives
10. Appreciate the contribution of mathematics to other disciplines, and as a particular “area of knowledge” the TOK course

ASSESSMENT OBJECTIVES

1. **Knowledge and understanding:** recall, select and use their knowledge of mathematical facts, concepts and techniques in a variety of familiar and unfamiliar contexts.
2. **Problem-solving:** recall, select and use their knowledge of mathematical skills, results and models in both real and abstract contexts to solve problems.
3. **Communication and interpretation:** transform common realistic contexts into mathematics; comment on the context; sketch or draw mathematical diagrams, graphs or constructions both on paper and using technology; record methods, solutions and conclusions using standardized notation.
4. **Technology:** use technology, accurately, appropriately and efficiently both to explore new ideas and to solve problems.

5. **Reasoning:** construct mathematical arguments through use of precise statements, logical deduction and inference, and by the manipulation of mathematical expressions.
6. **Investigative approaches:** investigate unfamiliar situations involving organizing and analysing information or measurements, drawing conclusions, testing their validity, and considering their scope and limitations.

LIST OF TOPICS	
YEAR 1	YEAR 2
1. Number and Algebra 5. Geometry and Trigonometry 2. Descriptive Statistics 3. Logic, Sets and Probability 4. Statistical Applications	6. Mathematical Models 7. Introduction to Differential Calculus

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
Internal Assessment	Project - an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements	20
External Assessment	Paper One	40
	Paper Two	40

Group 6. Visual Arts SL/HL

Teacher: K Ahn

AIMS
<ol style="list-style-type: none">1. Investigate past, present and emerging forms of visual arts and engage in producing, appreciating and evaluating these2. Develop an understanding of visual arts from a local, national and international perspective3. Build confidence in responding visually and creatively to personal and cultural experiences4. Develop skills in, and sensitivity to, the creation of works that reflect active and individual involvement5. Take responsibility for the direction of their learning through the acquisition of effective working practices.

ASSESSMENT OBJECTIVES
<ol style="list-style-type: none">1. Respond to and analyse critically and contextually the function, meaning and artistic qualities of past, present and emerging art, using the specialist vocabulary of visual arts2. Develop and present independent ideas and practice, and explain the connections between these and the work of others3. Explore and develop ideas and techniques for studio work through integrated contextual study and first-hand observations4. Develop and maintain a close relationship between investigation and a purposeful, creative process in studio work5. Produce personally relevant works of art that reveal evidence of exploration of ideas that reflect cultural and historical awareness6. Develop and demonstrate technical competence and artistic qualities that challenge and extend personal boundaries (option a) and technical competence and self-direction (option b).



CONTENT OUTLINE

HL Students must explore studio based art across three of the following areas.

SL Students must explore studio art across two areas of the following areas.

<p>Two Dimensional forms</p> <p>Drawing: such as charcoal, pencil, ink</p> <ul style="list-style-type: none"> • Painting: such as acrylic, oil, watercolour • Printmaking: such as relief, intaglio, planographic, chine collé • Graphics: such as illustration and design
<p>Three-dimensional forms</p> <p>Sculpture: such as ceramics, found objects, wood, assemblage</p> <ul style="list-style-type: none"> • Designed objects: such as fashion, architectural, vessels • Site specific/ephemeral: such as land art, installation, mural • Textiles: such as fibre, weaving, printed fabric
<p>Lens-based, electronic and screen-based forms</p> <p>Time-based and sequential art: such as animation, graphic novel, storyboard</p> <ul style="list-style-type: none"> • Lens media: such as still, moving, montage • Digital/screen based: such as vector graphics, software generated

ASSESSMENT TYPE	COMPONENT	IBDP WEIGHT %
Internal Assessment	Investigation workbook: supporting the development of studio work	Option A: 40 Option B: 60

External Assessment	Studio work: development of thematic work exploring media, artist models and issues relating to culture, history and society	Option A: 60 Option B: 40
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SL

Assessment tasks	Weighting
<p>External assessment</p> <p>Part 1: Comparative study</p> <p>Students at SL analyse and compare different artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artifacts from differing cultural contexts.</p> <ul style="list-style-type: none"> SL students submit 10–15 screens which examine and compare at least three artworks, at least two of which should be by different artists. The work selected for comparison and analysis should come from contrasting contexts (local, national, international and/or intercultural). SL students submit a list of sources used. 	20%
<p>Part 2: Process portfolio</p> <p>Students at SL submit carefully selected materials which evidence their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two- year course.</p> <ul style="list-style-type: none"> SL students submit 9–18 screens which evidence their sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities. For SL students the submitted work must be in at least two art-making forms, each from separate columns of the art-making forms table. 	40%

Assessment tasks	Weighting
<p>Internal assessment</p> <p>This task is internally assessed by the teacher and externally moderated by the IB at the end of the course.</p> <p>Part 3: Exhibition</p> <p>Students at SL submit for assessment a selection of resolved artworks from their exhibition. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication.</p> <ul style="list-style-type: none"> • SL students submit a curatorial rationale that does not exceed 400 words. • SL students submit 4–7 artworks. • SL students submit exhibition text (stating the title, medium, size and intention) for each selected artwork. <p>SL students may submit two photographs of their overall exhibition. These exhibition photographs provide an understanding of the context of the exhibition and the size and scope of the works. While the photographs will not be used to assess individual artworks, they may give the moderator insight into how a candidate has considered the overall experience of the viewer in their exhibition.</p>	<p>40%</p>

HL

Assessment tasks	Weighting
<p>External assessment</p> <p>Part 1: Comparative study</p> <p>Students at HL analyse and compare different artworks by different artists. This independent critical and contextual investigation explores artworks, objects and artefacts from differing cultural contexts.</p>	<p>20%</p>

<ul style="list-style-type: none"> • HL students submit 10–15 screens which examine and compare at least three artworks, at least two of which need to be by different artists. The works selected for comparison and analysis should come from contrasting contexts (local, national, international and/or intercultural). • HL students submit 3–5 screens which analyse the extent to which their work and practices have been influenced by the art and artists examined. • HL students submit a list of sources used. 	
<p>Part 2: Process portfolio</p> <p>Students at HL submit carefully selected materials which evidence their experimentation, exploration, manipulation and refinement of a variety of visual arts activities during the two-year course.</p> <ul style="list-style-type: none"> • HL students submit 13–25 screens which evidence their sustained experimentation, exploration, manipulation and refinement of a variety of art-making activities. For HL students the submitted work must have been created in at least three art-making forms, selected from a minimum of two columns of the art-making forms table. 	<p>40%</p>

Assessment tasks	Weighting
<p>Internal assessment</p> <p>This task is internally assessed by the teacher and externally moderated by the IB at the end of the course.</p> <p>Part 3: Exhibition</p> <p>Students at HL submit for assessment a selection of resolved artworks from their exhibition. The selected pieces should show evidence of their technical accomplishment during the visual arts course and an understanding of the use of materials, ideas and practices appropriate to visual communication.</p>	<p>40%</p>

- HL students submit a curatorial rationale that does not exceed 700 words.
- HL students submit 8–11 artworks.
- HL students submit exhibition text (stating the title, medium, size and intention) for each selected artwork.

HL students may submit two photographs of their overall exhibition. These exhibition photographs provide an understanding of the context of the exhibition and the size and scope of the works. While the photographs will not be used to assess individual artworks, they may give the moderator insight into how a candidate has considered the overall experience of the viewer in their exhibition.