



# Hurlstone Agricultural High School

## HSC Assessment Schedule 2022 - 2023



*Celebrating high potential and giftedness in the creative domain at HAHS.  
Still life study artwork by Tiya Purohit.*

E: Issued date 29 October 2022

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\*\* Timing may change due to unforeseen events and/or circumstances. Students will be given due notice via a revised assessment task notification in such cases.

<b>STUDENT PERSONAL ASSESSMENT RECORD REGISTER</b>			
<b>Subject:</b>			
<b>Task</b>	<b>Date due</b>	<b>Mark</b>	<b>Reflection</b>
1			
2			
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4			
<b>Comments</b>			
<b>Subject:</b>			
<b>Task</b>	<b>Date due</b>	<b>Mark</b>	<b>Reflection</b>
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<b>Task</b>	<b>Date due</b>	<b>Mark</b>	<b>Reflection</b>
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<b>Comments</b>			
<b>Subject:</b>			
<b>Task</b>	<b>Date due</b>	<b>Mark</b>	<b>Reflection</b>
1			
2			
3			
4			
<b>Comments</b>			

## CREATIVE ARTS

### MUSIC 1

#### OUTCOMES

Through activities in performance, composition, musicology and aural, a student:

- H1** performs stylistically, music that is characteristic of topics studied, both as a soloist and as a member of an ensemble
- H2** reads, interprets, discusses and analyses simple musical scores that are characteristic of the topics studied
- H3** improvises and composes music using the range of concepts for familiar sound sources reflecting the cultural and historical contexts studied
- H4** articulates an aural understanding of musical concepts and their relationships in a wide variety of musical styles
- H5** critically evaluates and discusses performances and compositions
- H6** critically evaluates and discusses the use of the concepts of music in works representative of the topics studied and through wide listening
- H7** understands the capabilities of performing media, incorporates technologies into composition and performance as appropriate to the topics studied
- H8** identifies, recognises, experiments with, and discusses the use and effects of technology in music
- H9** performs as a means of self-expression and communication
- H10** demonstrates a willingness to participate in performance, composition, musicology and aural activities
- H11** demonstrates a willingness to accept and use constructive criticism

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Composition Term 4, Week 8 2022	Aural Core/ Elective 1 Task Term 1, Week 7, 2023	Trial HSC Exam Term 3, Exam period, 2023	Elective Presentation Term 3, Week 5, 2023
		Outcomes	H4, H6, H7, H9, H10	H2, H4, H5, H6, H8, H10, H11	H3, H4, H5, H6, H7, H8, H10, H11
Performance Core	10	5		5	
Aural Skills Core	25		15	10	
Composition Core	10	10			
Musicology Core	10	10			
Elective 1	15		5	5	5
Elective 2	15			5	10
Elective 3	15			5	10
<b>TOTAL %</b>	<b>100</b>	<b>25</b>	<b>20</b>	<b>30</b>	<b>25</b>

## CREATIVE ARTS

### VISUAL ARTS

#### OUTCOMES

A student:

- H1** initiates and organises artmaking practice that is sustained, reflective and adapted to suit particular conditions
- H2** applies their understanding of the relationships among the artist, artwork, world and audience through the making of a body of work
- H3** demonstrates an understanding of the frames when working independently in the making of art
- H4** selects and develops subject matter and forms in particular ways as representations in art making
- H5** demonstrates conceptual strength in the production of a body of work that exhibits coherence and may be interpreted in a range of ways
- H6** demonstrates technical accomplishment, refinement and sensitivity appropriate to the artistic intentions within a body of work
- H7** applies their understanding of practice in art criticism and art history
- H8** applies their understanding of the relationships among the artist, artwork, world and audience
- H9** demonstrates an understanding of how the frames provide for different orientations to critical and historical investigations of art
- H10** constructs a body of significant art histories, critical narratives and other documentary accounts of representation in the visual arts

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Research	BOW +VAPD	Trial HSC Exam	BOW Final+ VAPD
		Term 1 Week 2/3, 2023	Term 2 Week 2/3, 2023	Term 3, Exam period, 2023	Term 3 Week 5/6, 2023
	Outcomes	H7, H8, H9, H10	H1, H2, H3, H4, H5	H7, H8, H9, H10	H1, H2, H3, H4, H5, H6
Art History & Criticism	50	20		30	
Art Making	50		20		30
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>30</b>

## ENGLISH

### ENGLISH ADVANCED

#### OUTCOMES

A student:

- EA12-1** Independently responds to, composes and evaluates a range of complex texts for understanding, interpretation, critical analysis, imaginative expression and pleasure
- EA12-2** Uses, evaluates and justifies processes, skills and knowledge required to effectively respond to and compose texts in different modes, media and technologies
- EA12-3** Critically analyses and uses language forms, features and structures of texts justifying appropriateness for specific purposes, audiences and contexts and evaluates their effects on meaning
- EA12-4** Strategically adapts and applies knowledge, skills and understanding of language concepts and literary devices in new and different contexts
- EA12-5** Thinks imaginatively, creatively, interpretively, critically and discerningly to respond to, evaluate and compose texts that synthesise complex information, ideas and arguments
- EA12-6** Investigates and evaluates the relationships between texts
- EA12-7** Evaluates the diverse ways texts can represent personal and public worlds and recognises how they are valued
- EA12-8** Explains and evaluates nuanced cultural assumptions and values in texts and their effects on meaning
- EA12-9** Reflects on, evaluates and monitors own learning and refines individual and collaborative processes as an independent learner

Components (syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Multimodal  Common Module	Extended Response  Module A	Extended Response  Module B & C (15% Module B & 20% Module C)	Trial HSC Exam  All Modules (10% Paper 1 & 15% Paper 2)
		Term 4, Week 7, 2022	Term 1, Week 8, 2023	Term 2, Week 8, 2023	Term 3, Exam period, 2023
	<b>Outcomes</b>	EA12-1 EA12-2 EA12-4 EA12-5	EA12-3 EA12-5 EA12-6	EA12-2 EA12-5 EA12-7 EA12-8 EA12-9	EA12-1 EA12-2 EA12-3 EA12-4 EA12-5 EA12-6 EA12-7 EA12-8 EA12-9
<b>Knowledge</b>	<b>50</b>	10	10	20	10
<b>Skills</b>	<b>50</b>	10	10	15	15
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>35</b>	<b>25</b>



## ENGLISH

### ENGLISH EXTENSION 1

#### OUTCOMES

A student:

- EE12-1** Demonstrates and applies insightful understanding of the dynamic, often subtle, relationship between text, purpose, audience and context, across a range of modes, media and technologies
- EE12-2** Analyses and experiments with language forms, features and structures of complex texts, discerningly evaluating their effects on meaning for different purposes, audiences and contexts
- EE12-3** Independently investigates, interprets and synthesises critical and creative texts to analyse and evaluate different ways of valuing texts in order to inform and refine response to and composition of sophisticated texts
- EE12-4** Critically evaluates how perspectives, including the cultural assumptions and values that underpin those perspectives, are represented in texts
- EE12-5** Reflects on and evaluates the development of their conceptual understanding and the independent and collaborative writing and creative processes

Components (syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3
		Extended Response	Multimodal	Trial HSC Exam
		Common Module	Elective Module	All Modules
	Term 4, Week 9, 2022	Term 2, Week 4, 2023	Term 3, Exam Period, 2023	
Outcomes	EE12-1 EE12-2 EE12-5	EE12-1 EE12-2 EE12-3 EE12-4	EE12-1 EE12-2 EE12-3 EE12-4 EE12-5	
Knowledge	50	15	20	15
Skills	50	15	20	15
<b>TOTAL %</b>	<b>100</b>	<b>30</b>	<b>40</b>	<b>30</b>

## ENGLISH

### ENGLISH EXTENSION 2

#### OUTCOMES

A student:

- EEX12-1** demonstrates a deep understanding of the dynamic relationship between text, composer, audience and context through the conceptualisation and execution of an extended composition using appropriate mode, medium and technology
- EEX12-2** strategically and effectively manipulates language forms and features to create a substantial extended composition for a specific purpose, audience and context
- EEX12-3** applies knowledge, understanding and insight, refined through analysis, interpretation, criticism and evaluation of strategically chosen texts, to shape new meaning in an original composition
- EEX12-4** undertakes extensive independent investigation to articulate a personal perspective that explores, challenges, speculates or evaluates a significant situation, event or idea
- EEX12-5** reflects on and evaluates the composition process and the effectiveness of their own published composition

Components (syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3
		Multimodal Presentation	Research and Reflection Task	Extended Response
		Viva Voce + Major Work Journal	Literature Review + Major Work Journal	Critique of the Creative Process + Major Work Journal
	Term 4, Week 8, 2022	Term 1, Week 7, 2023	Term 2, Week 7, 2023	
Outcomes	EEX12-1 EEX12-2 EEX12-3	EEX12-1 EEX12-2 EEX12-3 EEX12-4	EEX12-3 EEX12-4 EEX12-5	
<b>Knowledge</b>	<b>50</b>	15	20	15
<b>Skills</b>	<b>50</b>	15	20	15
<b>TOTAL %</b>	<b>100</b>	<b>30</b>	<b>40</b>	<b>30</b>

**ANCIENT HISTORY****OUTCOMES**

A student:

- AH12-1** accounts for the nature of continuity and change in the ancient world
- AH12-2** proposes arguments about the varying causes and effects of events and developments
- AH12-3** evaluates the role of historical features, individuals and groups in shaping the past
- AH12-4** analyses the different perspectives of individuals and groups in their historical context
- AH12-5** assesses the significance of historical features, people, places, events and developments of the ancient world
- AH12-6** analyses and interprets different types of sources for evidence to support an historical account or argument
- AH12-7** discusses and evaluates differing interpretations and representations of the past
- AH12-8** plans and conducts historical investigations and presents reasoned conclusions, using relevant evidence from a range of sources
- AH12-9** communicates historical understanding, using historical knowledge, concepts and terms, in appropriate and well-structured forms
- AH12-10** analyses issues relating to the ownership, custodianship and conservation of the ancient past

Components (syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Ancient Societies: In class Extended Response	Historical Period: Historical Analysis Pre-recorded Presentation	Personalities in their times: In-class extended response	Trial HSC Exam
	Outcomes	Term 4, Week 8 2022	Term 1, Week 6 2023	Term 2, Week 7 2023	Term 3, Exam Period, 2023
Knowledge & Understanding Course Content	40	10	10	5	15
Historical skills in the analysis and evaluation of sources and interpretations	20	5	5		10
Historical Inquiry & Research	20		10	10	
Communication of Historical Understanding in Appropriate Forms	20	5	5	5	5
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>30</b>	<b>20</b>	<b>30</b>

**BUSINESS STUDIES****OUTCOMES**

A student:

- H1** critically analyses the role of business in Australia and globally  
**H2** evaluates management strategies in response to changes in internal and external influences  
**H3** discusses the social and ethical responsibilities of management  
**H4** analyses business functions and processes in large and global businesses  
**H5** explains management strategies and their impact on businesses  
**H6** evaluates the effectiveness of management in the performance of businesses  
**H7** plans and conducts investigations into contemporary business issues  
**H8** organises and evaluates information for actual and hypothetical business situations  
**H9** communicates business information, issues and concepts in appropriate formats  
**H10** applies mathematical concepts appropriately in business situations

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Operations Extended Response  Term 4, Week 9 2022	Marketing Research Task Term 1, Week 8 2023	Finance Business Report Term 2, Week 8, 2023	Trial HSC Exam Term 3, Exam Period, 2023
	Outcomes	H4, H6, H7, H8, H9	H2, H3, H4, H5, H6, H7, H8, H9	H4, H5, H7, H8, H9	H1, H2, H3, H4, H5, H6, H8, H9, H10
Knowledge & understanding of course content	40	10	10	5	15
Stimulus – based skills	20			10	10
Inquiry & research	20	5	10	5	
Communication of business information, ideas & issues in appropriate forms	20	5	5	5	5
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>25</b>	<b>25</b>	<b>30</b>

**OUTCOMES**

A student:

- H1** demonstrates understanding of economic terms, concepts and relationships  
**H2** analyses the economic role of individuals, firms, institutions and governments  
**H3** explains the role of markets within the global economy  
**H4** analyses the impact of global markets on the Australian and global economies  
**H5** discusses policy options for dealing with problems and issues in contemporary and hypothetical contexts  
**H6** analyses the impact of economic policies in theoretical and contemporary Australian contexts  
**H7** evaluates the consequences of contemporary economic problems and issues on individuals, firms and governments  
**H8** applies appropriate terminology, concepts and theories in contemporary and hypothetical economic contexts  
**H9** selects and organises information from a variety of sources for relevance and reliability  
**H10** communicates economic information, ideas and issues in appropriate forms  
**H11** applies mathematical concepts in economic contexts  
**H12** works independently and in groups to achieve appropriate goals in set timelines

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Global Economy Task	Australia's Place in the Global Economy Extended Response	Economic Issues Stimulus Task	Trial HSC Exam
		Term 4, Week 8, 2022	Term 1, Week 8, 2023	Term 2, Week 7, 2023	Term 3, Trial Exam period 2023
Outcomes	H1, H2, H3, H4, H5, H8, H9, H10	H1, H2, H7, H8, H9, H10, H12	H1, H6, H7, H8, H10, H11	H1, H2, H3, H4, H5, H6, H7, H8, H10, H11	
Knowledge & Understanding of Course Content	40	5	10	10	15
Stimulus – Based Skills	20	5		5	10
Inquiry & Research	20	10	10		
Communication of Economic Information, Ideas, Issues in Appropriate Forms	20	5	5	5	5
<b>TOTAL %</b>	<b>100</b>	<b>25</b>	<b>25</b>	<b>20</b>	<b>30</b>

## HISTORY EXTENSION

### OUTCOMES

A student:

- HE12-1** analyses and evaluates different approaches to history and the complexity of factors that shape historical interpretations
- HE12-2** plans, conducts and presents a substantial historical investigation involving analysis, synthesis and evaluation of information from historical sources of differing perspectives and historical approaches
- HE12-3** communicates through detailed, well-structured texts to explain, argue, discuss, analyse and evaluate historical issues
- HE12-4** constructs an historical position about an area of historical inquiry, and discusses and challenges other positions

Components (syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3
		History Project – Historical Process (proposal)	History Project- Essay	Trial HSC Exam
		Term 4, Week 8, 2022	Term 2, Week 10 2023	Term 3, Exam Period 2023
Outcomes		HE12-2, HE12-3, HE12-4	HE12-1, HE12-2, HE12-3, HE12-4	HE12-1, HE12- 3, HE12-4
Knowledge & understanding of significant historical ideas & processes	40	10	10	20
Skills in designing, undertaking & communicating historical inquiry and analysis	60	20	30	10
<b>TOTAL %</b>	<b>100</b>	<b>30</b>	<b>40</b>	<b>30</b>

## LEGAL STUDIES

### OUTCOMES

A student:

- H1** identifies and applies legal concepts and terminology
- H2** describes and explains key features of and the relationship between Australian and international law
- H3** analyses the operation of domestic and international legal systems
- H4** evaluates the effectiveness of the legal system in addressing issues
- H5** explains the role of law in encouraging co-operation and resolving conflict, as well as initiating and responding to change
- H6** assesses the nature of the inter-relationship between the legal system and society
- H7** evaluates the effectiveness of the law in achieving justice
- H8** locates, selects, organises, synthesises and analyses legal information from a variety of sources including legislation, cases, media, international instruments and documents
- H9** communicates legal information using well-structured and logical arguments
- H10** analyses differing perspectives and interpretations of legal information and issues

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Topic Test Core: Crime	Research Task Core: Human Rights	In class Response Depth Option	Trial HSC Exam
		Term 4, Week 9 2022	Term 1, Week 8, 2023	Term 2, Week 9, 2023	Term 3, Exam Period, 2023
Outcomes	H: 1, 4, 5, 6, 7, 9, 10	H: 1, 3, 4, 5, 7, 8, 9, 10	H: 1, 2, 3, 5, 6, 7, 9, 10	H: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	
Knowledge & Understanding of Course Content	40	10	5	5	20
Analysis and Evaluation	20	5	5	5	5
Inquiry and Research	20		10	10	
Communication of legal information, issues and ideas in appropriate forms	20	5	5	5	5
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>25</b>	<b>25</b>	<b>30</b>

**MODERN HISTORY****OUTCOMES**

A student:

**MH12-1** accounts for the nature of continuity and change in the modern world**MH12-2** proposes arguments about the varying causes and effects of events and developments**MH12-3** evaluates the role of historical features, individuals, groups and ideas in shaping the past**MH12-4** analyses the different perspectives of individuals and groups in their historical context**MH12-5** assesses the significance of historical features, people, ideas, movements, events and developments of the modern world**MH12-6** analyses and interprets different types of sources for evidence to support an historical account or argument**MH12-7** discusses and evaluates differing interpretations and representations of the past**MH12-8** plans and conducts historical investigations and presents reasoned conclusions, using relevant evidence from a range of sources**MH12-9** communicates historical understanding, using historical knowledge, concepts and terms, in appropriate and well-structured forms

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		National Study In class Extended Response	Peace & Conflict Historical Analysis Recorded Presentation	Change in the Modern World Research and In class Extended Response	Trial HSC Exam
		Term 4, Week 7, 2022	Term 1, Week 7, 2023	Term 2, Week 6, 2023	Term 3, Exam Period, 2023
Outcomes	MH12-1, MH12-3, MH12-4, MH12-7, MH12-9	MH12-2, MH12-4, MH12-6, MH12-7, MH12-8, MH12-9	MH12-1, MH12-3, MH12-5, MH12-7, MH12-8, MH12-9	MH12-2, MH12-3, MH12-5, MH12-6, MH12-7, MH12-9	
Knowledge & understanding of course content	40	15	5	5	15
Historical skills in the analysis and evaluation of sources and interpretations	20		10		10
Historical inquiry & research	20		10	10	
Communication of historical understanding in appropriate forms	20	5	5	5	5
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>30</b>	<b>20</b>	<b>30</b>



## SOCIETY AND CULTURE

### OUTCOMES

A student:

- H1** evaluates and effectively applies social and cultural concepts
- H2** explains the development of personal, social and cultural identity
- H3** analyses relationships and interactions within and between social and cultural groups
- H4** assesses the interaction of personal experience and public knowledge in the development of social and cultural literacy
- H5** analyses continuity and change and their influence on personal and social futures
- H6** evaluates social and cultural research methods for appropriateness to specific research tasks
- H7** selects, organises, synthesises and analyses information from a variety of sources for usefulness, validity and bias
- H8** uses planning and review strategies to conduct ethical social and cultural research that is appropriate for tasks ranging from the simple to the complex
- H9** applies complex course language and concepts appropriate for a range of audiences and contexts
- H10** communicates complex information, ideas and issues using appropriate written, oral and graphic forms

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Social and Cultural Continuity and Change Task	Oral task and / or written submission Research & Methodology	Research and related in-class extended response Depth Study 2	Trial HSC Exam
		Term 4, Week 8, 2022	Term 1, Week 7, 2023	Term 2, Week 7, 2023	Term 3, Exam period, 2023
Outcomes	H3, H6, H7, H9, H10	H1, H2, H5, H9, H10	H3, H4, H6, H7, H8, H9, H10	H1, H2, H3, H4, H5, H6, H7, H10	
Knowledge and understanding of course content	50	10	10	10	20
Application and evaluation of social and cultural research methods	30	10	5	10	5
Communication of information, ideas and issues in appropriate forms	20		10	5	5
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>25</b>	<b>25</b>	<b>30</b>

**STUDIES OF RELIGION 1****OUTCOMES**

A student:

- H1** explains aspects of religion and belief systems  
**H2** describes and analyses the influence of religion and belief systems on individuals and society  
**H3** examines the influence and expression of religion and belief systems in Australia  
**H4** describes and analyses how aspects of religious traditions are expressed by their adherents  
**H5** evaluates the influence of religious traditions in the life of adherents  
**H6** organises, analyses and synthesises relevant information about religion from a variety of sources, considering usefulness, validity and bias  
**H7** conducts effective research about religion and evaluates the findings from the research  
**H8** applies appropriate terminology and concepts related to religion and belief systems  
**H9** coherently and effectively communicates complex information, ideas and issues using appropriate written, oral and graphic forms.

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3
		Research Task: Religion and Belief Systems in Australia Post 1945	Oral Presentation	Trial HSC Exam
		Term 4, Week 9, 2022	Term 2, Week 1, 2023	Term 3, Exam period, 2023
Outcomes	H1, H2, H3, H6, H8,	H1, H2, H4, H5, H6, H7, H9	H1, H2, H3, H4, H5, H6, H8, H9	
Knowledge and understanding of course content	40	15	10	15
Source-based skills	20	5	5	10
Investigation and Research	20	10	10	
Communication of information, ideas and issues in appropriate forms	20	5	10	5
<b>TOTAL %</b>	<b>100</b>	<b>35</b>	<b>35</b>	<b>30</b>

## LANGUAGES

### JAPANESE CONTINUERS

#### OUTCOMES

- H1.1** uses a range of strategies to maintain communication
- H1.2** conveys information appropriate to context, purpose and audience H1.3 exchanges and justifies opinions and ideas
- H1.4** reflects on aspects of past, present and future experience
- H2.1** applies knowledge of language structures to create original text (written or spoken texts created by students incorporating their own ideas)
- H2.2** composes informative, descriptive, reflective, persuasive or evaluative texts appropriate to context, purpose and/or audience.
- H2.3** structures and sequences ideas and information
- H3.1** conveys the gist of text and identifies specific information
- H3.2** summarises the main ideas
- H3.3** identifies the tone, purpose, context and audience.
- H3.4** draws conclusions from or justifies an opinion
- H3.5** interprets, analyses and evaluates information
- H3.6** infers points of view, attitude or emotions from language and context
- H4.1** recognises and employs language appropriate to different social contexts
- H4.2** identifies values, attitudes and beliefs of cultural significance
- H4.3** reflects upon significant aspects of language and culture

Component (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Response in English and Japanese to Written texts  Personal World / Traditions and Culture	Response in English & Japanese to spoken Texts Express ideas through written texts  Personal World / Daily Routine	Oral interaction/ Conversation  Personal World Future plans and work	Trial HSC Exam
		Term 4, Week 7, 2022	Term 1, Week 7, 2023	Term 2, Week 9, 2023	Term 3, Exam period, 2023
	<b>Outcomes</b>	1.2,1.3,1.4,2.1,3.1, 3.2, 3.3, 3.4,3.5, 3.6, 4.2	2.1, 2.2, 2.3, 3.1,3.2,3.3, 3.4,3.5,3.6	1.1, 1.2, 1.3, 1.4	1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3
<b>Listening</b>	<b>30</b>		20		10
<b>Reading</b>	<b>30</b>	20			10
<b>Speaking</b>	<b>20</b>			20	
<b>Writing In Japanese</b>	<b>20</b>		10		10
<b>Total %</b>	<b>100</b>	<b>20</b>	<b>30</b>	<b>20</b>	<b>30</b>

## LANGUAGES

### KOREAN BEGINNERS

#### OUTCOMES

- 1.1 establishes and maintains communication in Korean
- 1.2 manipulates linguistic structures to express ideas effectively in Korean
- 1.3 sequences ideas and information
- 1.4 applies knowledge of the culture of Korean-speaking communities to interact appropriately
- 2.1 understands and interprets information in texts using a range of strategies
- 2.2 conveys the gist of and identifies specific information in texts
- 2.3 summarises the main points of a text
- 2.4 draws conclusions from or justifies an opinion about a text
- 2.5 identifies the purpose, context and audience of a text
- 2.6 identifies and explains aspects of the culture of Korean-speaking communities in texts
- 3.1 produces texts appropriate to audience, purpose and context
- 3.2 structures and sequences ideas and information
- 3.3 applies knowledge of diverse linguistic structures to convey information and express original ideas in Korean
- 3.4 applies knowledge of the culture of Korean-speaking communities to the production of texts.

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Response to spoken / visual texts	Response in English and Korean to written texts	Oral interaction / Conversation	Trial HSC Exam
		Education and work	People, places and communities	Future plans and aspirations	
		Term 4, Week 8, 2022	Term 1, Week 8, 2023	Term 2, Week 9, 2023	Term 3, Exam Period, 2023
	Outcomes	2.1, 2.2, 2.3, 2.4, 2.5, 2.6	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3	1.1, 1.2, 1.3, 1.4	1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4
Listening	30	20			10
Reading	30		20		10
Speaking	20			20	
Writing	20		10		10
<b>Total %</b>	<b>100</b>	<b>20</b>	<b>30</b>	<b>20</b>	<b>30</b>

## MATHEMATICS

### MATHEMATICS ADVANCED

#### COMPONENTS:

Understanding, fluency and communication	50%
Problem solving, reasoning and justification	50%

#### OUTCOMES:

<b>MA11-1</b> uses algebraic and graphical techniques to solve, and where appropriate, compare alternative solutions to problems	<b>MA12-1</b> uses detailed algebraic and graphical techniques to critically construct, model and evaluate arguments in a range of familiar and unfamiliar contexts
<b>MA11-2</b> uses the concepts of functions and relations to model, analyse and solve practical problems	<b>MA12-2</b> models and solves problems and makes informed decisions about financial situations using mathematical reasoning and techniques
<b>MA11-3</b> uses the concepts and techniques of trigonometry in the solution of equations and problems involving geometric shapes	<b>MA12-3</b> applies calculus techniques to model and solve problems
<b>MA11-4</b> uses the concepts and techniques of periodic functions in the solutions of trigonometric equations or proof of trigonometric identities	<b>MA12-4</b> applies the concepts and techniques of arithmetic and geometric sequences and series in the solution of problems
<b>MA11-5</b> interprets the meaning of the derivative, determines the derivative of functions and applies these to solve simple practical problems	<b>MA12-5</b> applies the concepts and techniques of periodic functions in the solution of problems involving trigonometric graphs
<b>MA11-6</b> manipulates and solves expressions using the logarithmic and index laws, and uses logarithms and exponential functions to solve practical problems	<b>MA12-6</b> applies appropriate differentiation methods to solve problems
<b>MA11-7</b> uses concepts and techniques from probability to present and interpret data and solve problems in a variety of contexts, including the use of probability distributions	<b>MA12-7</b> applies the concepts and techniques of indefinite and definite integrals in the solution of problems
<b>MA11-8</b> uses appropriate technology to investigate, organise, model and interpret information in a range of contexts	<b>MA12-8</b> solves problems using appropriate statistical processes
<b>MA11-9</b> provides reasoning to support conclusions which are appropriate to the context	<b>MA12-9</b> chooses and uses appropriate technology effectively in a range of contexts, models and applies critical thinking to recognise appropriate times for such use
	<b>MA12-10</b> constructs arguments to prove and justify results and provides reasoning to support conclusions which are appropriate to the context

## MATHEMATICS

### MATHEMATICS ADVANCED (continued)

#### MATHEMATICS ADVANCED ASSESSMENT TASKS

Where possible, the outcomes listed for each task will be assessed. If there is any change to the outcomes being assessed, students will be given due notice.

Components (syllabus)	Weighting % (syllabus)	Task 1	Task 2	Task 3	Task 4
		In Class Test (non digital references allowed)	In Class Test (with home-made reference sheet)	Investigation Style Task/ Assignment and validation	Trial HSC Exam
		Term 4, Week 9, 2022	Term 1, Week 8, 2023	Term 2, Week 8, 2023	Term 3, Exam period, 2023
	Outcomes	MA11-6 MA12-1 MA12-6	MA12-1 MA12-3 MA12-5 MA12-6 MA12-7	MA11-7 MA12-8 MA12-9 MA12-10	MA11-2 MA11-3 MA11-4 MA11-6 MA11-7 MA12-1 MA12-2 MA12-3 MA12-4 MA12-5 MA12-6 MA12-7 MA12-8 MA12-10
Understanding, fluency and communication	50	10	15.5	9.5	15
Problem solving, reasoning and justification	50	10	15.5	9.5	15
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>31</b>	<b>19</b>	<b>30</b>

## MATHEMATICS

### MATHEMATICS EXTENSION 1

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#### COMPONENTS:

Understanding, fluency and communication	50%
Problem solving, reasoning and justification	50%

#### OUTCOMES:

<b>ME11-1</b> uses algebraic and graphical concepts in the modelling and solving of problems involving functions and their inverses	<b>ME12-1</b> applies techniques involving proof or calculus to model and solve problems
<b>ME11-2</b> manipulates algebraic expressions and graphical functions to solve problems	<b>ME12-2</b> applies concepts and techniques involving vectors and projectiles to solve problems
<b>ME11-3</b> applies concepts and techniques of inverse trigonometric functions and simplifying expressions involving compound angles in the solution of problems	<b>ME12-3</b> applies advanced concepts and techniques in simplifying expressions involving compound angles and solving trigonometric equations
<b>ME11-4</b> applies understanding of the concept of a derivative in the solution of problems, including rates of change, exponential growth and decay and related rates of change	<b>ME12-4</b> uses calculus in the solution of applied problems, including differential equations and volumes of solids of revolution
<b>ME11-5</b> uses concepts of permutations and combinations to solve problems involving counting or ordering	<b>ME12-5</b> applies appropriate statistical processes to present, analyse and interpret data
<b>ME11-6</b> uses appropriate technology to investigate, organise and interpret information to solve problems in a range of contexts	<b>ME12-6</b> chooses and uses appropriate technology to solve problems in a range of contexts
<b>ME11-7</b> communicates making comprehensive use of mathematical language, notation, diagrams and graphs	<b>ME12-7</b> evaluates and justifies conclusions, communicating a position clearly in appropriate mathematical forms

## MATHEMATICS

### MATHEMATICS EXTENSION 1 (continued)

#### MATHEMATICS EXTENSION 1 ASSESSMENT TASKS

This is a summary of the assessment plan for this course.

Where possible, the outcomes listed for each task will be assessed. If there is any change to the outcomes being assessed, students will be given due notice.

Total assessment for the **Mathematics Extension 1** course will be made up of a **mark out of 100 from the**

**Mathematics Advanced course and a mark out of 50 from the Mathematics Extension 1 course.**

Those **students studying the Extension 1** course will be expected to **complete the Advanced assessment tasks as well as the Extension 1 assessment tasks in each testing period.**

Components (syllabus)	Weighting % (syllabus)	Task 1	Task 2	Task 3	Task 4
		In Class Test (non-digital references allowed)	In Class Test (with home- made reference sheet)	Investigation Style Task/ Assignment and validation	Trial HSC Exam
		Term 4, Week 10, 2022	Term 1, Week 9, 2023	Term 2, Week 5, 2023	Term 3, Exam period, 2023
	Outcomes	ME12-1 ME12-2	ME12-1 ME12-2 ME12-4	ME12-6 ME12-7	ME11-1 ME11-2 ME11-3 ME11-4 ME11-5 ME12-1 ME12-2 ME12-3 ME12-4 ME12-5 ME12-7
Understanding, fluency and communication	50	10	15.5	9.5	15
Problem solving, reasoning and justification	50	10	15.5	9.5	15
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>31</b>	<b>19</b>	<b>30</b>



## MATHEMATICS

### MATHEMATICS EXTENSION 2

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#### COMPONENTS:

Understanding, fluency and communication	50%
Problem solving, reasoning and justification	50%

#### OUTCOMES:

<b>MEX12-1</b> understands and uses different representations of numbers and functions to model, prove results and find solutions to problems in a variety of contexts
<b>MEX12-2</b> chooses appropriate strategies to construct arguments and proofs in both practical and abstract settings
<b>MEX12-3</b> uses vectors to model and solve problems in two and three dimensions
<b>MEX12-4</b> uses the relationship between algebraic and geometric representations of complex numbers and complex number techniques to prove results, model and solve problems
<b>MEX12-5</b> applies techniques of integration to structured and unstructured problems
<b>MEX12-6</b> uses mechanics to model and solve practical problems
<b>MEX12-7</b> uses various mathematical techniques and concepts to model and solve structured, unstructured and multi-step problems
<b>MEX12-8</b> communicates and justifies abstract ideas and relationships using appropriate language, notation and logical argument

## MATHEMATICS

### MATHEMATICS EXTENSION 2 (continued)

#### MATHEMATICS EXTENSION 2 ASSESSMENT TASKS

This is a summary of the assessment plan for this course.

Where possible, the outcomes listed for each task will be assessed. If there is any change to the outcomes being assessed, students will be given due notice.

Total assessment for the **Mathematics Extension 2** course will be made up of a **mark out of 100 from the Mathematics Extension 1 course and a mark out of 100 from the Mathematics Extension 2 course**. Those **students studying the Extension 2 course** will be expected to **complete the Extension 1 assessment tasks as well as the Extension 2 assessment tasks in each testing period**.

Students studying Mathematics Extension 2 are also required to attend all Mathematics Advanced lessons, complete all course work and complete greater than 50% of the Advanced assessment tasks.

Components (syllabus)	Weighting % (syllabus)	Task 1	Task 2	Task 3	Task 4
		Investigation Style Task/Assignment and validation	In Class Test (with home- made reference sheet)	In class Test (non-digital references allowed)	Trial HSC Exam
		Term 4, Week 9, 2022	Term 1, Week 10 2023	Term 2, Week 8 2023	Term 3, Exam period, 2023
<b>Outcomes</b>		MEX12-1 MEX12-7 MEX12-8	MEX12-1 MEX12-2 MEX12-4	MEX12-3 MEX12-5	MEX-12-1 MEX-12-2 MEX-12-3 MEX-12-4 MEX-12-5 MEX-12-6 MEX-12-7 MEX-12-8
<b>Understanding, fluency and communication</b>	<b>50</b>	9.5	15.5	10	15
<b>Problem solving, reasoning and justification</b>	<b>50</b>	9.5	15.5	10	15
<b>TOTAL %</b>	<b>100</b>	<b>19</b>	<b>31</b>	<b>20</b>	<b>30</b>

## MATHEMATICS

### MATHEMATICS STANDARD 2

#### COMPONENTS:

Understanding, fluency and communication 50%

Problem solving, reasoning and justification 50%

#### OUTCOMES:

<p><b>MS11-1</b> uses algebraic and graphical techniques to compare alternative solutions to contextual problems</p>	<p><b>MS2-12-1</b> uses detailed algebraic and graphical techniques to critically evaluate and construct arguments in a range of familiar and unfamiliar contexts</p>
<p><b>MS11-2</b> represents information in symbolic, graphical and tabular form</p>	<p><b>MS2-12-2</b> analyses representations of data in order to make inferences, predictions and draw conclusions</p>
<p><b>MS11-3</b> solves problems involving quantity measurement, including accuracy and the choice of relevant units</p>	<p><b>MS2-12-3</b> interprets the results of measurements and calculations and makes judgements about their reasonableness, including the degree of accuracy and the conversion of units where appropriate</p>
<p><b>MS11-4</b> performs calculations in relation to twodimensional and three-dimensional figures</p>	<p><b>MS2-12-4</b> analyses two-dimensional and three-dimensional models to solve practical problems</p>
<p><b>MS11-5</b> models relevant financial situations using appropriate tools</p>	<p><b>MS2-12-5</b> makes informed decisions about financial situations, including annuities and loan repayments</p>
<p><b>MS11-6</b> makes predictions about everyday situations based on simple mathematical models</p>	<p><b>MS2-12-6</b> solves problems by representing the relationships between changing quantities in algebraic and graphical forms</p>
<p><b>MS11-7</b> develops and carries out simple statistical processes to answer questions posed</p>	<p><b>MS2-12-7</b> solves problems requiring statistical processes, including the use of the normal distribution and the correlation of bivariate data</p>
<p><b>MS11-8</b> solves probability problems involving multistage events</p>	<p><b>MS2-12-8</b> solves problems using networks to model decision- making in practical problems</p>
<p><b>MS11-9</b> uses appropriate technology to investigate, organise and interpret information in a range of contexts</p>	<p><b>MS2-12-9</b> chooses and uses appropriate technology effectively in a range of contexts, and applies critical thinking to recognise appropriate times and methods for such use</p>
<p><b>MS11-10</b> justifies a response to a given problem using appropriate mathematical terminology and/or calculations</p>	<p><b>MS2-12-10</b> uses mathematical argument and reasoning to evaluate conclusions, communicating a position clearly to others and justifying a response</p>

## MATHEMATICS

### MATHEMATICS STANDARD 2 (continued)

#### MATHEMATICS STANDARD 2 ASSESSMENT TASKS

This is a summary of the assessment plan for this course.

Where possible, the outcomes listed for each task will be assessed. If there is any change to the outcomes being assessed, students will be given due notice.

Total assessment for the **Mathematics Standard 2** course will be a **mark out of 100**.

Components (syllabus)	Weighting % (syllabus)	Task 1	Task 2	Task 3	Task 4
		In Class Test (non-digital references allowed)	Investigation Style Task/ Assignment	In Class Test (with home- made reference sheet)	Trial HSC Exam
		Term 4, Week 9, 2022	Term 1, Week 10, 2023	Term 2, Week 8, 2023	Term 3, Exam period, 2023
	Outcomes	MS11-2 MS11-5 MS11-6 MS11-10 MS2-12-1 MS2-12-3 MS2-12-5 MS2-12-6 MS2-12-10	MS2-12-2 MS2-12-3 MS2-12-9 MS2-12-10	MS2-12-1 MS2-12-2 MS2-12-3 MS2-12-5 MS2-12-6 MS2-12-10	MS-11-8 MS2-12-1 MS2-12-2 MS2-12-3 MS2-12-4 MS2-12-5 MS2-12-6 MS2-12-7 MS2- 12-8 MS2-12-10
Understanding, fluency and communication	50	10	9.5	15.5	15
Problem solving, reasoning and justification	50	10	9.5	15.5	15
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>19</b>	<b>31</b>	<b>30</b>

## PERSONAL DEVELOPMENT, HEALTH & PHYSICAL EDUCATION

### OUTCOMES

A student:

- H1** describes the nature, and justifies the choice, of Australia's health priorities
- H2** analyses and explains the health status of Australians in terms of current trends and groups most at risk
- H3** analyses the determinants of health and health inequalities
- H4** argues the case for the new public health approach to health promotion
- H5** explains the different roles and responsibilities of individuals, communities and governments in addressing Australia's health priorities
- H7** explains the relationship between physiology and movement potential
- H8** explains how a variety of training approaches and other interventions enhance performance and safety in physical activity
- H9** explains how movement skill is acquired and appraised
- H10** designs and implements training plans to improve performance
- H11** designs psychological strategies and nutritional plans in response to individual performance needs
- H13** selects and applies strategies for the management of injuries and the promotion of safety in sport and physical activity
- H14** argues the benefits of health-promoting actions and choices that promote social justice
- H15** critically analyses key issues affecting the health of Australian's and proposes ways of working toward better health for all
- H16** devises methods of gathering, interpreting and communicating information about health and physical activity concepts.
- H17** selects appropriate options and formulates strategies based on a critical analysis of the factors that affect performance and safe participation.

*Note: outcomes H6 & H12 are optional outcomes and not assessed.*

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Health Research Project	Training Program	Sports Medicine Practical	Trial HSC Exam
		Term 1, Week 2, 2022	Term 2, Week 8, 2023	Term 2, Week 10, 2023	Term 3, Exam period, 2023
Outcomes		H1, H2, H3, H16	H8, H10, H17	H8, H13, H16, H17	H:1,2,3,4,5,7, 8,9,10,13,14, 15,16,17
Knowledge & understanding of course content	40	5	5	5	25
Skills in critical thinking, research, analysis and communicating	60	15	20	20	5
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>25</b>	<b>25</b>	<b>30</b>

## SCIENCE

## BIOLOGY

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### OUTCOMES

A student:

#### *Questioning and predicting*

**BIO11/12-1** develops and evaluates questions and hypotheses for scientific investigation Planning investigations

#### *Planning investigations*

**BIO11/12-2** designs and evaluates investigations in order to obtain primary and secondary data and information

#### *Conducting investigations*

**BIO11/12-3** conducts investigations to collect valid and reliable primary and secondary data and information

#### *Processing data and information*

**BIO11/12-4** selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

#### *Analysing data and information*

**BIO11/12-5** analyses and evaluates primary and secondary data and information

#### *Problem solving*

**BIO11/12-6** solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

#### *Communicating*

**BIO11/12-7** communicates scientific understanding using suitable language and terminology for a specific audience or purpose

**BIO12-12** explains the structures of DNA and analyses the mechanisms of inheritance and how processes of reproduction ensure continuity of species

**BIO12-13** explains natural genetic change and the use of genetic technologies to induce genetic change

**BIO12-14** analyses infectious disease in terms of cause, transmission, management and the organism's response, including the human immune system

**BIO12-15** explains non-infectious disease and disorders and a range of technologies and methods used to assist, control, prevent and treat non-infectious disease

SCIENCE

**BIOLOGY (continued)**

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Processing and Modelling	Practical and Processing	Depth Study	Trial HSC Exam
	Outcomes	Term 4, Week 7, 2022	Term 1, Week 6, 2023	Term 2, Week 6, 2023	Term 3, Exam period, 2023
		BIO 11/12-3 BIO 11/12-4 BIO 11/12-5 BIO 11/12-6 BIO 11/12-7 BIO 12-12	BIO 11/12-1 BIO 11/12-4 BIO 11/12-6 BIO 11/12-7 BIO 12-14	BIO 11/12-1 BIO11/12-2 BIO 11/12-3 BIO 12-13	BIO 11/12-1 to 7 BIO 12-12 BIO 12-13 BIO1 2-14 BIO 12-15
Knowledge and Understanding	40	5	5	10	20
Skills in working scientifically	60	15	15	20	10
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>30</b>

## SCIENCE

## CHEMISTRY

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### OUTCOMES

A student:

*Questioning and predicting*

**CH11/12-1** develops and evaluates questions and hypotheses for scientific investigation

*Planning investigations*

**CH11/12-2** designs and evaluates investigations in order to obtain primary and secondary data and information

*Conducting investigations*

**CH11/12-3** conducts investigations to collect valid and reliable primary and secondary data and information

*Processing data and information*

**CH11/12-4** selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

*Analysing data and information*

**CH11/12-5** analyses and evaluates primary and secondary data and information

*Problem solving*

**CH11/12-6** solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

*Communicating*

**CH11/12-7** communicates scientific understanding using suitable language and terminology for a specific audience or purpose

**CH12-12** explains the characteristics of equilibrium systems, and the factors that affect these systems

**CH12-13** describes, explains and quantitatively analyses acids and bases using contemporary models

**CH12-14** analyses the structure of, and predicts reactions involving, carbon compounds

**CH12-15** describes and evaluates chemical systems used to design and analyse chemical processes



SCIENCE

**CHEMISTRY (continued)**

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task3	Task 4
		Research / Processing Information	Practical and Analysis Processes	Depth study	Trial HSC Exam
		Term 4, Week 6 2022	Term1, Week 8, 2023	Term 2, Week 9, 2023	Term 3, Exam period, 2023
Outcomes	CH11/12-1 CH11/12-4 CH11/12-5 CH11/12-6 CH11/12-7 CH12-12 CH12-13	CH11/12-2 CH11/12-3 CH11/12-5 CH12-13 CH 12-12	CH11/12-1 CH11/12-2 CH11/12-3 CH11/12-4 CH11/12-7 CH12-14 CH12-15	CH 11/12-1 to 7 CH 12-12 CH 12-13 CH 12-14 CH 12-15	
Knowledge and Understanding	40	5	5	10	20
Skills in working scientifically	60	15	15	20	10
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>30</b>

## SCIENCE

# EARTH AND ENVIRONMENTAL SCIENCE

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### OUTCOMES

A student:

#### **Questioning and predicting**

**EES11/12-1** develops and evaluates questions and hypotheses for scientific investigation Planning investigations

**EES11/12-2** designs and evaluates investigations in order to obtain primary and secondary data and information

#### **Conducting investigations**

**EES11/12-3** conducts investigations to collect valid and reliable primary and secondary data and information

#### **Processing data and information**

**EES11/12-4** selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

#### **Analysing data and information**

**EES11/12-5** analyses and evaluates primary and secondary data and information Problem solving

**EES11/12-6** solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

#### **Communicating**

**EES11/12-7** communicates scientific understanding using suitable language and terminology for a specific audience or purpose

#### **Year 12 course knowledge and understanding outcomes , a student:**

**EES12-12** describes and evaluates the models that show the structure and development of the Earth over its history

**EES12-13** describes and evaluates the causes of the Earth's hazards and the ways in which they affect, and are affected by, the Earth's systems

**EES12-14** analyses the natural processes and human influences on the Earth, including the scientific evidence for changes in climate

**EES12-15** describes and assesses renewable and non-renewable Earth resources and how their extraction, use, consumption and disposal affect the Earth's systems

SCIENCE

**EARTH AND ENVIRONMENTAL SCIENCE (continued)**

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Practical, research and data analysis	Practical and Processes modelling and data analysis	Depth study	Trial HSC Exam
		Term 4, Week 9, 2022	Term 1, Week 7, 2023	Term 2, Week 7, 2023	Term 3, exam period, 2023
Outcomes	EES 11/12-1 EES 11/12-2 EES 11/12-3 EES 11/12-5 EES 11/12-6 EES 12-12	EES 11/12-1 EES 11/12-5 EES 11/12-7 EES 12-13	EES 11/12-1 EES 11/12-2 EES 11/12-3 EES 11/12-4 EES 11/12-5 EES 11/12-7 EES 12-14	EES 11/12-1 to 7 EES 12-12 EES 12-13 EE 1 2-14 EE 12-15	
Knowledge and Understanding	40	5	5	10	20
Skills in working scientifically	60	15	15	20	10
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>30</b>

## SCIENCE

### INVESTIGATING SCIENCE

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#### Questioning and predicting

**INS11/12-1** develops and evaluates questions and hypotheses for scientific investigation

#### Planning investigations

**INS11/12-2** designs and evaluates investigations in order to obtain primary and secondary data and information

#### Conducting investigations

**INS11/12-3** conducts investigations to collect valid and reliable primary and secondary data and information

#### Processing data and information

**INS11/12-4** selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

#### Analysing data and information

**INS11/12-5** analyses and evaluates primary and secondary data and information

#### Problem solving

**INS11/12-6** solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

#### Communicating

**INS11/12-7** communicates scientific understanding using suitable language and terminology for a specific audience or purpose

**INS12-12** develops and evaluates the process of undertaking scientific investigations

**INS12-13** describes and explains how science drives the development of technologies

**INS12-14** uses evidence-based analysis in a scientific investigation to support or refute a hypothesis

**INS12-15** evaluates the implications of ethical, social, economic and political influences on science

SCIENCE

**INVESTIGATING SCIENCE (continued)**

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Practical, research and data analysis	Practical and Processes modelling and data analysis	Depth study	Trial HSC Exam
	Outcomes	Term 4, Week 10, 2022	Term 1, Week 10, 2023	Term 2, Week 4, 2023	Term 3, exam period 2023
		INS 11/12-1 INS 11/12-2 INS 11/12-3 INS 11/12-5 INS 11/12-6 INS 12-12	INS 11/12-1 INS 11/12-5 INS 11/12-7 INS 12-13	INS 11/12-1 INS 11/12-2 INS 11/12-3 INS 11/12-4 INS 11/12-5 INS 11/12-7 INS 12-14	INS 11/12-1 to 7 INS 12-12 INS 12-13 INS 12-14 INS 12-15
Knowledge and Understanding	40	5	5	10	20
Skills in working scientifically	60	15	15	20	10
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>30</b>

## SCIENCE

## PHYSICS

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### OUTCOMES

A student:

*Questioning and predicting*

**PH11/12-1** develops and evaluates questions and hypotheses for scientific investigation

*Planning investigations*

**PH11/12-2** designs and evaluates investigations in order to obtain primary and secondary data and information

*Conducting investigations*

**PH11/12-3** conducts investigations to collect valid and reliable primary and secondary data and information

*Processing data and information*

**PH11/12-4** selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media

*Analysing data and information*

**PH11/12-5** analyses and evaluates primary and secondary data and information

*Problem solving*

**PH11/12-6** solves scientific problems using primary and secondary data, critical thinking skills and scientific processes

*Communicating*

**PH11/12-7** communicates scientific understanding using suitable language and terminology for a specific audience or purpose

**PH12-12** describes and analyses qualitatively and quantitatively circular motion and motion in a gravitational field, in particular, the projectile motion of particles

**PH12-13** explains and analyses the electric and magnetic interactions due to charged particles and currents and evaluates their effect both qualitatively and quantitatively

**PH12-14** describes and analyses evidence for the properties of light and evaluates the implications of this evidence for modern theories of physics in the contemporary world

**PH12-15** explains and analyses the evidence supporting the relationship between astronomical events and the nucleosynthesis of atoms and relates these to the development of the current model of the atom

SCIENCE

**PHYSICS (continued)**

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Practical and analysis	Practical and Processes modelling	Depth study	Trial HSC Exam
		Term 4, Week 8, 2022	Term 1, Week 5, 2023	Term 2, Week 5 2023	Term 3, exam period, 2023
	Outcomes	PH 11/12-2 PH 11/12-3 PH 11/12-5 PH 11/12-6 PH 12-12	PH 11/12-1 PH 11/12-5 PH 11/12- 7 PH 12-13 PH 12-2 PH 12-3	PH 11/12-1 PH 11/12-2 PH 11/12-3 PH 11/12-4 PH 11/12-5 PH 11/12-7 PH 12-14 PH 12-6	PH 11/12-1 to 7 PH 12-12 PH 12-13 PH 1 2-14 PH 12-15
Knowledge and Understanding	40	5	5	10	15
Skills in working scientifically	60	15	15	20	15
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>20</b>	<b>30</b>	<b>30</b>

## SCIENCE

### SCIENCE EXTENSION

#### OUTCOMES

A student:

**SE-1** refines and applies the Working Scientifically processes in relation to scientific research

**SE-2** analyses historic and cultural observations, ethical considerations and philosophical arguments involved in the development of scientific knowledge and scientific methods of inquiry

**SE-3** interrogates relevant and valid peer-reviewed scientific research to develop a scientific research question, hypothesis, proposal and plan

**SE-4** uses statistical applications, mathematical processes and/or modelling to gather, process, analyse and represent reliable and valid datasets

**SE-5** analyses and applies the processes used in reliable and valid scientific research to solve complex scientific problems and inform further research

**SE-6** analyses and reports on a contemporary issue or an application of science informed by either primary or secondary-sourced data, or both, in relation to relevant publicly available data sets

**SE-7** communicates analysis of an argument or conclusion incorporating appropriate scientific language and referencing techniques in a scientific report

Components (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task3
		Section 1 of the Scientific Research Portfolio	Section 2 of the Scientific Research Portfolio	Trial HSC Exam
		Term 1, Week 2, 2023	Term 2, Week 7, 2023	Term 3, exam period, 2023
Outcomes	SE-1 ,SE-2, SE-3	SE-1, SE-2, SE-3, SE-4 SE-5, SE-6, SE-7	SE-1, SE-2, SE-3, SE-4 SE-5, SE-6, SE-7	
Communicating scientifically	30	10	10	10
Gathering, recording, analysing and evaluating data	30	10	10	10
Application of scientific research skills	40	10	20	10
<b>TOTAL %</b>	<b>100</b>	<b>30</b>	<b>40</b>	<b>30</b>



## TECHNOLOGIES

## AGRICULTURE

### OUTCOMES

A student:

- H1.1** explains the influence of physical, biological, social, historical and economic factors on sustainable agricultural production
- H2.1** describes the inputs, processes and interactions of plant production systems
- H2.2** describes the inputs, processes and interactions of animal production systems
- H3.1** assesses the general business principles and decision-making processes involved in sustainable farm management and marketing of farm products
- H3.2** critically assesses the marketing of a plant OR animal product
- H3.3** critically examines the technologies and technological innovations employed in the production and marketing of agricultural products
- H3.4** evaluates the management of the processes in agricultural systems
- H4.1** justifies and applies appropriate experimental techniques, technologies, research methods and data presentation and analysis in relation to agricultural problems and situations
- H5.1** evaluates the impact of innovation, ethics and current issues on Australian agricultural systems

Component (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Plant Experimental Design	Research Assignment	Elective in class/ Extended response	Trial HSC Exam
		Term 1, Week 4, 2023	Term 2, Week 4, 2023	Term 2, Week 10, 2023	Term 3, exam period, 2023
	<b>Outcomes</b>	H2.1, H3.4, H4.1	H1.1 to H3.4, H5.1	H3.4, H4.1, H5.1	H1.1 to H5.1
<b>Knowledge and understanding of course content</b>	<b>50</b>	10	10	10	20
<b>Knowledge, understanding and skills required to manage agricultural production systems</b>	<b>20</b>		10		10
<b>Skills in effective research, experimentation and communication</b>	<b>30</b>	10	10	10	
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>30</b>	<b>20</b>	<b>30</b>

## TECHNOLOGIES

## ENGINEERING STUDIES

### OUTCOMES

A student:

- H1.1** describes the scope of engineering and critically analyses current innovations
- H1.2** differentiates between the properties and structure of materials and justifies the selection of materials in engineering applications
- H2.1** determines suitable properties, uses and applications of materials, components and processes in engineering
- H2.2** analyses and synthesizes engineering applications in specific fields and reports on the importance of these to society
- H3.1** demonstrates proficiency in the use of mathematical, scientific and graphical methods to analyse and solve problems of engineering practice
- H3.2** uses appropriate written, oral and presentation skills in the preparation of detailed engineering reports
- H3.3** develops and uses specialized techniques in the application of graphics as a communication tool
- H4.1** investigates the extent of technological change in engineering
- H4.3** applies understanding of social, environmental and cultural implications of technological change in engineering to the analysis of specific engineering problems
- H5.1** works individually and in teams to solve specific engineering problems and prepare engineering reports
- H5.2** selects and uses appropriate management and planning skills related to engineering
- H6.1** demonstrates skills in research and problem solving related to engineering
- H6.2** demonstrates skills in analysis, synthesis and experimentation related to engineering

Components (syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Engineering Report Civil Structures	Drawing Activity	Engineering Report Aeronautical	Trial HSC Exam
		Term 4, Week 9, 2022	Term 1, Week 10, 2023	Term 2, Week 6, 2023	Term 3, exam period, 2023
	<b>Outcomes</b>	H1.2, H2.1, H2.2, H3.2, H5.2	H3.1, H3.3	H1.2, H2.1, H2.2, H4.1, H4.3, H5.1, H5.2	H1.1, H1.2, H2.2, H3.2, H4.1, H4.2, H4.3, H5.1, H5.2, H6.1, H6.2
<b>Knowledge and understand of engineering principles and developments in technology</b>	<b>40</b>	10	5	10	15
<b>Understanding the scope and role of engineering including management and problem solving</b>	<b>25</b>	5	5	10	5
<b>Skills in research, problem solving and communication related to Engineering</b>	<b>35</b>	10	5	10	10
<b>TOTAL %</b>	<b>100</b>	<b>25</b>	<b>15</b>	<b>30</b>	<b>30</b>

## TECHNOLOGIES

### DESIGN AND TECHNOLOGY

#### OUTCOMES:

- H1.1** critically analyses the factors affecting design and the development and success of design projects
- H1.2** relates the practices and processes of designers and producers to the major design project
- H2.1** explains the influence of trends in society on design and production
- H2.2** evaluates the impact of design and innovation on society and the environment
- H3.1** analyses the factors that influence innovation and the success of innovation
- H3.2** uses creative and innovative approaches in designing and producing
- H4.1** identifies a need or opportunity and researches and explores ideas for design development and production of the major design project
- H4.2** selects and uses resources responsibly and safely to realise a quality major design project
- H4.3** evaluates the processes undertaken and the impacts of the major design project
- H5.1** manages the development of a quality major design project
- H5.2** selects and uses appropriate research methods and communication techniques
- H6.1** justifies technological activities undertaken in the major design project through the study of industrial and commercial practices
- H6.2** critically assesses the emergence and impact of new technologies, and the factors affecting their development

Component (Syllabus)	Weighting % (Syllabus)	Task 1	Task 2	Task 3	Task 4
		Project Proposal	Innovation Case Study & Exam Responses	Report of research and experimentation	Trial HSC Exam
	Outcomes	H4.1 H4.2 H4.3 H5.1	H1.1 H1.2 H2.2 H3.1 H6.2	H3.2 H4.2 H4.3 H5.1 H5.2 H6.1	H1.1 H1.2 H2.1 H2.2 H3.1 H6.1 H6.2
Knowledge and understanding of course content	40	Term 4, Week 9, 2022	Term 1, Week 7, 2023	Term 2, Week 6, 2023	Term 3, exam period, 2023
Knowledge and skills in designing, managing, producing and evaluating a major design project	60	20	25	30	10
<b>TOTAL %</b>	<b>100</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>25</b>