

MELBA COLLEGE

VCE

Course Selection Handbook



2020

Congratulations on your decision to continue your senior secondary education at  
Melba College in 2020

Over the coming weeks you will be making important decisions regarding your courses for 2020. Please take the time to read the information in this handbook and discuss this important decision with your family. You should seek advice from your Careers teacher, Year Level and VCE Leader and Careers professionals.

There are many factors that will influence your course selection decisions. Possibly the most important factor to think about is what you would like to do once you have completed secondary school.

Before deciding on a course for 2020 find information about the following:

- Pre-requisites for tertiary courses at university, college or TAFE
- Tertiary entrance requirements and the selection processes
- ATAR scores and how they are calculated – including how subjects are scaled.

Regardless of the pathway you choose – and the subjects you select – one key piece of advice is offered – choose subjects you enjoy, are good at, and you find interesting. In the event that you approach this process with no clear goal in mind – choose subjects that will allow you to keep your options open.

**V.C.E. STUDIES - 2020**

**ENGLISH**

<b>Subject</b>	<b>Units</b>
English	1-4
<b><u>OR</u></b>	
English as an Additional Language (EAL)	1-4
English as an Additional Language (Bridging)	1-2
<b><u>AND/OR</u></b>	
Literature	1-4

**MATHEMATICS**

<b>Subject</b>	<b>Units</b>		
Foundation Mathematics	1 - 2		
General Mathematics	1 - 2		
Mathematical Methods		1 - 4	
Further Mathematics			3 - 4

**THE ARTS**

<b>Subject</b>		<b>Units</b>	
Media		1 – 4	
Music	Music Performance	1 – 2	
	Music Performance		3 – 4
	Music Investigation		3 – 4
Studio Arts		1 – 4	
Dance		1 – 4	
Drama		1 – 4	

Theatre Studies		1 – 4	
Visual Communication & Design		1 – 4	
<b>HUMANITIES &amp; COMMERCE</b>			
<b>Subject</b>		<b>Units</b>	
Accounting		1 - 2	
Business Management		1 - 4	
Legal Studies		1 - 4	
History	20 <sup>TH</sup> Century History	1 – 2	
	Revolutions		3 – 4

<b>PE &amp; HEALTH</b>			
<b>Subject</b>		<b>Units</b>	
Health & Human Development		1 – 4	
Physical Education		1 – 4	

<b>LANGUAGES</b>			
<b>Subject</b>		<b>Units</b>	
German		1 – 4	

<b>SCIENCE</b>			
<b>Subject</b>		<b>Units</b>	
Biology		1 - 4	
Chemistry		1 - 4	
Physics		1 - 4	
Psychology		1 - 4	

<b>TECHNOLOGY</b>		
<b>Subject</b>	<b>Units</b>	
Food Studies	1 - 4	
Product Design & Technology - Wood	1 - 4	
Product Design & Technology - Textiles	1 - 2	
Computing (Information Technology)	1 - 2	
Computing (Informatics)		3 - 4

<b>VET UNITS (Other choices available)</b>
Certificate II in Business
Certificate II Music Industry Skills
Certificate III Music Industry Skills
Certificate II in Interactive Multimedia
Certificate II in Hospitality (Operations)
Certificate I in Engineering Technology
CISCO - CCNA

**COURSE DESCRIPTIONS**

The following Course Descriptions reflect the information relating to each Unit/Study published by Victorian Curriculum Assessment Authority. Further information can be gained by accessing the VCAA website – [www.vcaa.vic.edu.au](http://www.vcaa.vic.edu.au) – and following the links to Studies.

The following information has been given:

- Name of the Study & in some instances a brief introduction to the subject
- Name of each Unit and a brief description of the content
- The Areas of Study (topics) covered in each unit
- Outcomes – the assessment standard required at each unit.

The Course Descriptions are arranged in alphabetical order.

# ACCOUNTING

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## **Unit 1: Role of accounting in business**

This unit explores the establishment of a business and the role of accounting in the determination of business success or failure. In this, it considers the importance of accounting information to stakeholders. Students analyse, interpret and evaluate the performance of the business using financial and non-financial information. They use these evaluations to make recommendations regarding the suitability of a business as an investment. Students record financial data and prepare reports for service businesses owned by sole proprietors. Where appropriate, the accounting procedures developed in each area of study should incorporate the application of the Conceptual Framework and financial indicators to measure business performance, and take into account the range of ethical considerations faced by business owners when making decisions, including financial, social and environmental.

### **Areas of Study**

1. The role of accounting
2. Recording financial data and reporting accounting information for a service business

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Describe the resources required to establish and operate a business, and select and use accounting reports and other information to discuss the success or otherwise of the business.

**Outcome 2:** Identify and record financial data, report and explain accounting information for a service business, and suggest and apply appropriate financial and non-financial indicators to measure business performance.

## **Unit 2: Accounting and decision-making for a trading business**

In this unit students develop their knowledge of the accounting process for sole proprietors operating a trading business, with a focus on inventory, accounts receivable, accounts payable and non-current assets. Students use manual processes and ICT, including spreadsheets, to prepare historical and budgeted accounting reports. Students analyse and evaluate the performance of the business relating to inventory, accounts receivable, accounts payable and non-current assets. They use relevant financial and other information to predict, budget and compare the potential effects of alternative strategies on the performance of the business. Using these evaluations, students develop and suggest to the owner strategies to improve business performance. Where appropriate, the accounting procedures developed in each area of study should incorporate application of the Conceptual Framework, financial indicators and ethical considerations for business owners when making business decisions, including financial, social and environmental..

### **Areas of study**

1. Accounting for inventory
2. Accounting for and managing accounts receivable and accounts payable
3. Accounting for and managing non-current assets

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Record and report for inventory and discuss the effect of relevant financial and non-financial factors, and ethical considerations, on the outcome of business decisions.

**Outcome 2:** Record and report for accounts receivable and accounts payable, and analyse and discuss the effect of relevant decisions on the performance of the business including the influence of ethical considerations.

**Outcome 3:** Record and report for non-current assets and depreciation

**Assessment tasks** for Unit 1 and 2 Accounting will be selected from the following:

- exercise/s using a commercial accounting software package
- folio of exercises
- test
- assignment
- case study
- classroom presentation
- report

# BIOLOGY

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## **Unit 1: How do living things stay alive?**

In this unit students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. They analyse types of adaptations that enhance the organism's survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat. The role of a keystone species in maintaining the structure of an ecosystem is explored. Students consider how the planet's biodiversity is classified and the factors that affect the growth of a population. Students investigate the survival of an organism or species in Area of Study 3.

### **Areas of Study**

1. How do organisms function?
2. How do living systems sustain life?
3. Practical investigation

### **Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Investigate and explain how cellular structures and systems function to sustain life.

**Outcome 2:** Explain how various adaptations enhance the survival of an individual organism, investigate the relationships between organisms that form a living community and their habitat, and analyse the impacts of factors that affect population growth.

**Outcome 3:** Design and undertake an investigation related to the survival of an organism or species, and draw conclusions based on evidence from collected data.

## **Unit 2: How is continuity of life maintained?**

In this unit students focus on cell reproduction and the transmission of biological information from generation to generation. Students learn that all cells are derived from pre-existing cells through the cell cycle. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies, and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered. Students use chromosome theory and terminology from classical genetics to explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes. They consider the role of genetic knowledge in decision making about the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions. In this context the uses of genetic screening and its social and ethical issues are examined. Students research an issue related to genetics and/or reproductive in Area of Study 3.

### **Areas of Study**

1. How does reproduction maintain the continuity of life?
2. How is inheritance explained?
3. Investigation of an issue

### **Outcomes**

On completion of this unit you should be able to:

**Outcome 1:** Compare the advantages and disadvantages of asexual and sexual reproduction, explain how changes within the cell cycle may have an impact on cellular or tissue system function and identify the role of stem cells in cell growth and cell differentiation and in medical therapies.



**Outcome 2:** Apply an understanding of genetics to describe patterns of inheritance, analyse pedigree charts, predict outcomes of genetic crosses and identify the implications of the uses of genetic screening and decision making related to inheritance.

**Outcome 3:** Investigate and communicate a substantiated response to a question related to an issue in genetics and/or reproductive science.

#### **Assessment**

All assessments at Units 1 and 2 are school-based. They may be chosen from the list suggested in the VCAA Biology Study Design 2016 – 2021.

### **Unit 3: How do cells maintain life?**

In this unit students investigate the workings of the cell from several perspectives. They explore the importance of the insolubility of the plasma membrane in water and its differential permeability to specific solutes in defining the cell, its internal spaces and the control of the movement of molecules and ions in and out of such spaces. Students consider base pairing specificity, the binding of enzymes and substrates, the response of receptors to signalling molecules and reactions between antigens and antibodies to highlight the importance of molecular interactions based on the complementary nature of specific molecules.

Students study the synthesis, structure and function of nucleic acids and proteins as key molecules in cellular processes. They explore the chemistry of cells by examining the nature of biochemical pathways, their components and energy transformations. Cells communicate with each other using a variety of signalling molecules. Students consider the types of signals, the transduction of information within the cell and cellular responses. At this molecular level

Students study the human immune system and the interactions between its components to provide immunity to a specific antigen.

A student practical investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3.

#### **Areas of Study**

1. How do cellular processes work?
2. How do cells communicate?

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Explain the dynamic nature of the cell in terms of key cellular processes including regulation, photosynthesis and cellular respiration, and analyse factors that affect the rate of biochemical reactions.

**Outcome 2:** Apply a stimulus-response model to explain how cells communicate with each other, outline human responses to invading pathogens, distinguish between the different ways that immunity may be acquired, and explain how malfunctions of the immune system cause disease.

#### **Contribution to final assessment**

*School-assessed Coursework for Unit 3 will contribute 16 per cent to the study score.*

#### **Assessment:**

##### **For Outcome 1**

A report related to at least two practical activities from a practical logbook.

##### **For Outcome 2**

At least one task selected from:

- a report of a practical activity
- annotations of activities or investigations from a practical logbook
- a graphic organiser
- a bioinformatics exercise
- an evaluation of research

- media response
- data analysis
- a response to a set of structured questions
- problem solving involving biological concepts, skills and/or issues
- a reflective learning journal/blog related to selected activities or in response to an issue.

#### **Unit 4: How does life change and respond to challenges over time?**

In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool.

The accumulation of changes over time is considered as a mechanism for biological evolution by natural selection that leads to the rise of new species. Students examine change in life forms using evidence from palaeontology, biogeography, developmental biology and structural morphology. They explore how technological developments in the fields of comparative genomics, molecular homology and bioinformatics have resulted in evidence of change through measurements of relatedness between species.

Students examine the structural and cognitive trends in the human fossil record and the interrelationships between human biological and cultural evolution. The biological consequences, and social and ethical implications, of manipulating the DNA molecule and applying biotechnologies is explored for both the individual and the species.

A student practical investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

#### **Areas of Study**

1. How are species related?
2. How do humans impact on biological processes?
3. Practical Investigation

#### **Outcomes**

On completion of this unit the student should be able to:

**Outcome 1:** Analyse evidence for evolutionary change, explain how relatedness between species is determined, and elaborate on the consequences of biological change in human evolution.

**Outcome 2:** Describe how tools and techniques can be used to manipulate DNA, explain how biological knowledge is applied to biotechnical applications, and analyse the interrelationship between scientific knowledge and its applications in society.

**Outcome 3:** Design and undertake an investigation related to cellular processes and/or biological change and continuity over time, and present methodologies, findings and conclusions in a scientific poster.

#### **Contribution to final assessment**

*School-assessed Coursework for Unit 4 will contribute 24 per cent to the study score.*

#### **End of year exam on Units 3 & 4 – Contribution to assessment: 60%**

#### **Assessment:**

##### **For Outcome 1**

A report using primary or secondary data.

##### **For Outcome 2**

A response to an issue

OR

A report of a laboratory investigation

##### **For Outcome 3**

A structured scientific poster according to the VCAA template

# BUSINESS MANAGEMENT

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## Unit 1: Planning a business

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. Therefore, how businesses are formed and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

### Area of Study

1. The business idea
2. External Environment
3. Internal Environment

### Outcomes:

On completion of this unit the student should be able to describe:

**Outcome 1:** How and why business ideas are created and developed, and explain the methods by which a culture of business innovation and entrepreneurship may be fostered in a nation.

**Outcome 2:** The external environment of a business and explain how the macro and operating factors within it may affect business planning.

**Outcome 3:** The internal business environment and analyse how factors from within it may affect business planning.

## Unit 2: Establishing a business

This unit focuses on the establishment phase of a business's life. Establishing a business involves complying with legal requirements as well as making decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. In this unit students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse various management practices in this area by applying this knowledge to contemporary business case studies from the past four years.

### Area of Study

1. Legal requirements and financial considerations
2. Marketing a business
3. Staffing a business

### Outcomes:

On completion of this unit the student should be able to:

**Outcome 1:** explain the importance when establishing a business of complying with legal requirements and financial record keeping, and establishing effective policies and procedures.

**Outcome 2:** explain the importance of establishing a customer base and a marketing presence to achieve the objectives of the business, analyse effective marketing and public relations strategies and apply these strategies to business-related case studies.

**Outcome 3:** discuss the staffing needs for a business and evaluate the benefits and limitations of management strategies in this area from both an employer and an employee perspective.

### **Unit 3: Managing a business**

In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives. Students develop an understanding of the complexity and challenge of managing businesses and through the use of contemporary business case studies from the past four years have the opportunity to compare theoretical perspectives with current practice.

#### **Area of Study**

1. Business foundations
2. Managing employees
3. Operations management

#### **Outcomes:**

On completion of this unit the student should be able to:

**Outcome 1:** Discuss the key characteristics of businesses and stakeholders, and analyse the relationship between corporate culture, management styles and management skills.

**Outcome 2:** Explain theories of motivation and apply them to a range of contexts, and analyse and evaluate strategies related to the management of employees.

**Outcome 3:** Analyse the relationship between business objectives and operations management, and propose and evaluate strategies to improve the efficiency and effectiveness of business operations.

### **Unit 4: Transforming a business**

Businesses are under constant pressure to adapt and change to meet their objectives. In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management. Using a contemporary business case study from the past four years, students evaluate business practice against theory.

#### **Area of Study**

1. Reviewing performance – the need for change
2. Implementing change

On completion of this unit the student should be able to:

**Outcome 1:** Explain the way business change may come about, use key performance indicators to analyse the performance of a business, discuss the driving and restraining forces for change and evaluate management strategies to position a business for the future.

**Outcome 2:** Evaluate the effectiveness of a variety of strategies used by managers to implement change and discuss the effect of change on the stakeholders of a business.

# CHEMISTRY

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## Unit 1: How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavour. Students investigate a range of materials from metals and salts to polymers and nanomaterials. Students examine the modification of metals, assess the factors that affect the formation of ionic crystals and investigate a range of non-metallic substances from molecules to polymers and giant lattices and relate their structures to specific applications. They apply their knowledge to determine the relative masses of elements and the composition of substances. Throughout the unit, students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena.

### Areas of Study

1. How can knowledge of the elements explain the properties of matter?
2. How can the versatility of non-metals be explained?
3. Research Investigation

### Outcomes:

On completion of this unit the student should be able to:

**Outcome 1:** relate the position of elements in the periodic table to their properties, investigate the structures and properties of metals and ionic compounds, and calculate mole quantities.

**Outcome 2:** investigate and explain the properties of carbon lattices and molecular substances, name organic compounds, and explain how polymers can be designed for a purpose.

**Outcome 3:** investigate a selected material or chemical and communicate a substantiated response.

### Assessment

Suitable tasks for assessment may be selected from the following:

#### Outcomes 1 and 2

- annotations of a practical work folio of activities or investigations
- a report of a practical activity or investigation
- a modelling activity
- media response
- problem-solving involving chemical concepts, skills and/or issues
- a reflective learning journal/blog related to selected activities or in response to an issue
- data analysis
- a test comprising multiple choice and/or short answer and/or extended response.

**Outcome 3** Students write a report of an independent investigation of a topic selected from Area of Study 1 and/or Area of Study 2, using an appropriate format, for example digital presentation, oral communication or written report.

## Unit 2 What makes water such a unique chemical?

Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students explore the relationship between these bonding forces and the physical and chemical properties of water. They investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. Students are introduced to stoichiometry and to analytical techniques and instrumental procedures, and apply these to determine concentrations of different species in water samples, including chemical contaminants. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water.

### Areas of Study

1. How do substances interact with water?
2. How are substances in water measured and analysed?
3. Research Investigation

**Outcomes:**

On completion of this unit the student should be able to:

**Outcome 1:** relate the properties of water to its structure and bonding, and explain the importance of the properties and reactions of water in selected contexts.

**Outcome 2:** measure amounts of dissolved substances in water and analyse water samples for salts, organic compounds and acids and bases.

**Outcome 3:** investigate a selected material or chemical and communicate a substantiated response.

**Assessment**

**Outcomes 1 and 2** assessment tasks are chosen from the following list

- annotations of a practical work folio of activities or investigations
- a report of a practical activity or investigation
- a modelling activity, data analysis, a media response
- problem solving involving chemical concepts, skills and/or issues
- a reflective learning journal/blog related to selected activities or in response to an issue
- a test comprising multiple choice and/or short answer and/or extended response.

**Outcome 3:** Students write a report of a student-designed quantitative laboratory investigation using an appropriate format, for example digital presentation, oral communication, scientific poster or written report.

**Unit 3: How can chemical processes be designed to optimise efficiency?**

The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources, including fossil fuels, biofuels, galvanic cells and fuel cells. They investigate the combustion of fuels, including the energy transformations involved, the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions, and calculations of the amounts of energy released and their representations. Students consider the purpose, design and operating principles of galvanic cells, fuel cells and electrolytic cells. In this context they use the electrochemical series to predict and write half and overall redox equations, and apply Faraday's laws to calculate quantities in electrolytic reactions. Students analyse manufacturing processes with reference to factors that influence their reaction rates and extent. They investigate and apply the equilibrium law and Le Chatelier's principle to different reaction systems, including to predict and explain the conditions that will improve the efficiency and percentage yield of chemical processes. They use the language and conventions of chemistry including symbols, units, chemical formulas and equations to represent and explain observations and data collected from experiments, and to discuss chemical phenomena. A student practical investigation related to energy and/or food is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

**Areas of Study**

1. What are the options for energy production?
2. How can the yield of a chemical product be optimised?

**Outcomes:**

On completion of this unit you should be able to:

**Outcome 1** On completion of this unit the student should be able to compare fuels quantitatively with reference to combustion products and energy outputs, apply knowledge of the electrochemical series to design, construct and test galvanic cells, and evaluate energy resources based on energy efficiency, renewability and environmental impact.

**Outcome 2** On completion of this unit the student should be able to apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised, and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

**Assessment:****Outcome 1**

Analysis and evaluation of stimulus material. OR A report on a laboratory investigation. OR A comparison of two electricity-generating cells. OR A reflective learning journal/blog related to selected activities or in response to an issue. (approximately 50 minutes or not exceeding 1000 words)

**Outcome 2**

At least one task selected from:

- annotations of at least two practical activities from a practical logbook
- a report of a student investigation
- an evaluation of research
- analysis of data including generalisations and conclusions
- media analysis/response
- a graphic organiser illustrating a chemical process
- an analysis of an unfamiliar chemical manufacturing process or electrolytic cell
- a response to a set of structured questions. (approximately 50 minutes or not exceeding 1000 words for each task)

**Contribution to final assessment**

School-assessed Coursework for Unit 3 will contribute 16 per cent to the study score.

**External assessment**

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 60 per cent.

**Unit 4: How are organic compounds categorised, analysed and used?**

The carbon atom has unique characteristics that explain the diversity and number of organic compounds that not only constitute living tissues but are also found in the fuels, foods, medicines and many of the materials we use in everyday life. In this unit students investigate the structural features, bonding, typical reactions and uses of the major families of organic compounds including those found in food. Students study the ways in which organic structures are represented and named. They process data from instrumental analyses of organic compounds to confirm or deduce organic structures, and perform volumetric analyses to determine the concentrations of organic chemicals in mixtures. Students consider the nature of the reactions involved to predict the products of reaction pathways and to design pathways to produce particular compounds from given starting materials. Students investigate key food molecules through an exploration of their chemical structures, the hydrolytic reactions in which they are broken down and the condensation reactions in which they are rebuilt to form new molecules. In this context the role of enzymes and coenzymes in facilitating chemical reactions is explored. Students use calorimetry as an investigative tool to determine the energy released in the combustion of foods. A student practical investigation related to energy and/or food is undertaken in either Unit 3 or in Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

**Areas of Study**

1. How can the diversity of carbon compounds be explained and categorised?
2. What is the chemistry of food?
3. Practical investigation

**Outcomes**

On completion of this unit the student should be able to:

**Outcome 1** Compare the general structures and reactions of the major organic families of compounds, deduce structures of organic compounds using instrumental analysis data, and design reaction pathways for the synthesis of organic molecules.

**Outcome 2** Distinguish between the chemical structures of key food molecules, analyse the chemical reactions involved in the metabolism of the major components of food including the role of enzymes, and calculate the energy content of food using calorimetry.

**Outcome 3** Design and undertake a practical investigation related to energy and/or food, and present methodologies, findings and conclusions in a scientific poster.

### **Assessment**

#### **Outcome 1**

At least one task selected from:

- annotations of at least two practical activities from a practical logbook
- a report of a student investigation
- analysis of data including generalisations and conclusions
- media analysis/response
- a response to a set of structured questions
- a reflective learning journal/blog related to comparison of organic structures or pathways. (approximately 50 minutes or not exceeding 1000 words for each task)

**Outcome 2** Response to stimulus material. OR A report of a laboratory investigation. OR A comparison of food molecules OR A reflective learning journal/blog related to selected activities or in response to an issue. (approximately 50 minutes or not exceeding 1000 words)

**Outcome 3** A structured scientific poster according to the VCAA standard template. (not exceeding 1000 words)

#### **Contribution to assessment**

School-assessed Coursework for Unit 4 will contribute 24 per cent to the study score.

#### **End of year exam – Contribution to assessment:**

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 60 per cent to the study score.



# COMPUTING (INFORMATION TECHNOLOGY)

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## Unit 1 Computing

In this unit students focus on how data, information and networked digital systems can be used to meet a range of users' current and future needs.

### Areas of Study

1. Data and graphic solutions
2. Networks
3. Collaboration and communication

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Acquire, secure and interpret data, and design and develop a graphic solution that communicates the findings of an investigation.

**Outcome 2:** Design a network with wireless capability that meets an identified need or opportunity, explain its configuration and predict risks and benefits for intended users.

**Outcome 3:** Design and develop a website collaboratively with others that presents an analysis of a contemporary issue and the team's point of view on the issue.

## Unit 2 Computing

In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data.

### Areas of Study

1. Programming
2. Data analysis and visualisation
3. Data management

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Design working modules in response to solution requirements, and use a programming or scripting language to develop the modules.

**Outcome 2:** Apply the problem-solving methodology and use appropriate software tools to extract relevant data and create a data visualisation that meets a specified user's needs.

**Outcome 3:** Apply the problem-solving methodology to create a solution using database management software, and explain the personal benefits and risks of interacting with a database.

## COMPUTING (INFORMATICS)

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### Unit 3 Informatics

In Informatics Units 3 and 4 students focus on data, information and information systems. In Unit 3 students consider data and how it is acquired, managed, manipulated and interpreted to meet a range of needs.

#### Areas of Study

1. Organisations and data management
2. Data analytics: drawing conclusions

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Design a solution, develop it using a relational database management system, and diagrammatically represent how users interact with an online solution when supplying data for a transaction.

**Outcome 2:** Use a range of appropriate techniques and processes to acquire, prepare, manipulate and interpret complex data to confirm or refute a hypothesis, and formulate a project plan to manage progress.

### Unit 4 Informatics

In this unit students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs.

#### Areas of Study

1. Data analytics: presenting the findings
2. Information management

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** On completion of this unit the student should be able to design, develop and evaluate a multimodal online solution that confirms or refutes a hypothesis, and assess the effectiveness of the project plan in managing progress.

**Outcome 2:** On completion of this unit the student should be able to compare and contrast the effectiveness of information management strategies used by two organisations to manage the storage and disposal of data and information, and recommend improvements to their current practices.

# DANCE

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## Unit 1

In this unit students explore the potential of the body as an instrument of expression and communication in conjunction with the regular and systematic development of physical dance skills. Students discover the diversity of expressive movement and purposes for dancing in dances from different times, places, cultures, traditions and/or styles. They commence the process of developing a personal movement vocabulary and also begin the practices of documenting and analysing movement. Through this work they develop understanding of how other choreographers use these practices. Students learn about relevant physiology and approaches to health and wellbeing, and about care and maintenance of the body. They apply this knowledge through regular and systematic dance training. Students explore the choreographic process through movement studies, cohesive dance compositions and performances. They discuss influences on other choreographers and the impact of these influences on intentions and movement vocabulary in selected dance works.

### Area of Study

1. Dance perspectives
2. Choreography and performance
3. Dance technique and performance
4. Awareness and maintenance of the dancer's body

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Describe and document features of other choreographers' dance works.

**Outcome 2:** Choreograph and perform a solo, duo and/or group dance work and complete structured improvisations.

**Outcome 3:** Safely and expressively perform a learnt solo, duo or group dance work.

**Outcome 4:** Describe key approaches to wellbeing and health practices for dancers and essential aspects of physiology, and demonstrate the safe use and maintenance of the dancer's body

## Unit 2

In this unit students extend their personal movement vocabulary and skill in using a choreographic process by exploring elements of movement (time, space and energy), the manipulation of movement through choreographic devices and the types of form used by choreographers. Students use the choreographic process to develop and link movement phrases to create a dance work. They apply their understanding of the processes used to realise a solo or group dance work – choreographing and/or learning, rehearsing, preparing for performance and performing. Students are introduced to a range of dance traditions, styles and works. Dance traditions, styles and works selected for study should encompass the dance output of traditional and/or contemporary Aboriginal and Torres Strait Islander Peoples and other Australian dance artists. Students may also study material such as dance from other cultures, music theatre, the work of tap/jazz or street performers, ballet choreographers, and/or modern dance. Students describe the movement vocabulary in their own and others' dances by identifying the use of movement categories and ways the elements of movement have been manipulated through the use of choreographic devices. Students make links between the theoretical and practical aspects of dance across the areas of study through analysis and discussion of the way their own and other choreographers' intentions are communicated, and through the ways movement has been manipulated and structured.

### Areas of Study

1. Dance perspectives
2. Choreography and performance
3. Dance technique and performance

### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Analyse use of the movement categories and elements of movement in selected dance traditions, styles and/or works

**Outcome 2:** Complete structured improvisations and choreograph and perform a solo, duo or group dance work.

**Outcome 3:** Safely and securely perform a learnt solo, duo or group dance work with artistry, and report on the realisation of the dance work.

### Unit 3

In this unit students choreograph, rehearse and perform a solo dance work that allows them to execute a diverse range of physical skills and actions drawn from all movement categories. Students continue regular and systematic dance training and learn and perform a duo or group dance work created by another choreographer. They continue to develop their ability to safely execute movement vocabulary and perform with artistry. Students analyse the realisation of their solo and the learnt duo or group dance work, focusing on the processes of choreographing or learning, rehearsing, preparing for performance and performing. This analysis connects each student's work as a choreographer to the work of professional choreographers. Students further develop their understanding of the choreographic process through analysis of two dance works by choreographers of the twentieth and/or twenty-first centuries. These dance works must be selected from the Prescribed list of dance works for Unit 3. The Prescribed list for Unit 3 includes solo works, duos and works where the performance of a particular dancer in a group can be studied independently. Students analyse how the intentions chosen by choreographers are developed through the use of choreographic devices and arrangement of phrases and sections. They analyse the dance design and use of movement vocabulary in the selected works and consider influences on the choreographers' choices of intention, movement vocabulary and production aspects of the dance works. Students consider the influence these choreographers and/or the selected dance works have had on the arts, artists and/or society.

#### Areas of Study

1. Dance Perspectives
2. Choreography, performance and analysis of a skills-based solo dance work
3. Dance technique, performance and analysis of a learnt dance work

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Analyse two selected dance works.

**Outcome 2:** Choreograph, rehearse and perform a skills-based solo dance work and analyse the processes used to realise the solo dance work.

**Outcome 3:** Learn, rehearse and prepare for performance, and perform a duo or group dance work by another choreographer and analyse the processes used.

### Unit 4

In this unit students choreograph, rehearse and perform a solo dance work with a cohesive structure. When rehearsing and performing this dance work students focus on communicating the intention with accurate execution of choreographic variations of spatial organisation. They explore how they can demonstrate artistry in performance. Students document and analyse the realisation of the solo dance work across the processes of choreographing, rehearsing, preparing to perform and performing the dance work. Students continue to develop their understanding of the choreographic process through analysis of a group dance work by a twentieth or twenty-first century choreographer. This analysis focuses on ways in which the intention is expressed through the manipulation of spatial relationships. Students analyse the use of group structures (canon, contrast, unison, and asymmetrical and symmetrical groupings and relationships) and spatial organisation (direction, level, focus and dimension) and investigate the influences on choices made by choreographers in these works.

#### Areas of Study

1. Dance Perspectives
2. Choreography, Performance and dance-making analysis

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Analyse a selected group dance work.

**Outcome 2:** Choreograph, rehearse, perform and analyse their realisation of a solo dance work.

## DRAMA

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### Unit 1 Introducing performance styles

In this unit students study three or more performance styles from a range of social, historical and cultural contexts. They examine drama traditions of ritual and storytelling to devise performances that go beyond re-creation and/or representation of real life as it is lived. This unit focuses on creating, presenting and analysing a devised solo and/or ensemble performance that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. This unit also involves analysis of a student's own performance work and a work by professional drama performers. Students apply play-making techniques to shape and give meaning to their performance. They manipulate expressive and performance skills in the creation and presentation of characters, and develop awareness and understanding of how characters are portrayed in a range of performance styles. They document the processes they use as they explore a range of stimulus material, and experiment with production areas, dramatic elements, conventions and performance styles. In this unit the terms character, performance, story and style may be understood as one or more characters, performances, stories or styles.

#### Areas of Study

1. Creating a devised performance
2. Presenting a devised performance
3. Analysing a devised performance
4. Analysing a professional drama performance

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Devise and document solo and/or ensemble drama works based on experiences and/or stories.

**Outcome 2:** Perform devised drama works to an audience.

**Outcome 3:** Analyse the development, and the performance to an audience, of their devised work.

**Outcome 4:** Analyse the presentation of ideas, stories and characters in a drama performance by professional or other drama practitioners.

### Unit 2 Australian identity

In this unit students study aspects of Australian identity evident in contemporary drama practice. This may also involve exploring the work of selected drama practitioners and associated performance styles. This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance. Students create, present and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context. In creating the performance, students use stimulus material that allows them to explore an aspect or aspects of Australian identity. They examine selected performance styles and explore the associated conventions. Students further develop their knowledge of the conventions of transformation of character, time and place, the application of symbol, and how these conventions may be manipulated to create meaning in performance and the use of dramatic elements and production areas. Students analyse their own performance work as well as undertaking an analysis of a performance of an Australian work, where possible, by professional actors. An Australian work might:

- be written, adapted or devised by Australian writers or theatre-makers
- reflect aspects of Australian identity, for example the voice of Australia's first peoples, the Celtic perspective, the twentieth or twenty-first century migrant experience, the refugee experience, urban and rural perspectives.

Across this unit, students study performance styles from a range of historical and/or social and/or cultural contexts. In this unit the terms character, performance, story and style may be understood as one or more characters, performances, stories or styles.

### **Areas of Study**

1. Using Australia as inspiration
2. Presenting a devised performance
3. Analysing a devised performance
4. Analysing Australian drama performance

### **Outcomes**

On completion of this unit you should be able to:

**Outcome 1:** Devise and document the processes used to create a solo or ensemble performance that reflects

an aspect or aspects of Australian identity and contemporary drama practice.

**Outcome 2:** Present a devised performance that reflects aspects of Australian identity and contemporary drama practice

**Outcome 3:** Analyse the development, and performance to an audience, of their devised work.

**Outcome 4:** Analyse and evaluate a performance of a drama work by Australian practitioners.

### **Materials Fees**

Approximately \$60 (based on 2018 cost).

## **Unit 3 Devised ensemble performance**

In this unit students explore the work of drama practitioners and draw on contemporary practice as they devise ensemble performance work. Students explore performance styles and associated conventions from a diverse range of contemporary and/or traditional contexts. They work collaboratively to devise, develop and present an ensemble performance. Students create work that reflects a specific performance style or one that draws on multiple performance styles and is therefore eclectic in nature. They use play-making techniques to extract dramatic potential from stimulus material, then apply and manipulate conventions, dramatic elements, expressive skills, performance skills and production areas. Throughout development of the work they experiment with transformation of character, time and place, and application of symbol. Students devise and shape their work to communicate meaning or to have a specific impact on their audience. In addition, students document and evaluate stages involved in the creation, development and presentation of the ensemble performance. Students analyse and evaluate a professional drama performance selected from the prescribed

### **Areas of Study**

1. Devising and presenting ensemble performance
2. Analysing a devised ensemble performance
3. Analysing and evaluating a professional drama performance

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Develop and present characters within a devised ensemble performance that goes beyond a representation of real life as it is lived.

**Outcome 2:** Analyse the use of processes, techniques and skills to create and present a devised ensemble performance.

**Outcome 3:** Analyse and evaluate a professional drama performance.

## **Unit 4 Devised solo performance**

This unit focuses on the development and the presentation of devised solo performances. Students explore contemporary practice and works that are eclectic in nature; that is, they draw on a range of performance styles and associated conventions from a diverse range of contemporary and traditional contexts. Students develop skills

in extracting dramatic potential from stimulus material and use play-making techniques to develop and present a short solo performance. They experiment with application of symbol and transformation of character, time and place. They apply conventions, dramatic elements, expressive skills, performance skills and performance styles to shape and give meaning to their work. Students further develop and refine these skills as they create a performance in response to a prescribed structure. They consider the use of production areas to enhance their performance and the application of symbol and transformations. Students document and evaluate the stages involved in the creation, development and presentation of their solo performance. Students are encouraged to attend performances that incorporate a range of performance styles to support their work in this unit.

### **Areas of Study**

1. Demonstrating techniques of solo performance
2. Devising a solo performance
3. Analysing and evaluating a devised solo performance

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Demonstrate, in response to given stimulus material, application of symbol and transformation of character, time and place, and describe the techniques used.

**Outcome 2:** Create, develop and perform a solo performance in response to a prescribed structure.

**Outcome 3:** Analyse and evaluate the creation, development and presentation of a solo performance devised in response to a prescribed structure.

### **Materials Fees**

Approximately \$60 (based on 2018 cost).

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## ENGLISH

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### Unit 1

In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts and create their own texts intended to position audiences. Students develop their skills in creating written, spoken and multimodal texts.

#### Areas of Study

1. Reading and creating texts
2. Analysing and presenting argument

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Produce analytical and creative responses to texts

**Outcome 2:** Analyse how argument and persuasive language can be used to position audiences, and create their own texts intended to position audiences

### Unit 2

In this unit, students compare the presentation of ideas, issues and themes in texts. They analyse arguments presented and the use of persuasive language in texts and create their own texts intended to position audiences. Students develop their skills in creating written, spoken and multimodal texts.

#### Areas of Study

1. Reading and comparing texts
2. Analysing and presenting argument

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Compare the presentation of ideas, issues and themes in two texts.

**Outcome 2:** Identify and analyse how argument and persuasive language are used in text/s that attempt to influence an audience, and create a text which presents a point of view.

#### Assessment

Assessment tasks for English may be chosen from the following list suggested in the VCAA Study Design.

- an analytical response to a set text
- a creative response to a set text such as a monologue, script or short story
- an analysis of the use of argument and persuasive language in text/s
- an oral presentation of a point of view intended to position an audience
- a comparative analytical response to set texts
- a persuasive text that presents an argument or viewpoint



### **Unit 3**

In this unit students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts. Texts selected for study in Area of Study 1 must be chosen from the Text List published annually by the VCAA. The texts selected for study in Unit 3 Area of Study 2 must have appeared in the media since 1 September of the previous year. The term 'selected text' refers to a text chosen from the list of prescribed texts in the Text List published by the VCAA.

### **Areas of Study**

1. **Reading and Creating Texts:** In this area of study students identify, discuss and analyse how the features of selected texts create meaning and how they influence interpretation. Students prepare sustained analytical interpretations of selected texts, discussing how features of the text, create meaning and using textual evidence to support their responses. Students present sustained creative responses to selected texts, demonstrating their understanding of the world of the texts and how texts construct meaning.

2. **Analysing Argument:** In this area of study students analyse and compare the use of argument and language in texts that debate a topical issue. The texts must have appeared in the media since 1 September of the previous year. Considering information about the purpose, audience and context of a text, students explore the argument of a persuasive piece, and the way written, spoken and visual language is used. Students develop written and spoken critical analyses of the use of argument and language in written, spoken, and/or multimodal texts, including analysis of the quality of the reasoning presented and the use of features intended to position audiences.

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Produce an analytical interpretation of a selected text, and a creative response to a different selected text.

**Outcome 2:** Analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.

*Contribution to assessment: 25%*

### **Unit 4**

In this unit students compare the presentation of ideas, issues and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media. Texts selected for Area of Study 1 must be chosen from the Text List published annually by the VCAA. The issues selected for Area of Study 2 must have appeared in the media since 1 September of the previous year, but need not be the same as the issue selected for study in Unit 3. The term 'selected texts' refers to a combination of texts chosen from the list of prescribed texts for comparative study in the Text List published by the VCAA.

### **Areas of Study**

1. Reading and Comparing Texts:
2. Presenting Argument:

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Produce a detailed comparison which analyses how two selected texts present ideas, issues and themes.

**Outcome 2:** Construct a sustained and reasoned point of view on an issue currently debated in the media

*Contribution to assessment: 25%*

*End of year exam – Contribution to assessment: 50%*

### **ASSESSMENT:**

#### **Assessment tasks for English include:**

- Oral presentations
- Imaginative Texts
- Comparative Analysis Essays
- Text response essays
- Analysis of persuasive language in media texts

# BRIDGING ENGLISH AS AN ADDITIONAL LANGUAGE

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## Unit 1

In this unit, students will build their ability to listen, speak, read and write for everyday and academic purposes. They explore how language features, structures and conventions can be used to express ideas and opinions, and to create their own spoken and written texts.

### Areas of Study

1. English for everyday and academic purposes
2. English for self-expression

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Engage with and understand everyday and accessible academic texts, and produce their own everyday and academic texts

**Outcome 2:** Understand texts for self-expression and produce texts for self-expression

## Unit 2

In this unit, students will build their understanding of how English is constructed and used to communicate in a variety of contexts and for a range of purposes.

### Areas of Study

1. English literature
2. English in the media

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Understand and respond to literary texts and create their own literary texts

**Outcome 2:** Explain how a variety of media texts position audiences, and produce texts which attempt to position audiences

## Assessment

Assessment tasks for **Bridging English as an Additional Language** may be chosen from the following list suggested in the VCAA Study Design.

- role-plays
- presentations
- interviews
- group work and discussion
- short-answer or multiple-choice questions
- journal entries
- personal letters
- blogs
- emails
- letters to the editor
- essays
- reports
- biographies and/or autobiographies
- factual articles
- comprehension and analysis activities
- advertisements.

# ENGLISH AS AN ADDITIONAL LANGUAGE

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## Unit 1

In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts and create their own texts intended to position audiences.

### Areas of Study

1. Reading and creating texts
2. Analysing and presenting argument

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Produce analytical and creative responses to texts.

**Outcome 2:** Analyse how argument and persuasive language can be used to position audiences, and create their own texts intended to position audiences.

## Unit 2

In this unit students compare the presentation of ideas, issues and themes in texts. They analyse arguments presented and the use of persuasive language in texts and create their own texts intended to position audiences.

### Areas of Study

1. Reading and comparing texts
2. Analysing and presenting argument

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Compare the presentation of ideas, issues and themes in two texts.

**Outcome 2:** Identify and analyse how argument and persuasive language are used in text/s that attempt to influence an audience, and create a text which presents a point of view.

### Assessment

Assessment tasks for **English as an Additional Language** may be chosen from the following list suggested in the VCAA Study Design:

- an analytical response to a set text
- a creative response to a set text such as a monologue, script, short story, illustrated narrative, short film or graphic text
- an analysis of the use of argument and persuasive language in text/s
- a text intended to position an audience.
- a comparative analytical response to set texts
- a persuasive text that presents an argument or viewpoint

## Unit 3

In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts.

### Areas of Study

1. Reading and Creating Texts
2. Analysing Argument
3. Listening to texts

**Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Produce an analytical interpretation of a selected text and a creative response of a different selected text.

**Outcome 2:** Analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.

**Outcome 3:** Comprehend a spoken text

*Contribution to assessment: 25%*

**Unit 4**

In this unit students compare the presentation of ideas, issues and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

**Areas of Study**

1. Reading and Comparing Texts
2. Presenting Argument

**Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Produce a detailed comparison which analyses how two selected texts present ideas, issues and themes.

**Outcome 2:** Construct a sustained and reasoned point of view on an issue currently debated in the media.

*Contribution to assessment: 25%*

*End of year exam – Contribution to assessment: 50%*

**Assessment**

Assessment tasks for **English as an Additional Language or Dialect** may be chosen from the list suggested in the VCAA **English as an Additional Language** Study Design 2016-2020

# FOOD STUDIES

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## Unit 1 Food origins

In this area of study students explore the origins and cultural roles of food, from early civilisations through to today's industrialised and global world. Through an overview of the earliest food production regions and systems, students gain an understanding of the natural resources, climatic influences and social circumstances that have led to global variety in food commodities, cuisines and cultures with a focus on one selected region other than Australia. The practical component explores the use of ingredients available today that were used in earlier cultures.

### Areas of Study

1. Food around the world
2. Food in Australia

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Identify and explain major factors in the development of a globalised food supply, and demonstrate adaptations of selected food from earlier cuisines through practical activities.

**Outcome 2:** Describe patterns of change in Australia's food industries and cultures, and use foods indigenous to Australia and those introduced through migration in the preparation of food products.

## Unit 2 Food Makers

In this unit students investigate food systems in contemporary Australia. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

### Areas of Study

1. Food industries
2. Food in the home

### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Describe Australia's major food industries, analyse relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.

**Outcome 2:** Compare and evaluate similar foods prepared in different settings, explain the influences on effective food provision and preparation in the home, and design and create a food product that illustrates potential adaptation in a commercial context.

### Materials Fees

Approximate \$150 (based on 2018 cost).

### **Unit 3 Food in daily life**

This unit investigates the many roles and everyday influences of food. Area of Study 1 explores the science of food: our physical need for it and how it nourishes and sometimes harms our bodies. Students investigate the physiology of eating and appreciating food, and the microbiology of digestion. Area of Study 2 focuses on influences on food choice: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments. Students inquire into the role of food in shaping and expressing identity and connectedness and the ways in which food information can be filtered and manipulated. They investigate behavioural principles that assist in the establishment of lifelong, healthy dietary patterns.

#### **Areas of study**

1. The science of food
2. Food choice, health and wellbeing

#### **Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Explain the processes of eating and digesting food and absorption of macronutrients, explain causes and effects of food allergies, food intolerances and food contamination, analyse food selection models, and apply principles of nutrition and food science in the creation of food products.

**Outcome 2:** Explain and analyse factors affecting food access and choice, analyse the influences that shape an individual's food values, beliefs and behaviours, and apply practical skills to create a range of healthy meals for children and families.

### **Unit 4 Food issues, challenges and futures**

In this unit students examine debates about global and Australian food systems. Area of Study 1 focuses on issues about the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage, and the use and management of water and land. Area of Study 2 focuses on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices.

#### **Areas of study**

1. Environment and ethics
2. Navigating food information

#### **Outcomes**

On completion of this unit you should be able to:

**Outcome 1:** Explain a range of food systems issues, respond to a selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.

**Outcome 2:** Explain a variety of food information contexts, analyse the formation of food beliefs, evaluate a selected food trend, fad or diet and create food products that meet the Australian Dietary Standards.

#### **Materials Fees**

Approximately \$150 (based on 2018 cost).

# HEALTH AND HUMAN DEVELOPMENT

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## Unit 1: Understanding Health and Wellbeing

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and also explore other interpretations. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged. For the purposes of this study, students should consider wellbeing to be an implicit element of health. In this unit students identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islanders. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health and wellbeing and the indicators used to measure and evaluate health status. With a focus on youth, students consider their own health as individuals and as a cohort. They build health literacy through interpreting and using data, through investigating the role of food, and through extended inquiry into one youth health focus area..

### Areas of Study

1. Health Perspective and Influences
2. Health and Nutrition

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain multiple dimensions of health and wellbeing, explain indicators used to measure health status and analyse factors that contribute to variations in health status of youth.

**Outcome 2:** Apply nutrition knowledge and tools to the selection of food and the evaluation of nutrition information.

**Outcome 3:** Interpret data to identify key areas for improving youth health and wellbeing, and plan for action by analysing one particular area in detail.

## Unit 2: Managing Health and Development

This unit investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. This unit promotes the application of health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes. Students enquire into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

### Areas of Study

1. Developmental Transitions
2. Healthcare in Australia

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain developmental changes in the transition from youth to adulthood, analyse factors that contribute to healthy development during prenatal and early childhood stages of the lifespan and explain health and wellbeing as an intergenerational concept

**Outcome 2:** Describe how to access Australia's health system, explain how it promotes health and wellbeing in their local community, and analyse a range of issues associated with the use of new and emerging health procedures and technologies.

### Assessment



Assessment tasks for Health and Human Development may be chosen from the list suggested in the VCAA Study Design 2018-2022.

### **Unit 3: Australia's Health in a Globalised World**

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). They use this knowledge as background to their analysis and evaluation of variations in the health status of Australians. Area of Study 2 focuses on health promotion and improvements in population health over time. Students look at various public health approaches and the interdependence of different models as they research health improvements and evaluate successful programs. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

#### **Areas of Study**

1. Understanding health and wellbeing
2. Promoting health and wellbeing

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status

**Outcome 2:** Explain changes to public health approaches, analyse improvements in population health over time and evaluate health promotion strategies

*Contribution to assessment: 25%*

### **Unit 4: Global Health and Human Development in a Global Context**

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Area of Study 2 looks at global action to improve health and wellbeing and human development, focusing on the United Nations' (UN's) Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO). Students also investigate the role of non-government organisations and Australia's overseas aid program. Students evaluate the effectiveness of health initiatives and programs in a global context and reflect on their capacity to take action.

#### **Areas of Study**

1. Health and wellbeing in a global context
2. Health and the Sustainable Development Goals

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Analyse similarities and differences in health status and burden of disease globally and the factors that contribute to differences in health and wellbeing

**Outcome 2:** Analyse relationships between the SDGs and their role in the promotion of health and human development, and evaluate the effectiveness of global aid programs.

*Contribution to assessment: 25%*

*End of year exam- Contribution to assessment: 50%*

## Assessment

Assessment tasks for Health and Human Development may be chosen from the list suggested in the VCAA Study Design 2018-2022

## HISTORY

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### Unit 1 20<sup>th</sup> Century History: 1900-1939

In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars. World War One is regarded by many as marking the beginning of twentieth century history since it represented such a complete departure from the past and heralded changes that were to have an impact for decades to come. The post-war treaties ushered in a period where the world was, to a large degree, reshaped with new borders, movements, ideologies and power structures. The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

#### Areas of Study

1. Ideology and Conflict
2. Social and Cultural Change

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** explain the consequences of the peace treaties which ended World War One, the impact of ideologies on nations and the events that led to World War Two.

**Outcome 2:** explain patterns of social life and cultural change in one or more contexts, and analyse the factors which influenced changes to social life and culture, in the inter-war years

### Unit 2 20<sup>th</sup> Century History: 1945-2000

This unit explores the nature and impact of the Cold War and challenges and changes to existing political, economic and social arrangements in the second half of the twentieth century. Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War. The period also saw challenge and change to the established order in many countries. The second half of the twentieth century also saw the rise of social movements that challenged existing values and traditions, such as the civil rights movement, feminism and environmental movements.

#### Areas of Study

1. Competing Ideologies
2. Challenge and Change

#### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** explain the ideological divisions in the post-war period and analyse the nature, development and impact of the Cold War on nations and people, in relation to one or more particular conflicts in the period.

**Outcome 2:** explain the causes and nature of challenge and change in relation to two selected contexts in the second half of the twentieth century and analyse the consequences for nations and people.

## Assessment

Assessment tasks 20th Century History may be chosen from the following list suggested in the VCAA History Study Design

- analytical exercises
- annotated maps
- short reports
- essays
- oral presentations

- multimedia presentations
- biographical studies

### **Unit 3 & 4: Russian & Chinese Revolutions**

*Russian Revolution Coronation of Tsar Nicholas 1896 – End of the NEP 1927)*

*Chinese Revolution (The Chinese Republic 1912 – Death of Mao 1976)*

Revolutions are the great disjuncture of modern times and mark deliberate attempts at new directions. They share the common aim of breaking with the past by destroying the regimes and societies that engender them and embarking on a program of political and social transformation. As processes of dramatically accelerated social change, revolutions have a profound impact on the country in which they occur, as well as important international repercussions.

Because revolutions involve destruction and construction, dispossession and liberation, they polarise society and unleash civil war and counter-revolution, making the survival and consolidation of the revolution the principal concern of the revolutionary state. In defence of the revolution, under attack from within and without, revolutionary governments often deploy armed force and institute policies of terror and repression. The process of revolution concludes when a point of stability has been reached and a viable revolutionary settlement made.

#### **Areas of Study for both Revolutions**

1. Causes of Revolution
2. Consequences of Revolution

#### **Outcomes for both Revolutions**

By the end of this unit you should be able to:

**Outcome 1:** Analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements.

**Outcome 2:** Analyse the consequences of revolution and evaluate the extent of change brought to society.

*Contribution to assessment: Each revolution will contribute 25% to the overall study score*

#### **Assessment**

Assessment tasks for Unit 3 and 4 History will be chosen from the list suggested in the VCAA History Study Design 2016-2020. They include:

- Research Task / Short Answer Questions
- Analysis of Written/Visual Sources (Documents, Cartoons, Paintings, Posters, Speeches etc...)
- Historiography Exercise
- Essay

End of Year Exam Contribution: 50%

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## LANGUAGES - GERMAN

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The study of VCE German contributes to students' personal development in a range of areas including: communication skills, intercultural understanding, cognitive development, literacy and general knowledge. Learning and using an additional language encourages students to examine the influences on their perspectives and society, and to consider issues important for effective personal, social and international communication. It enables students to examine the nature of language, including their own, and the role of culture in language, communication and identity. By understanding the process of language learning, students can apply skills and knowledge to other contexts and languages. Learning a language engages analytical and reflective capabilities and enhances critical and creative thinking

### Unit 1 German

In Unit 1 students develop an understanding of the language and culture/s of German-speaking communities through the study of three or more topics from the prescribed themes. Each Area of Study in the unit must focus on a different subtopic. Students access and share useful information on the topics and subtopics through German and extend vocabulary and grammatical knowledge and language skills. They focus on analysing cultural products or practices including visual, spoken or written texts, which may include the following: stories, poems, plays, novels, songs, films, photographs, artworks, architecture, technology, food, clothing, sports and festivals.

#### Key Knowledge:

1. VCE Topics: Relationships; Personal ID and Lifestyle; Communication & Media.
2. Text Types & Writing Styles
3. Language & Culture through Texts
4. Vocabulary & Grammar

#### Areas of Study

1. Interpersonal communication,
2. Interpretive communication,
3. Presentational communication

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** exchange meaning in a conversation in German

**Outcome 2:** interpret information from two texts [spoken, read or viewed] on the same subtopic presented in German, and write instructions/advice in German

**Outcome 3:** present information, concepts and ideas in writing in German on the selected subtopic and for a specific audience and purpose.

#### Assessment

Assessment tasks for German Units 1 and 2 may be chosen from the list suggested in the VCAA German Study Design

### Unit 2 German

In this unit students develop an understanding of aspects of language and culture through the study of three or more topics. Students analyse visual, spoken and written texts. They access and share useful information on the topics and subtopics through German and consolidate and extend vocabulary, grammar knowledge and language skills. Cultural products or practices can be used to demonstrate how culture and perspectives may vary between communities. Students reflect on the interplay between language and culture, and its impact on meaning, understanding and the individual's language use in specific contexts and for specific audiences.

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**Key Knowledge:**

1. VCE Topics: Influence of Science & Technology; Cultural Heritage - Festivals, Cultural Heritage - Fairy Tales
2. Text Types & Writing Styles
3. Language & Culture through Texts
4. Vocabulary & Grammar

**Areas of Study**

1. Interpersonal communication,
2. Interpretive communication,
3. Presentational communication

**Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** respond in writing in German to spoken, written or viewed texts presented in German.

**Outcome 2:** analyse and use information from written, spoken or visual texts to produce an extended written response in German.

**Outcome 3:** explain information, ideas and concepts orally in German to a specific audience about an aspect of culture within communities where German is spoken.

**Assessment**

Assessment tasks for German Units 1 and 2 may be chosen from the list suggested in the VCAA German Study Design

**Unit 3 German**

In Unit 3 students investigate the way German speakers interpret and express ideas, and negotiate and persuade in German. Students interpret information, inform others, and reflect upon and develop persuasive arguments. They access and share useful information on the subtopics through German, and consolidate and extend vocabulary and grammar knowledge and language skills. Students consider the influence of language and culture in shaping meaning and reflect on the practices, products and perspectives of the cultures of German-speaking communities. They reflect on how knowledge of German and German-speaking communities can be applied in a range of contexts and endeavours, such as further study, travel, business or community involvement.

**Key Knowledge:**

1. VCE Topics: Aspirations Education & Careers; Global & contemporary society; Lifestyles in German speaking countries & communities<sup>2</sup>.
2. Text Types & Writing Styles
3. Language & Culture through Texts
4. Vocabulary & Grammar

**Areas of Study**

1. Interpersonal communication,
2. Interpretive communication,
3. Presentational communication

**Outcomes:**

On completion of this unit students should be able to:

**Outcome 1:** to participate in a spoken exchange in German to resolve a personal issue.

**Outcome 2:** to interpret information from spoken, written and viewed texts and write responses in German.

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**Outcome 3:** express ideas in a personal, informative or imaginative piece of writing in German.

### **Assessment**

Assessment tasks for German Units 3 and 4 may be chosen from the list suggested in the VCAA German Study Design

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*Contribution to assessment: 25%*

### **Unit 4 German**

In Unit 4 students investigate aspects of culture through the study of two or more subtopics from the prescribed themes and topics. Students build on their knowledge of German-speaking communities, considering cultural perspectives and language and explaining personal observations. Students consolidate and extend vocabulary, grammar knowledge and language skills to investigate the topics through German. Students identify and reflect on cultural products or practices that provide insights into German-speaking communities. Cultural products or practices can be drawn from a diverse range of texts, activities and creations. Students reflect on the ways culture, place and time influence values, attitudes and behaviours. They consider how knowledge of more than one culture can influence the ways individuals relate to each other and function in the world.

### **Key Knowledge:**

1. VCE Topics: Aspirations Education & Careers; Global & contemporary society; Lifestyles in German speaking countries & communities
  2. Text Types & Writing Styles
- 
3. Language & Culture through Texts
  4. Vocabulary & Grammar

### **Areas of Study**

1. Interpersonal communication
2. Interpretive communication,
3. Presentational communication

### **Outcomes**

On completion of this unit you should be able to:

**Outcome 1:** share information, ideas and opinions in a spoken exchange in German.

**Outcome 2:** analyse information from written, spoken and viewed texts for use in a written response in German.

**Outcome 3:** present information, concepts and ideas in evaluative or persuasive writing on an issue in German.

*Contribution to assessment: 25%*

*End of year exam*

*Oral Component - Contribution to assessment: 12.5%*

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*Written Component - Contribution to assessment: 37.5%*

# LEGAL STUDIES

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## Unit 1: Criminal Law in action

In this unit, you will examine the need for laws in society. You will investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts of crime. Through a consideration of contemporary cases and issues, you will learn about different types of crimes and explore rights and responsibilities under criminal law. You will also consider the role of parliament and subordinate authorities in law-making, as well as the impact of the Victorian Charter of Rights and Responsibilities on law enforcement and adjudication in Victoria. You will investigate the processes and procedures followed by courts in hearing and resolving criminal cases. You will explore the main features and operations of criminal courts and consider the effectiveness of the criminal justice system in achieving justice.

### Areas of Study

1. Law in Society
2. Criminal Law
3. The Criminal Courtroom

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain the need for effective laws and describe the main sources and types of law in society.

**Outcome 2:** Explain the key principles and types of criminal law; apply the key principles to relevant cases, and discuss the impact of criminal activity on the individual and society.

**Outcome 3:** Describe the processes for the resolution of criminal cases and discuss the capacity of these processes to achieve justice.

## Unit 2: Issues in Civil Law

In this unit, you will examine the rights that are protected by civil law, as well as obligations that laws impose. You will investigate types of civil laws, related cases and issues, and develop an appreciation of the role of civil law in society and how it affects people as individuals. You will also focus on the resolution of civil disputes through judicial determination and alternative methods in courts, tribunals and independent bodies. You will examine these methods of dispute resolution and evaluate their effectiveness. You will focus on cases that have had a broader impact on the legal system and on the rights of individuals. You will develop an appreciation of the role played by such cases and undertake an analysis of relevant legal issues.

### Areas of Study

1. Civil law
2. The civil law in action
3. The law in focus
4. A question of rights

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain the principles of civil law, law-making by courts and elements of torts and apply these to relevant cases.

**Outcome 2:** Explain and evaluate the processes for the resolution of civil disputes.

**Outcome 3:** Explain one or more areas of civil law and discuss the legal system's capacity to respond to issues and disputes related to the selected area/s of law.

**Outcome 4:** Describe an Australian case illustrating rights issues, and discuss the impact of the case on the legal system and the rights of individuals.

### Assessment Tasks (to be selected from)

- Mock court or role play
- A folio and report
- Essays or structured assignments
- Tests
- Case study
- Report (written, visual, oral or multi-media)

### **Unit 3: Law-making**

Students develop an understanding of the institutions that determine our laws, and their law-making powers and processes. They evaluate the effectiveness of law-making bodies and examine the need for the law to keep up to date with changes in society. Students investigate the key features and operation of parliament and influences on law-making. Students develop an understanding of the importance of the Constitution, and undertake a comparative analysis with another country. They learn the importance of the role played by the High Court in interpreting and enforcing the Constitution. Students investigate the nature and importance of courts as law-makers and evaluate their effectiveness. They also investigate the relationships that exist between parliaments and courts.

#### **Areas of study**

1. Parliament and the citizen
2. The Constitution and the protection of rights
3. Role of the courts in law-making

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Explain the structure and role of parliament, including its processes and effectiveness as a law-making body, describe why legal change is needed, and the means by which such change can be influenced (25 marks).

**Outcome 2:** Explain the role of the Commonwealth Constitution in defining law-making powers within a federal structure, analyse the means by which law-making powers may change, and evaluate the effectiveness of the Commonwealth Constitution in protecting human rights (50 marks).

**Outcome 3:** Describe the role and operation of courts in law-making, evaluate their effectiveness as law-making bodies and discuss their relationship with parliament (25 marks).

School-assessed coursework for Unit 3 will contribute 25% to the study score. The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50% to the study score.

### **Unit 4: Dispute resolution**

Students examine the institutions that adjudicate criminal cases and civil disputes. They also investigate methods of dispute resolution that can be used as an alternative to civil litigation. Students investigate the processes and procedures followed in courtrooms and develop an understanding of the adversary and jury systems, as well as pre-trial and post-trial procedures that operate in the Victorian legal system. Using the elements of an effective legal system, students consider the extent to which court processes and procedures contribute to the effective operation of the legal system. They also consider reforms or changes that could further improve its effective operation.

#### **Areas of study**

1. Dispute resolution methods
2. Court processes and procedures, and engaging in justice

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Describe and evaluate the effectiveness of institutions and methods for the determination of criminal cases and the resolution of civil disputes (40 marks).

**Outcome 2:** Explain the processes and procedures for the resolution of criminal cases and civil disputes, and evaluate their operation and application, and evaluate the effectiveness of the legal system (60 marks).

School-assessed coursework for Unit 4 will contribute 25% to the study score. The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50% to the study score.

Assessment tasks for units 3 and 4 will be selected from: a case study, structured questions, test, essay, report in written format, report in multimedia format, folio of exercises.



# LITERATURE

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## Unit 1 – Approaches To Literature

In this unit, students focus on the ways in which the interaction between text and reader creates meaning. Students' analyses of the features and conventions of texts help them develop increasingly discriminating responses to a range of literary forms and styles. Students respond critically, creatively and reflectively to the ideas and concerns of texts and gain insights into how texts function as representations of human experience. They develop familiarity with key terms, concepts and practices that equip them for further studies in literature. They develop an awareness of how the views and values that readers hold may influence the reading of a text.

### Areas of Study

1. Reading Practices
2. Ideas and concerns in texts

### Outcomes:

**Outcome 1:** On completion of this unit the student should be able to respond to a range of texts and reflect on influences shaping these responses.

**Outcome 2:** On completion of this unit the student should be able to analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society.

## Unit 2 – Context and Connections

In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Drawing on a range of literary texts, students consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted. Students analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

### Areas of Study

1. The text, the reader and their contexts
2. Exploring connections between texts

### Outcomes

**Outcome One:** On completion of this unit the student should be able to analyse and respond critically and creatively to the ways a text from a past era and/or a different culture reflect or comment on the ideas and concerns of individuals and groups in that context.

**Outcome Two:** On completion of this unit the student should be able to compare texts considering the dialogic nature of texts and how they influence each other.

### Assessment

Assessment tasks for this unit may include:

- essay (comparative, interpretive, analytical or discursive);
- debate;
- journal entries;
- close analysis of selected passages;
- an original piece of writing responding to a text(s) studied;
- oral or written review;
- multimedia presentation;
- participation in an online discussion;
- performance and commentary.

\* At least one of the assessment tasks must be in an oral form

### Unit 3

In this unit students consider how the form of a text affects meaning, and how writers construct their texts. They investigate ways writers adapt and transform texts and how meaning is affected as texts are adapted and transformed. They consider how the perspectives of those adapting texts may inform or influence the adaptations. Students draw on their study of adaptations and transformations to develop creative responses to texts. Students develop their skills in communicating ideas in both written and oral forms.

#### Areas of Study

**1. Adaptations and Transformations:** In this area of study students focus on how the form of text contributes to the meaning of the text. Students develop an understanding of the typical features of a particular form of text and how the conventions associated with it are used.

**2. Creative Responses to Texts:** In this area of study students focus on the imaginative techniques used for creating and recreating a literary work. Students use their knowledge of how the meaning of texts can change as form changes to construct their own creative transformations of texts

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** On completion of this unit the student should be able to analyse the extent to which meaning changes when a text is adapted to a different form.

**Outcome 2:** On completion of this unit the student should be able to respond creatively to a text and comment on the connections between the text and the response.

*Contribution to assessment: 25%*

### Unit 4

In this unit students develop critical and analytic responses to texts. They consider the context of their responses to texts as well as the ideas explored in the texts, the style of the language and points of view. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches. Specifically, for Unit 4 Outcome 1, the literary criticism selected must reflect different perspectives, assumptions and ideas about the views and values of the text/s studied.

#### Areas of Study

**1. Literary Perspectives:** In this area of study students focus on how different readings of texts may reflect the views and values of both writer and reader. Students consider the ways in which various interpretations of texts can contribute to understanding.

**2. Close analysis:** In this area of study students focus on detailed scrutiny of the language, style, concerns and construction of texts. Students attend closely to textual details to examine the ways specific features and/or passages in a text contributes to their overall interpretations.

#### Outcomes

By the end of this unit you should be able to:

**Outcome One:** On completion of this unit students should be able to produce an interpretation of a text using different literary perspectives to inform their view.

**Outcome Two:** Analyse critically features of a text, relating them to an interpretation of the text as a whole.

*Contribution to assessment: 25%*

*End of year exam – Contribution to assessment: 50%*



# FOUNDATION MATHEMATICS

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## Unit 1 and 2 Foundation Mathematics

Foundation Mathematics provides for the continuing mathematical development of students entering VCE who do not necessarily intend to undertake Unit 3 and 4 studies in VCE Mathematics in the following year. This course is designed to complement General Mathematics and Mathematical Methods. In Foundation Mathematics there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study. The areas of study for Units 1 and 2 of Foundation Mathematics are 'Space, shape and design', 'Patterns and number', 'Data' and 'Measurement'. All four areas of study are to be completed over the two units. The content should be developed using contexts present in students' other studies, work and personal or other familiar situations. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

### Areas of Study

1. Space, Shape and Design
2. Patterns and Number
3. Data
4. Measurement

### Outcomes

By the end of each unit you should be able to:

**Outcome 1:** Use and apply a range of mathematical concepts, skills and procedures from selected areas of study to solve problems based on a range of everyday and real-life contexts

**Outcome 2:** Apply mathematical procedures to solve practical problems in both familiar and new contexts, and communicate their results.

**Outcome 3:** Select and use technology to solve problems in practical contexts.

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# GENERAL MATHEMATICS

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## Unit 1 and 2 General Mathematics

General Mathematics focuses on the application of mathematics in real life. It is suitable for students who have studied General Mathematics or Mathematical Methods in Year 10. It leads to studying Unit 3 and 4 Further Mathematics in Year 12. The areas of study are listed below along with the topics we will cover in each one.

### Areas of Study

Algebra and Structure

- Linear relations and equations

Arithmetic and Number

- Computation and practical arithmetic
- Financial arithmetic

Discrete mathematics

- Matrices
- Graphs and networks
- Number patterns and recursion

Graphs of linear and non-linear relations

- Linear graphs and models

Statistics

- Investigating and comparing data distributions
- Investigating relationships between two numerical variables

### Outcomes

By the end of each unit you should be able to:

**Outcome 1:** Define and explain key concepts as specified in the selected content from the areas of study, and apply a range of related mathematical routines and procedures.

**Outcome 2:** Select and apply mathematical facts, concepts, models and techniques from the topics covered in the unit to investigate and analyse extended application problems in a range of contexts.

**Outcome 3:** Select and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

A graphics calculator (e.g. Casio Classpad) is necessary to be able to satisfy Outcome 3.

## FURTHER MATHEMATICS

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### Unit 3 Further Mathematics

In Unit 3 you will be required to investigate data distributions using single and bivariate sets. You will look for a relationship between two numeric variables and investigate fitting a model to your linear associations. You will also study a specific type of modelling called time series. During the Recursion and financial modelling you will investigate how assets depreciate, how compound interest investments and loans work. Finally you will investigate how compound interest changes over different time periods

#### Areas of Study

UNIT 3 - CORE

1. Data analysis
2. Recursion and financial modelling

#### Outcomes

By the end of these units you should be able to:

**Outcome 1:** Define and explain key concepts as specified in the content from the areas of study and use this knowledge to apply related mathematical techniques and models as specified.

**Outcome 2:** Select and apply the mathematical concepts, models and techniques as specified in Area of Study in a range of contexts of increasing complexity

**Outcome 3:** Select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches

*Contribution to assessment: Data = 13% Recursion and Financial Modelling: 7%*

### Unit 4 Further Mathematics

In Unit 4 you will be required to study the topics of Matrices and Networks. The Matrices module covers definition of matrices, different types of matrices, matrix operations, transition matrices and the use of first-order linear matrix recurrence relations to model a range of situations and solve related problems. The Networks module covers definition and representation of different kinds of undirected and directed graphs, eulerian trails, eulerian circuits, bridges, hamiltonian paths and cycles, and the use of networks to model and solve problems involving travel, connection, flow, matching, allocation and scheduling.

#### Areas of Study

UNIT 4 – Applications in:

1. Matrices
2. Networks and decision mathematics

#### Outcomes

See Unit 3

*Contribution to assessment: Matrices: 7% Networks: 7%*

*End of year exam – Contribution to assessment: Multiple Choice 33% Short Answer 33%*

#### Assessment

Assessment tasks for Further Maths will be chosen from the list suggested in the VCAA Further Maths Study Design 2016-2018

## MATHEMATICAL METHODS (CAS)

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Mathematical Methods is a rigorous application of mathematics which requires a strong foundation in algebra. It is suitable for students who are aiming for tertiary courses in Engineering, Science, Economics or Medicine. Students should have passed Year 10 Mathematical Methods at a reasonable level.

### Unit 1 Mathematical Methods Unit 1

In Unit 1 you will be required to study the graphical representation of functions of a single real variable and the study of key features of graphs of functions such as axis intercepts, domain (including maximal domain) and range of a function, asymptotic behaviour and symmetry. Students should be familiar with relevant mental and by hand approaches in simple cases. In Unit 1 the focus is on the algebra of polynomial functions to degree 4.

#### Areas of Study

1. Functions and Graphs
2. Algebra

#### Outcomes:

By the end of this unit you should be able to:

**Outcome 1:** Define and explain key concepts, in relation to the areas of study, and apply a range of related mathematical routines and procedures. This outcome is assessed in written tests and an application task.

**Outcome 2:** Apply mathematical processes in non-routine contexts and analyse and discuss these problems of mathematics. This outcome is assessed in an application task.

**Outcome 3:** Use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques. This outcome is assessed through written tests and an application task.

### Unit 2 Mathematical Methods Unit 2

In Unit 2 you will be required to study covers constant and average rates of change and an informal treatment of instantaneous rate of change of a function in familiar contexts, including graphical and numerical approaches to the measurement of constant, average and instantaneous rates of change. This unit also includes introductory probability theory, including the concept of events, probability and representation of event spaces using various forms such as lists, grids, venn diagrams, karnaugh maps, tables and tree diagrams.

#### Areas of Study

1. Calculus
2. Probability

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Define and explain key concepts, in relation to the areas of study, and apply a range of related mathematical routines and procedures. This outcome is assessed in written tests and an application task.

**Outcome 2:** Application of mathematical processes in non-routine contexts and analyse and discuss these problems of mathematics. This outcome is assessed in an application task.

**Outcome 3:** Use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques. This outcome is assessed through written tests and an application task.

### **Unit 3 Mathematical Methods Unit 3**

In Unit 3 you will be required to study the behaviour of functions, including key features such as axis intercepts, stationary points, points of inflection, domain and range, asymptotic behaviour and symmetry. You will also study the algebra of functions including the composition of functions, inverse functions, the solution of equations and simultaneous equations using appropriate processes.

#### **Areas of Study**

1. Functions and Graphs
2. Algebra

#### **Outcomes**

Outcomes in this unit are assessed on 3 separate occasions, 2 written tests and an application task.

By the end of this unit you should be able to:

**Outcome 1:** Define and explain key concepts, in relation to the areas of study, and apply a range of related mathematical routines and procedures.

**Outcome 2:** Apply mathematical processes in non-routine contexts and analyse and discuss these problems of mathematics.

**Outcome 3:** Use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques.

#### **Assessment**

Unit 3 will be assessed by an application task that will spread over 4-5 lessons. It will contribute 17% of the study score.

### **Unit 4 Mathematical Methods Unit 4**

In unit 4 you will be required to study the graphical treatment of limits, continuity and differentiability of functions alongside the anti-differentiation and integration of functions. You will also study discrete and continuous random variables, probability functions and the calculation and interpretation of central measures and measures of spread.

#### **Areas of Study**

1. Calculus
2. Probability

#### **Outcomes**

Outcomes in this unit are assessed in 2 separate analysis tasks.

By the end of this unit you should be able to:

**Outcome 1:** Define and explain key concepts, in relation to the areas of study, and apply a range of related mathematical routines and procedures.

**Outcome 2:** Apply mathematical processes in non-routine contexts and analyse and discuss these problems of mathematics.

**Outcome 3:** Use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques.

#### **Assessment**

Unit 4 will be assessed in two modelling or problem solving tasks. Each will spread over 2-3 lessons. It will contribute 17% towards your study score.

*End of year exam – Contribution to assessment: 66%*



# MEDIA

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## Unit 1 Media forms, representations and Australian stories

The relationship between audiences and the media is dynamic and changing. Audiences engage with media products in many ways. They share a common language with media producers and construct meanings from the representations within a media product. In this unit students develop an understanding of audiences and the core concepts underpinning the construction of representations and meaning in different media forms. They explore media codes and conventions and the construction of meaning in media products. Students analyse how representations, narrative and media codes and conventions contribute to the construction of the media realities audiences engage with and read. Students gain an understanding of audiences as producers and consumers of media products. Through analysing the structure of narratives, students consider the impact of media creators and institutions on production. They develop research skills to investigate and analyse selected narratives focusing on the influence of media professionals on production genre and style. Students develop an understanding of the features of Australian fictional and non-fictional narratives in different media forms. Students work in a range of media forms and develop and produce representations to demonstrate an understanding of the characteristics of each media form, and how they contribute to the communication of meaning.

### Areas of Study

1. Media representations
2. Media forms in production
3. Australian stories

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Explain how media representations in a range of media products and forms, and from different periods of time, locations and contexts, are constructed, distributed, engaged with, consumed and read by audiences.

**Outcome 2:** use the media production process to design, produce and evaluate media representations for specified audiences in a range of media forms

**Outcome 3:** analyse how the structural features of Australian fictional and non-fictional narratives in two or more media forms engage, and are consumed and read by, audiences.

## Unit 2 Narrative across media forms

Fictional and non-fictional narratives are fundamental to the media and are found in all media forms. Media industries such as journalism and filmmaking are built upon the creation and distribution of narratives constructed in the form of a series of interconnected images and/or sounds and/or words, and using media codes and conventions. New media forms and technologies enable participants to design, create and distribute narratives in hybrid forms such as collaborative and user-generated content, which challenges the traditional understanding of narrative form and content. Narratives in new media forms have generated new modes of audience engagement, consumption and reception. In this unit students further develop an understanding of the concept of narrative in media products and forms in different contexts. Narratives in both traditional and newer forms include film, television, sound, news, print, photography, games, and interactive digital forms. Students analyse the influence of developments in media technologies on individuals and society, examining in a range of media forms the effects of media convergence and hybridisation on the design, production and distribution of narratives in the media and audience engagement, consumption and reception. Students undertake production activities to design and create narratives that demonstrate an awareness of the structures and media codes and conventions appropriate to corresponding media forms.

### Areas of Study

1. Narrative, style and genre
2. Narratives in production
3. Media and change

### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Analyse the intentions of media creators and producers and the influences of narratives on the audience in different media forms.

**Outcome 2:** Apply the media production process to create, develop and construct narratives.

**Outcome 3:** Discuss the influence of new media technologies on society, audiences, the individual, media industries and institutions.

### **Unit 3 Media narratives and pre-production**

In this unit students explore stories that circulate in society through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological and institutional contexts of production, distribution, consumption and reception. Students assess how audiences from different periods of time and contexts are engaged by, consume and read narratives using appropriate media language. Narratives are defined as the depiction of a chain of events in a cause and effect relationship occurring in physical and/or virtual space and time in non-fictional and fictional media products. Students use the pre-production stage of the media production process to design the production of a media product for a specified audience. They investigate a media form that aligns with their interests and intent, developing an understanding of the media codes and conventions appropriate to audience engagement, consumption and reception within the selected media form. They explore and experiment with media technologies to develop skills in their selected media form, reflecting on and documenting their progress. Students undertake pre-production processes appropriate to their selected media form and develop written and visual documentation to support the production and post-production of a media product in Unit 4.

#### **Areas of Study**

1. Narrative and ideology
2. Media production development
3. Media production design

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Analyse how narratives are constructed and distributed, and how they engage, are consumed and are read by the intended audience and present day audiences.

**Outcome 2:** Research aspects of a media form and experiment with media technologies and media production processes to inform and document the design of a media production.

**Outcome 3:** Develop and document a media production design in a selected media form for a specified audience.

### **Unit 4 Media production and issues in the media**

In this unit students focus on the production and post-production stages of the media production process, bringing the media production design created in Unit 3 to its realisation. They refine their media production in response to feedback and through personal reflection, documenting the iterations of their production as they work towards completion. Students explore the relationship between the media and audiences, focusing on the opportunities and challenges afforded by current developments in the media industry. They consider the nature of communication between the media and audiences, explore the capacity of the media to be used by governments, institutions and audiences, and analyse the role of the Australian government in regulating the media.

#### **Areas of Study**

1. Media production
2. Agency and control in and of the media

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Produce, refine and resolve a media product designed in Unit 3.

**Outcome 2:** Discuss issues of agency and control in the relationship between the media and its audience

**Materials Cost per student:**

\$100

**MUSIC PERFORMANCE**

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**Please Note:**

At least THREE - FOUR years experience in learning an instrument is recommended by VCAA before commencing VCE Music Performance Unit 1 or 2.

It is a College requirement that all students undertaking VCE Music Performance Unit 1 or 2 have weekly instrumental lessons.

**Unit 1**

This unit focuses on building your performance and musicianship skills to present performances of selected group and solo works using one or more instruments. You study the work of other performers, explore strategies to optimise your own performance, identify technical, expressive and stylistic challenges in your works and practise technical work to address these challenges. You also develop your aural, theoretical and analytical musicianship skills.

**Areas of Study**

1. Performance
2. Preparing for Performance
3. Music Language

**Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Prepare and perform a practised program of group and solo works

**Outcome 2:** Demonstrate and discuss techniques relevant to the performance of selected works

**Outcome 3:** Identify, re-create, extend and notate music language components and short phrases, and describe ways elements of music may be interpreted

**Unit 2**

This unit focuses on continuing to build your performance and musicianship skills to present performances of selected group and solo works using one or more instruments. You study the work of other performers, explore strategies to optimise your own performance, identify technical, expressive and stylistic challenges in your works and practise technical work to address these challenges. You also develop your aural, theoretical and analytical musicianship skills.

**Areas of Study**

1. Performance
2. Preparing for Performance
3. Music Language
4. Organisation of sound

**Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Prepare and perform a practised program of group and solo works

**Outcome 2:** Demonstrate and discuss techniques relevant to the performance of selected works

**Outcome 3:** Re-create, extend and notate music language components and short phrases, and describe ways elements of music may be interpreted

**Outcome 4:** Devise a composition or improvisation that uses music language evident in work/s being prepared for performance

## MUSIC PERFORMANCE

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### Unit 3

This unit focuses on building and refining performance and musicianship skills. Students focus on either group or solo performance and begin preparation of a performance program they will present in the end-of-year examination. As part of their preparation, students will also present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

#### Areas of Study

1. Performance
2. Preparing for Performance
3. Music Language

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Prepare and perform a program of group and solo works, and demonstrate a diverse range of techniques and expressive qualities and an understanding of a wide range of music styles and performance conventions

**Outcome 2:** Demonstrate and discuss techniques relevant to performance of selected works

**Outcome 3:** Identify, re-create, notate and transcribe short excerpts of music, and discuss the interpretation of expressive elements of music in pre-recorded works

### Unit 4

In this unit, you will focus on either group or solo performance and continue preparation of a performance program they will present in the end-of-year examination. All students present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. Through analyses of other performers' interpretations and feedback on their own performances, students refine their interpretations and optimise their approach to performance. They continue to address challenges relevant to works they are preparing for performance and to strengthen their listening, aural, theoretical and analytical musicianship skills.

#### Areas of Study

1. Performance
2. Preparing for Performance
3. Music Language

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Prepare and perform informed interpretations in a program of group and solo works, and demonstrate a diverse range of techniques, expressive qualities and understanding of a wide range of music styles and performance conventions

**Outcome 2:** Demonstrate and discuss techniques relevant to refining the performance of selected works

**Outcome 3:** Identify, re-create, notate and transcribe short excerpts of music, and discuss the interpretation of expressive elements of music in pre-recorded works

## MUSIC INVESTIGATION

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**Please Note:**

At least FOUR - FIVE years experience in learning an instrument is recommended by VCAA before commencing VCE Music Investigation Unit 3.

It is a College requirement that all students undertaking VCE Music Investigation have weekly instrumental lessons.

### Unit 3

In this Unit, students research performance practices relevant to a music style, tradition or genre. The music style, tradition or genre selected for study may be representative of music practice in a specific time, place or culture, and/or the work of a particular performer or composer. Students design an Investigation Topic as the basis for study of performance techniques and conventions, interpretative possibilities and contextual issues. Through this study they develop listening, aural, theoretical, interpretative and technical musicianship skills and demonstrate findings through performance of established repertoire, music they have composed, improvised or arranged, and commentary about issues that have informed their interpretation of a representative program of works.

#### Areas of Study

1. Investigation
2. Composition/improvisation/arrangement
3. Performance

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Demonstrate understanding of practices and issues that inform performance of works that are representative of a selected music style, tradition and/or genre relevant to the Investigation Topic

**Outcome 2:** Compose, improvise and/or arrange original music exercises and document and discuss music characteristics and performance practices relevant to the Investigation Topic

**Outcome 3:** Present a performance of music works and communicate knowledge and understanding of a specific music style, tradition and/or genre relevant to the Investigation Topic

### Unit 4

In this unit, further research to reflect on and evaluate their interpretative approaches to the music works they are preparing to perform. This research extends students' understanding of the possibilities for performance of their program. They consider how to balance their realisation of technical and expressive features with choices they have made in relation to personal, stylistic, practical, technological, historical and cultural influences. They prepare a Performer's Statement that explains their interpretative approach to the works and demonstrates their understanding of performance practices relevant to the music style, tradition and/or genre of works in the performance program they are preparing. This statement will be provided to assessors at the end-of-year performance examination.

#### Areas of Study

1. Investigation
2. Composition/improvisation/arrangement
3. Performance

#### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain and justify their interpretative approach to performance of a program of works

**Outcome 2:** Compose/improvise/arrange an original music work and perform a music work and explain how it is characteristic of a music style, tradition and/or genre relevant to the Investigation Topic

**Outcome 3:** Demonstrate artistic intent and understanding in a cohesive and engaging performance of music works

# OUTDOOR & ENVIRONMENTAL STUDIES

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## Unit 1 Exploring Outdoor Experiences

This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to, and experiences of, outdoor environments. Students are provided with the opportunity to explore the many ways in which nature is understood and perceived. Students develop a clear understanding of the range of motivations for interacting with outdoor environments and the factors that affect an individual's access to outdoor experiences and relationships with outdoor environments. Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments. Students understand the links between practical experiences and theoretical investigations, gaining insight into a variety of responses to, and relationships with, nature.

### Areas of Study

1. Motivations for outdoor experiences
2. Influences on outdoor experiences

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Analyse motivations for participation in and responses to outdoor environments and be able to participate safely in specific outdoor experiences

**Outcome 2:** Explain factors that influence outdoor experiences and plan for sustainable interactions with outdoor

## Unit 2 Discovering Outdoor Environments

This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments. In this unit students study the impact of nature on humans, and the ecological, social and economic implications of the impact of humans on outdoor environments. Students develop a clear understanding of the impact of technologies and changing human lifestyles on outdoor environments. Students examine a number of case studies of specific outdoor environments, including areas where there is evidence of human intervention. They develop the practical skills required to minimise the impact of humans on outdoor environments. Through practical experiences students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop theoretical knowledge about natural environments

### Areas of Study

1. Investigating outdoor environments
2. Impacts on outdoor environments

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain and justify their interpretative approach to performance of a program of works

**Outcome 2:** Evaluate the impacts of humans on outdoor environments and analyse practices for promoting positive impacts, with reference to specific outdoor experiences.

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# OUTDOOR & ENVIRONMENTAL STUDIES

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## Unit 3 Relationships with outdoor environments

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of a range of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia. Students consider a number of factors that influence relationships with outdoor environments. They also examine the dynamic nature of relationships between humans and their environment. Students are involved in one or more experiences in outdoor environments, including in areas where there is evidence of human interaction. Through these practical experiences students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop theoretical knowledge and skills about specific natural environments.

### Areas of Study

1. Historical relationships with outdoor environments
2. Relationships with Australian environments since 1990

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Explain and evaluate how relationships with Australian outdoor environments have changed over time, with reference to specific outdoor experiences

**Outcome 2:** Analyse and evaluate the factors influencing societal relationships with outdoor environments since 1990, with reference to specific outdoor experiences

## Unit 4 Sustainable outdoor relationships

In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues relating to the capacity of outdoor environments to support the future needs of the Australian population. Students examine the importance of developing a balance between human needs and the conservation of outdoor environments and consider the skills needed to be environmentally responsible citizens. They investigate current acts and conventions as well as management strategies for achieving and maintaining healthy and sustainable environments in contemporary Australian society. Students engage in one or more related experiences in outdoor environments. They learn and apply the practical skills and knowledge required to sustain healthy outdoor environments, and evaluate the strategies and actions they employ. Through these practical experiences students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop and apply theoretical knowledge about outdoor environments.

### Areas of Study

1. Healthy outdoor environments
2. Sustainable outdoor environments

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Evaluate the contemporary state of Australian outdoor environments and analyse the importance of healthy outdoor environments and sustainability for individuals and society, with reference to specific outdoor experiences.

**Outcome 2:** Analyse conflicts over the use of outdoor environments, and evaluate practices and strategies for sustaining outdoor environments, with reference to specific outdoor experiences.

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# PHYSICAL EDUCATION

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## Unit 1 The Human Body in Motion

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity. Using a contemporary approach, students evaluate the social, cultural and environmental influences on movement. They consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms. They also recommend and implement strategies to minimise the risk of illness or injury to each system.

### Areas of Study

1. How does the musculoskeletal system work to produce movement?
2. How does the cardiovascular system function at rest and during exercise?

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** To collect and analyse information from, and participate in, a variety of practical activities to explain how the musculoskeletal system functions and its limiting conditions, and evaluate the ethical and performance implications of the use of practices and substances that enhance human movement.

**Outcome 2:** To collect and analyse information from, and participate in, a variety of practical activities to explain how the cardiovascular and respiratory systems function and the limiting conditions of each system, and discuss the ethical and performance implications of the use of practices and substances to enhance the performance of these two systems.

## Unit 2 Physical Activity, Sport and Society

This unit develops students' understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people's lives in different population groups.

Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups. They gain an appreciation of the level of physical activity required for health benefits. Students investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence and facilitate participation in regular physical activity.

They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various communities, social, cultural and environmental contexts. Students investigate individual and population-based consequences of physical inactivity and sedentary behaviour. They then create and participate in an activity plan that meets the physical activity and sedentary behaviour guidelines relevant to the particular population group being studied. Students apply various methods to assess physical activity and sedentary behaviour levels at the individual and population level, and analyse the data in relation to physical activity and sedentary behaviour guidelines. Students study and apply the social-ecological model and/or the Youth Physical Activity Promotion Model to critique a range of individual- and settings-based strategies that are effective in promoting participation in some form of regular physical activity.

### Areas of Study

1. What are the relationships between physical activity, sport, health and society?



## 2. What are the contemporary issues associated with physical activity and sport?

### Outcomes :

On completion of this unit you should be able to:

**Outcome 1:** collect and analyse data related to individual and population levels of participation in physical activity and sedentary behaviour to create, undertake and evaluate an activity plan that meets the physical activity and sedentary behaviour guidelines for an individual or a specific group.

**Outcome 2:** Apply a social-ecological framework to research, analyse and evaluate a contemporary issue associated with participation in physical activity and/or sport in a local, national or global setting.

### Assessment

Assessment tasks for Physical Education may be chosen from the following list suggested in the VCAA Physical Education Study Design:

- a practical laboratory report linking key knowledge and key skills to practical activity
- a case study analysis
- a data analysis
- a critically reflective folio/diary of participation in practical activities
- a visual presentation such as graphic organiser, concept/mind map, annotated poster, presentation file
- a multimedia presentation, including two or more data types (for example, text, still and moving images, sound) and involving some form of interaction
- a physical simulation or model
- an oral presentation such as podcast, debate
- a written report
- a test.

## Unit 3: Movement Skills and Energy for Physical Activity

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport. Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

### Areas of Study

1. How are movement skills improved?
2. How does the body produce energy?

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** Collect and analyse information from, and participate in, a variety of physical activities to develop and refine movement skills from a coaching perspective, through the application of biomechanical and skill acquisition principles.

**Outcome 2:** Use data collected in practical activities to analyse how the major body and energy systems work together to enable movements to occur, and explain the factors causing fatigue and suitable recovery strategies..

*Contribution to assessment: 25%*

## Unit 4: Training to Improve Performance

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/ or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program. Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods. Students critique the effectiveness of the implementation of training principles and methods to meet the needs of the individual, and evaluate the chronic adaptations to training from a theoretical perspective.

### **Areas of Study**

1. What are the foundations of an effective training program?
2. How is training implemented effectively to improve fitness?

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Analyse data from an activity analysis and fitness tests to determine and assess the fitness components and energy system requirements of the activity

**Outcome 2:** Participate in a variety of training methods, and design and evaluate training programs to enhance specific fitness components.

*Contribution to assessment: 25%*

*End of year exam – Contribution to assessment: 50%*

### **Assessment**

Assessment tasks for Units 3 & 4 may be chosen from the list suggested in the VCAA Physical Education Study Design 2018-2021

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# PHYSICS

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## Unit 1: What ideas explain the Physical World?

Ideas in physics are dynamic. As physicists explore concepts, theories evolve. Often this requires the detection, description and explanation of things that cannot be seen. In this unit students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter.

Students use thermodynamic principles to explain phenomena related to changes in thermal energy. They apply thermal laws when investigating energy transfers within and between systems, and assess the impact of human use of energy on the environment. Students examine the motion of electrons and explain how it can be manipulated and utilised. They explore current scientifically accepted theories that explain how matter and energy have changed since the origins of the Universe.

Students undertake quantitative investigations involving at least one independent continuous variable

### Areas of Study

1. How can thermal effects be explained?
2. How do electric circuits work?
3. What is matter and how is it formed?

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** *apply thermodynamic principles to analyse, interpret and explain changes in thermal energy in selected contexts, and describe the environmental impact of human activities with reference to thermal effects and climate science concepts.*

**Outcome 2:** *investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, and describe the safe and effective use of electricity by individuals and the community.*

**Outcome 3:** *explain the origins of atoms, the nature of subatomic particles and how energy can be produced by atoms.*

*Contribution to Final Assessment: 20%*

## Unit 2 : What do experiments reveal about the physical world?

In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments. Students make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored through indirect observations.

In the core component of this unit students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. Students choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science. The option enables students to pursue an area of interest by investigating a selected question.

Students design and undertake investigations involving at least one independent, continuous variable.

### Areas of Study

1. How can Motion be described and explained?
2. Option selected from one of the following choices:
  - What are stars?

- Is there life beyond Earth's Solar System?
- How do forces act on the Human body?
- How can AC electricity charge a DC device?
- How do heavy things fly?
- How do fusion and fission compare as viable nuclear energy power sources?
- How is radiation used to maintain human health?
- How do particle accelerators work?
- How can human vision be enhanced?
- How do instruments make music?
- How can performance in ball sports be improved?
- How does the human body use electricity?

### 3. Practical Investigation

#### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** *Investigate, analyse and mathematically model the motion of particles and bodies*

**Outcome 2:** *Varies, dependent on option selected.*

**Outcome 3:** *design and undertake an investigation of a physics question related to the scientific inquiry processes of data collection and analysis, and draw conclusions based on evidence from collected data.*

*Contribution to Final Assessment: 30%*

*End of year exam – Contribution to assessment: 50%*

#### Assessment

Assessment tasks for Physics may be chosen from the following list suggested in the VCAA Physics Study Design for 2016-2020:

- A report of a practical investigation (student-designed or adapted) with results reported in a poster format

And selections from:

- |  |  |
|--|--|
| ● an annotated folio of practical activities data analysis     | ● a modelling activity   |
| ● design, building, testing and evaluation of a device         | ● a media response   |
| ● an explanation of the operation of a device                  | ● a summary report of selected practical investigations  |
| ● a proposed solution to a scientific or technological problem | ● a reflective learning journal/blog related to selected activities or in response to an issue |
| ● a report of a selected physics phenomenon                    | ● a test comprising multiple choice and/or short answer and/or extended response.              |

### Unit 3 Physics : How do fields explain motion and electricity?

In this unit students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators. They explore the interactions, effects and applications of gravitational, electric and magnetic fields. Students use Newton's laws to investigate motion in one and two dimensions, and are introduced to Einstein's theories to explain the motion of very fast objects. They consider how developing technologies can challenge existing explanations of the physical world, requiring a review of conceptual models and theories. Students design and undertake investigations involving at least two continuous independent variables.

A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format

### Areas of Study

1. How do things move without contact?
2. How are fields used to move electrical energy?
3. How fast can things go?

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** *analyse gravitational, electric and magnetic fields, and use these to explain the operation of motors and particle accelerators and the orbits of satellites.*

**Outcome 2:** *analyse and evaluate an electricity generation and distribution system.*

**Outcome 3:** *investigate motion and related energy transformations experimentally, analyse motion using Newton's laws of motion in one and two dimensions, and explain the motion of objects moving at very large speeds using Einstein's theory of special relativity.*

*Contribution to Final Assessment: 21%*

### Unit 4 : How can two contradictory models explain both light and matter?

A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. Wave theory has classically been used to explain phenomena related to light; however, continued exploration of light and matter has revealed the particle-like properties of light. On very small scales, light and matter – which initially seem to be quite different – have been observed as having similar properties.

In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students learn to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. Students design and undertake investigations involving at least two continuous independent variables.

A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Unit 3 and Unit 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format

### Areas of Study

1. How can waves explain the behavior of light?
2. How are light and matter similar?
3. Practical Investigation

### Outcomes

By the end of this unit you should be able to:

**Outcome 1:** apply wave concepts to analyse, interpret and explain the behaviour of light.

**Outcome 2:** provide evidence for the nature of light and matter, and analyse the data from experiments that supports this evidence.

**Outcome 3:** design and undertake a practical investigation related to waves or fields or motion, and present methodologies, findings and conclusions in a scientific poster.

Contribution to Final Assessment: 19%

End of year exam – Contribution to assessment: 60%

### Assessment

Assessment tasks for Physics may be chosen from the list suggested in the VCAA Physics Study Design 2017-2021.

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## PRODUCT DESIGN AND TECHNOLOGY - TEXTILES

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### Unit 1 Sustainable product redevelopment

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic market. Sustainable re-development refers to designers and makers ensuring products serve social, economic and environmental needs. Generating economic growth for design and manufacturing in Australia can begin with redeveloping existing products so they have positive social and minimal environmental impact. In this unit students examine claims of sustainable practices by designers. Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. They consider how a redeveloped product should attempt to solve a problem related to the original product. Where possible, materials and manufacturing processes used should be carefully selected to improve the overall sustainability of the redeveloped product.

#### Areas of Study

1. Sustainable redevelopment of a product
2. Producing and evaluating a redeveloped product

#### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Design and plan the redevelopment of a product with the intention of developing a different product with consideration of sustainability issues.

**Outcome 2:** Select and apply materials, tools, equipment and processes to make a redeveloped product, and compare this with the original product.

### Unit 2 Collaborative Design

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution. Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also use digital technologies to facilitate teams to work collaboratively online. In this unit students gain inspiration from an historical or a contemporary design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics.

#### Areas of Study

1. Designing within a team
2. Producing and evaluating within a team

#### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Design and plan a product or range of products collaboratively in response to a design brief.

**Outcome 2:** Justify, manage and use appropriate production processes to make a product safely and evaluate individually and as a member of a team, the processes and materials used and the suitability of a product or components of a group product/s against the design brief.

#### Materials Fees

Approximately \$150 (based on 2018 cost).

### **Unit 3 Applying the product design process**

In this unit students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology. Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a one-off situation in a small cottage industry or a school setting. Although a product design process may vary in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the product design process as they design for an end-user/s. Students identify methods which could be used in a low-volume or mass/high-volume production setting to manufacture a similar product to their design. In the initial stage of the product design process a design brief is prepared, outlining the context or situation around the design problem and describing the needs and requirements in the form of constraints or considerations.

#### **Areas of Study**

1. Designing for end-user/s
2. Product development in industry
3. Designing for others

#### **Outcomes:**

By the end of this unit you should be able to:

**Outcome 1:** Investigate and define a design problem, and discuss how the design process leads to product design development.

**Outcome 2:** Explain and analyse influences on the design, development and manufacture of products within industrial settings.

**Outcome 3:** Document the product design process used to meet the needs of an end-user/s, and commence production of the designed product.

### **Unit 4 Product development and evaluation**

In this unit students engage with an end-user/s to gain feedback throughout the process of production. Students make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the product design factors.

#### **Areas of Study**

1. Product analysis and comparison
2. Product manufacture
3. Product evaluation

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Compare, analyse and evaluate similar commercial products, taking into account a range of factors and using appropriate techniques.

**Outcome 2:** Apply a range of production skills and processes safely to make the product designed in Unit 3, and manage time and resources effectively and efficiently.

**Outcome 3:** Evaluate the finished product through testing and feedback against criteria, create end-user/s' instructions or care labels and recommend improvements to future products.

#### **Materials Fees**

Approximately \$150 (based on 2018 cost).

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# PRODUCT DESIGN AND TECHNOLOGY - WOOD

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## Unit 1 Sustainable product redevelopment

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic market. Sustainable re-development refers to designers and makers ensuring products serve social, economic and environmental needs. Generating economic growth for design and manufacturing in Australia can begin with redeveloping existing products so they have positive social and minimal environmental impact. In this unit students examine claims of sustainable practices by designers. Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. They consider how a redeveloped product should attempt to solve a problem related to the original product. Where possible, materials and manufacturing processes used should be carefully selected to improve the overall sustainability of the redeveloped product.

### Areas of Study

3. Sustainable redevelopment of a product
4. Producing and evaluating a redeveloped product

### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Design and plan the redevelopment of a product with the intention of developing a different product with consideration of sustainability issues.

**Outcome 2:** Select and apply materials, tools, equipment and processes to make a redeveloped product, and compare this with the original product.

## Unit 2 Collaborative Design

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution. Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also use digital technologies to facilitate teams to work collaboratively online. In this unit students gain inspiration from an historical or a contemporary design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics.

### Areas of Study

3. Designing within a team
4. Producing and evaluating within a team

### Outcomes

On completion of this unit you should be able to:

**Outcome 1:** Design and plan a product or range of products collaboratively in response to a design brief.

**Outcome 2:** Justify, manage and use appropriate production processes to make a product safely and evaluate individually and as a member of a team, the processes and materials used and the suitability of a product or components of a group product/s against the design brief.

### Materials Fees

Approximately \$150 (based on 2018 cost).



### **Unit 3 Applying the product design process**

In this unit students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology. Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a one-off situation in a small cottage industry or a school setting. Although a product design process may vary in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the product design process as they design for an end-user/s. Students identify methods which could be used in a low-volume or mass/high-volume production setting to manufacture a similar product to their design. In the initial stage of the product design process a design brief is prepared, outlining the context or situation around the design problem and describing the needs and requirements in the form of constraints or considerations.

#### **Areas of Study**

4. Designing for end-user/s
5. Product development in industry
6. Designing for others

#### **Outcomes:**

By the end of this unit you should be able to:

**Outcome 1:** Investigate and define a design problem, and discuss how the design process leads to product design development.

**Outcome 2:** Explain and analyse influences on the design, development and manufacture of products within industrial settings.

**Outcome 3:** Document the product design process used to meet the needs of an end-user/s, and commence production of the designed product.

### **Unit 4 Product development and evaluation**

In this unit students engage with an end-user/s to gain feedback throughout the process of production. Students make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the product design factors.

#### **Areas of Study**

4. Product analysis and comparison
5. Product manufacture
6. Product evaluation

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Compare, analyse and evaluate similar commercial products, taking into account a range of factors and using appropriate techniques.

**Outcome 2:** Apply a range of production skills and processes safely to make the product designed in Unit 3, and manage time and resources effectively and efficiently.

**Outcome 3:** Evaluate the finished product through testing and feedback against criteria, create end-user/s' instructions or care labels and recommend improvements to future products.

#### **Materials Fees**

Approximately \$150 (based on 2018 cost).

# PSYCHOLOGY

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## **Unit 1 How are behaviour and mental processes shaped?**

Human development involves changes in thoughts, feelings and behaviours. In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours.

A student-directed research investigation related to brain function and/or development is undertaken in this unit. The research investigation draws on content from Area of Study 1 and/or Area of Study 2.

### **Areas of Study**

1. How does the brain function?
2. What influences psychological development?
3. Student-directed research project

### **Outcomes**

On completion of this unit the student should be able to:

**Outcome 1:** Describe how understanding of brain structure and function has changed over time, explain how different areas of the brain coordinate different functions, and explain how brain plasticity and brain damage can change psychological functioning.

**Outcome 2:** Identify the varying influences of nature and nurture on a person's psychological development, and explain different factors that may lead to typical or atypical psychological development.

**Outcome 3:** Investigate and communicate a substantiated response to a question related to brain function and/or development, including reference to at least two contemporary psychological studies and/or research techniques.

### **Assessment Tasks:** (to be selected from)

- research investigation (mandatory task)
- annotated folio of practical activities
- media response
- oral presentation using two or more data types, e.g. still or moving images, written text, sound
- visual presentation, for example concept map, graphic organiser, poster
- test
- essay
- debate
- data analysis
- evaluation of research

## **Unit 2 - How do external factors influence behaviour and mental processes?**

A person's thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways.

### **Areas of Study**

1. What influences a person's perception of the world?
2. How are people influenced to behave in particular ways?
3. Student-directed practical investigation

### **Outcomes**

By the end of this unit students should be able to:

Outcome 1: Compare the sensations and perceptions of vision and taste, and analyse factors that may lead to the occurrence of perceptual distortions. Outcome 2: Identify factors that influence individuals to behave in specific ways, and analyse ways in which others can influence individuals to behave differently. Outcome 3: Design and undertake a practical investigation related to external influences on behaviour, and draw conclusions based on evidence from collected data.

**Assessment Tasks:** (to be selected from the same list as for Unit 1)

### **Unit 3 – How does experience affect behavior and mental processes?**

In this unit students examine both macro-level and micro-level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved. Students examine the contribution that classical and contemporary research has made to the understanding of the structure and function of the nervous system, and to the understanding of biological, psychological and social factors that influence learning and memory.

### **Areas of Study**

1. How does the nervous system enable psychological functioning?
2. How do people learn and remember?

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Explain how the structure and function of the human nervous system enables a person to interact with the external world and analyse the different ways in which stress can affect nervous system functioning.

**Outcome 2:** Apply biological and psychological explanations for how new information can be learnt and stored in memory, and provide biological, psychological and social explanations of a person's inability to remember information.

### **Assessment Tasks**

Outcome 1 and 2 - At least one task selected from:

- annotations of at least two practical activities from a practical logbook
- evaluation of research
- a report of a student investigation
- an analysis of data including generalisations and conclusions
- a visual presentation
- media analysis/response
- a response to a set of structured questions
- a reflective blog/learning journal related to selected activities or in response to an issue
- a test

## **Unit 4 – How is wellbeing developed and maintained?**

In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual's mental functioning and wellbeing.

### **Areas of Study**

1. **How do levels of consciousness affect mental processes and behaviour?**
2. **What influences mental wellbeing?**
3. **Practical investigation**

### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Explain consciousness as a continuum, compare theories about the purpose and nature of sleep, and elaborate on the effects of sleep disruption on a person's functioning.

**Outcome 2:** Explain the concepts of mental health and mental illness including influences of risk and protective factors, apply a biopsychosocial approach to explain the development and management of specific phobia, and explain the psychological basis of strategies that contribute to mental wellbeing.

**Outcome 3:** Design and undertake a practical investigation related to mental processes and psychological functioning, and present methodologies, findings and conclusions in a scientific poster.

### **Assessment Tasks**

**Outcome 1 and 2** At least one task selected from:

- annotations of at least two practical activities from a practical logbook
- evaluation of research
- a report of a student investigation
- an analysis of data including generalisations and conclusions
- a visual presentation
- media analysis/response
- a response to a set of structured questions
- a reflective blog/learning journal related to selected activities or in response to an issue
- a test

**Outcome 3** A structured scientific poster according to the VCAA template

## STUDIO ARTS

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### Unit 1 Studio inspiration and techniques

In this unit students focus on developing an individual understanding of the stages of studio practice and learn how to explore, develop, refine, resolve and present artworks. Students explore sources of inspiration, research artistic influences, develop individual ideas and explore a range of materials and techniques related to specific art forms. Using documented evidence in a visual diary, students progressively refine and resolve their skills to communicate ideas in artworks.

#### Areas of Study

1. Researching and recording ideas
2. Studio Practice
3. Interpreting art ideas and use of materials and techniques

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Identify sources of inspiration and artistic influences and outline individual ideas, art forms and aesthetic qualities, and translate these into visual language

**Outcome 2:** Produce at least one finished artwork and progressively record the development of their studio practice, conveying individual ideas through the exploration of materials and techniques in the selected art form/s.

**Outcome 3:** Discuss the artistic practice of artists from different times and cultures, their sources of inspiration, materials and techniques for at least two artworks by each artist.

### Unit 2 Studio Exploration and concepts

In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms. Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process.

#### Areas of Study

1. Exploration of studio practice and development of artworks
2. Ideas and styles in artworks

#### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Develop an individual exploration proposal to form the basis of a studio process, and from this produce and document a variety of potential directions in a visual diary for at least one artwork.

**Outcome 2:** Compare a range of historical and contemporary art periods, styles or movements, and analyse the ways in which artists communicate ideas, develop styles and demonstrate aesthetic qualities in artworks.

#### Materials Fees

Approximately \$125 (based on 2018 cost).

### **Unit 3 Studio practices and processes**

In this unit students focus on the implementation of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a studio process to explore and develop their individual ideas. Analysis of these explorations and the development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4.

#### **Areas of study**

1. Exploration proposal
2. Studio process
3. Artists and studio practices

#### **Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Prepare an exploration proposal that formulates the content and parameters of an individual studio process including a plan of how the proposal will be undertaken.

**Outcome 2:** Progressively present an individual studio process recorded in written and visual form that produces a range of potential directions, and reflects the concepts and ideas documented in the exploration proposal and work plan.

**Outcome 3:** Examine the practice of at least two artists, with reference to two artworks by each artist, referencing the different historical and cultural context of each artwork.

### **Unit 4 Studio practice and art industry contexts**

In this unit students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4. The development of these artworks should reflect refinement and skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities discussed in the exploration proposal in Unit 3.

#### **Areas of study**

1. Production and presentation of artworks
2. Evaluation
3. Art industry contexts

#### **Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Present at least two finished artworks based on selected and evaluated potential directions developed through the studio process, which demonstrate refinement and application of materials and techniques, and that realise and communicate the student's ideas expressed in the exploration proposal.

**Outcome 2:** Provide visual and written documentation that identifies and evaluates the extent to which the artworks reflect the selected potential directions, and effectively demonstrates a cohesive relationship between the works.

**Outcome 3:** Compare the methods used by artists and considerations of curators in the preparation, presentation, conservation and promotion of specific artworks in at least two different exhibitions.

#### **Materials Fees**

Approximately \$125 (based on 2018 cost).

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# THEATRE STUDIES

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## Unit 1: Pre-modern theatre styles and conventions

This unit focuses on the application of acting, direction and design in relation to theatre styles from the pre-modern era, that is, works prior to the 1920s. Students creatively and imaginatively work in production roles with scripts from the pre-modern era of theatre, focusing on at least three distinct theatre styles and their conventions. They study innovations in theatre production in the pre-modern era and apply this knowledge to their own works. Students develop knowledge and skills about theatre production processes including dramaturgy, planning, development and performance to an audience and apply this to their work.

Theatre styles from the pre-modern era of theatre include Ancient Greek, Ancient Roman, Liturgical drama such as morality/miracle/mystery plays, Commedia dell'Arte, Elizabethan, Restoration comedies and dramas, Neo-classical, Naturalism/Realism, Beijing Opera, Noh, Bunraku and Kabuki and other traditional indigenous theatre forms.

Students begin to develop skills of performance analysis and apply these to the analysis of a play in performance.

### Areas of Study

1. Exploring pre-modern theatre styles and conventions
2. Interpreting scripts
3. Analysing a play in performance

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Identify and describe distinguishing features of theatre styles and scripts from the pre-modern era.

**Outcome 2:** Work creatively and imaginatively in production roles to interpret scripts from the pre-modern era.

**Outcome 3:** Analyse a performance of a script.

## Unit 2: Modern theatre styles and conventions

This unit focuses on the application of acting, direction and design in relation to theatre styles from the modern era, that is, the 1920s to the present. Students creatively and imaginatively work in production roles with scripts from the modern era of theatre, focusing on at least three distinct theatre styles. They study innovations in theatre production in the modern era and apply this knowledge to their own works. Students develop knowledge and skills about theatre production processes including dramaturgy, planning, development and performance to an audience and apply this to their work. They study safe and ethical working practices in theatre production and develop skills of performance analysis, which they apply to the analysis of a play in performance. Theatre styles from the modern era of theatre include Epic theatre, Constructivist theatre, Theatre of the Absurd, Political theatre, Feminist theatre, Expressionism, Eclectic theatre, Experimental theatre, Musical theatre, Physical theatre, Verbatim theatre, Theatre-in-education, and Immersive/Interactive theatre.

### Areas of Study

4. Exploring modern theatre styles and conventions
5. Interpreting scripts
6. Analysing and evaluating a theatre production

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Identify and describe the distinguishing features of theatre styles and scripts from the modern era.

**Outcome 2:** Work creatively and imaginatively in production roles to interpret scripts from the modern era.

**Outcome 3:** Analyse and evaluate a theatre production.





### **Unit 3: Producing theatre**

In this unit students develop an interpretation of a script through the three stages of the theatre production process: planning, development and presentation. Students specialise in two production roles, working collaboratively, creatively and imaginatively to realise the production of a script. They use knowledge developed during this process to analyse and evaluate the ways work in production roles can be used to interpret script excerpts previously unstudied. Students develop knowledge and apply elements of theatre composition, and safe and ethical working practices in the theatre. Students attend a performance selected from the prescribed VCE Theatre Studies Unit 3 Playlist and analyse and evaluate the interpretation of the script in the performance.

#### **Area of Study**

1. Staging theatre
2. Interpreting a script
3. Analysing and evaluating theatre

#### **Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Interpret a script across the stages of the production process through creative, imaginative and collaborative work undertaken in two production roles.

**Outcome 2:** Outline concepts and ideas for a creative interpretation of excerpts from a script and explain how these could be realised in a theatre production.

**Outcome 3:** Analyse and evaluate the creative and imaginative interpretation of a written script in production to an audience.

### **Unit 4: Presenting an interpretation**

In this unit students study a scene and an associated monologue. They initially develop an interpretation of the prescribed scene. This work includes exploring theatrical possibilities and using dramaturgy across the three stages of the production process. Students then develop a creative and imaginative interpretation of the monologue that is embedded in the specified scene. To realise their interpretation, they work in production roles as an actor and director, or as a designer. Students' work for Areas of Study 1 and 2 is supported through analysis of a performance they attend. The performance must be selected from the VCE Theatre Studies Unit 4 Playlist. The Playlist is published annually on the VCAA website. Students analyse acting, direction and design and the use of theatre technologies, as appropriate to the production. In conducting their work in Areas of Study 1 and 2, students develop knowledge in and apply safe and ethical theatre practices.

#### **Area of Study**

1. Researching and presenting theatrical possibilities
2. Interpreting a monologue
3. Analysing and evaluating a performance

#### **Outcomes:**

On completion of this unit you should be able to:

**Outcome 1:** Describe and justify a creative and imaginative interpretation of a monologue and its prescribed scene.

**Outcome 2:** Interpret and present a monologue and orally justify and explain their interpretive decisions.

**Outcome 3:** Analyse and evaluate acting, direction and design in a production.

# VISUAL COMMUNICATION & DESIGN

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## Unit 1 Introduction to Visual Communication & Design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications. Through experimentation and through exploration of the relationship between design elements and design principles, students develop an understanding of how design elements and principles affect the visual message and the way information and ideas are read and perceived.

### Areas of Study

1. Drawing as a means of communication
2. Design elements and design principles
3. Visual communication design in context

### Outcomes:

On completion of this unit you should be able to:

**Outcome 1:** Create drawings for different purposes using a range of drawing methods, media and materials.

**Outcome 2:** Select and apply design elements and design principles to create visual communications that satisfy stated purposes.

**Outcome 3:** Describe how a visual communication has been influenced by past and contemporary practices, and by social and cultural factors.

## Unit 2 Applications of visual communication design

This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields. Students use presentation drawing methods that incorporate the use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design. They investigate how typography and imagery are used in visual communication design. They apply design thinking skills when exploring ways in which images and type can be manipulated to communicate ideas and concepts in different ways in the communication design field. In response to a brief, students engage in the stages of research, generation of ideas and development of concepts to create visual communications.

### Areas of Study

1. Technical drawing in context
2. Type and imagery
3. Applying the design process

### Outcomes

At the end of this unit you should be able to:

**Outcome 1:** Create presentation drawings that incorporate relevant technical drawing conventions and effectively communicate information and ideas for a selected design field.

**Outcome 2:** Manipulate type and images to create visual communications suitable for print and screen-based presentations, taking into account copyright.

**Outcome 3:** Engage in stages of the design process to create a visual communication appropriate to a given brief.

### Materials Fees

Approximately \$100 (based on 2018 cost).

### **Unit 3 Design Thinking and Practice**

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media, materials and the application of design elements and design principles can create effective visual communications for specific audiences and purposes. They investigate and experiment with the use of manual and digital methods, media and materials to make informed decisions when selecting suitable approaches for the development of their own design ideas and concepts. Students use their research and analysis of visual communication designers to support the development of their own work. They establish a brief and apply design thinking skills through the design process. They identify and describe a client, two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need. Design from a variety of historical and contemporary design fields is considered by students to provide directions, themes or starting points for investigation and inspiration for their own work. Students use observational and visualisation drawings to generate a wide range of design ideas and apply design thinking strategies to organise and evaluate their ideas. The brief and investigation work underpin the developmental and refinement work undertaken in Unit 4.

#### **Areas of Study**

1. Analysis and practice in context
2. Design industry practice
3. Developing a brief and generating ideas

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Create visual communications for specific contexts, purposes and audiences that are informed by their analysis of existing visual communications.

**Outcome 2:** Describe how visual communications are designed and produced in the design industry and explain factors that influence these practices.

**Outcome 3:** Apply design thinking skills in preparing a brief, undertaking research and generating a range of ideas relevant to the brief.

### **Unit 4 Design development and presentation**

The focus of this unit is the development of design concepts and two final presentations of visual communications to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated needs. Having completed their brief and generated ideas in Unit 3, students continue the design process by developing and refining concepts for each need stated in the brief. They utilise a range of digital and manual two- and three-dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages with their target audience. As students revisit stages to undertake further research or idea generation when developing and presenting their design solutions, they develop an understanding of the iterative nature of the design process. Ongoing reflection and evaluation of design solutions against the brief assists students with keeping their endeavours focused. Students refine and present two visual communications within the parameters of the brief. They reflect on the design process and the design decisions they took in the realisation of their ideas. They evaluate their visual communications and devise a pitch to communicate their design thinking and decision making to the client.

#### **Areas of Study**

1. Development of design concepts
2. Final presentations
3. Evaluation and explanation

#### **Outcomes**

By the end of this unit you should be able to:

**Outcome 1:** Develop distinctly different design concepts for each need, and select and refine for each need a concept that satisfies each of the requirements of the brief.

**Outcome 2:** Produce final visual communication presentations that satisfy the requirements of the brief.

**Outcome 3:** Devise a pitch to present and explain their visual communications to an audience and evaluate the visual communications against the brief.

**Materials Fees**

Approximately \$100 (based on 2018 cost).