

Dare, Connect, Learn.

William Ruthven
Pathways

2020

**VCE Course Selection
Handbook
Units 1 & 2**



**WILLIAM RUTHVEN
SECONDARY COLLEGE**

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Principal's Message

Congratulations! You are now moving into the final years of formal schooling before you decide on university, TAFE, apprenticeship or workplace options. It is with great excitement I look forward to our work together in 2018. I feel privileged to work with you as you move into your future. This is an exciting time full of possibilities and will be immensely rewarding if you value the learning and contribute with a great deal of hard work! Learning is about curiosity—exploring the many aspects of Science, Humanities, English, Mathematics, The Arts and Technologies. The subjects, which are described in detail in this book, will help you make the right choices for your VCE and VCAL studies in 2018. Learning is also about building knowledge. No matter which subjects you select to study in Units 1–4 VCE or VCAL, you are building a body of knowledge, which will stand you in good stead for the rest of your life.



Our values are **Leadership Excellence Acceptance Respect Now @ WRSC**. These values will help you to persist and excel in study, work and life beyond school. I wish you every success.

Judith Benney

Principal

Our Values



Leadership: Encouraging all students to see themselves as self-motivated, independent learners in all aspects of their lives. Encouraging all students to seek wonder and inquire into the world around them.



Excellence: All members of the college community pursue excellence and take responsibility for learning and achieving their full potential.



Acceptance: All members of the College community value diversity as a strength and cultivate an openness of mind. All members work collaboratively in teams and develop the skills to solve new problems. Acceptance also builds on encouraging a safe, orderly learning environment based around positive relationships.



Respect: All members of the College community cultivate mutual respect, responsibility, integrity and respect for learning.

Management of individual pathways

The course-counselling program at William Ruthven Secondary College is based on the principles of integration and collaboration. The program brings together the student and the key people in their life and collaboratively, they identify and analyse the student's goals, areas of interest and academic ability. Through this integrated approach, the student and key stakeholders develop a career action plan that is understood, aspirational and achievable.

Students are supported in selecting their Senior School program with a careers counsellor. The careers counsellor works with students during all the planning days and supports them through their studies.

Students may be involved in a variety of alternative programs such as:

- Vocational Education and Training (VET)
- Australia School-based Apprenticeships (ASBA)
- Three Year VCE Programs
- Enhancement Studies (University studies)
- VCAL Victorian Certificate of Applied Learning

Promotion to year 11

Term One assessment tasks and feedback will be used to identify 'students at risk' of not being promoted. Year Level Leaders will prepare a list of 'students at risk' of non-promotion. Students and their parents/guardians will be counselled by the appropriate staff as to the action they could take to improve their performance and prospects of promotion.

During Terms Two, Three and Four progress will be monitored in an on-going way by the Year Level Leaders with the support of the Senior School Leader. The College will provide every assistance possible to ensure that student improvement occurs. Assistance will be individually tailored and may include regular parent contact, interviews with careers counsellors, conduct and progress cards, lunchtime and after school classes, extra help with organisational and diary skills, contracts and peer or adult mentoring.

During the course counselling process for Year 11 students, teachers' recommendations about the likelihood of the satisfactory completion of subjects will be sought as guidance on subject choices and promotion to Year 12.

Year 11 students need a minimum of 8 VCE Units completed to be promoted to Year 12, including at least 1 unit of English.

Summary of VCE requirements

For all VCE studies, assessment involves a mix of school-based assessment and external examinations, with the external examination contributing up to 66% of the student's final study score. In most cases, the school-based assessment is referred to as School-Assessed Coursework (SAC) but in studies in which a folder of work is accumulated throughout the year (Art, Design Technology, Food Technology, Media, Studio Art and Visual Communication & Design, etc.), this work is referred to as a School-Assessed Task (SAT).

Minimum requirement

The minimum requirement is the satisfactory completion of 16 units, which must include:

- Three (3) units from the English group, with both at Units 3 and 4 level.
- At least three sequences of Units 3 and 4 studies other than English, which may include any number of English sequences once the English requirement has been met.

The Victorian Tertiary Admissions Centre (VTAC) advises that for the calculation of a student's Australian Tertiary Admission Rank (ATAR), satisfactory completion of both Units 3 and 4 of an English sequence is required.

Assessment

An S will be awarded for satisfactory completion of a Unit when a student demonstrates achievement of all outcomes. This decision will be based on the teacher's assessment of the student's overall performance on the designated assessment tasks for the Unit. If N is awarded for any outcome this will result in a failure for the entire Unit.

In accordance with VCAA advice, achievement of an outcome means:

- The work meets the required standard
- The work was submitted on time
- The work is clearly the student's own
- There has been no substantive breach of rules.

If all outcomes are achieved, the student receives an S for the unit. A student may not be granted satisfactory completion if:

- The work is not of the required standard
- The student has failed to meet a school deadline for the assessment task, including where an extension of time has been granted for any reason, including Special Provision
- The work cannot be authenticated
- There has been a substantive breach of rules including school attendance rules

If any of the outcomes are not achieved, the student receives an N for the unit.

Where a student has completed work but there has been a substantive breach of class attendance, the student may be awarded an N.

Assessment of performance

VCE

Units 1 and 2

These Units are graded on the basis of work undertaken by students in connection with the learning outcomes, called SACs. This will be part of the regular teaching and learning program and will be completed mainly in class time. The school determines grades – VCAA does not report graded results for Units 1 and 2.

Units 3 and 4

Forms of Assessment:

School-Assessed Coursework (SAC)

Assesses each student's overall level of achievement on the assessments tasks listed in the Study Design. The Study design specifies a range of assessment tasks (e.g. assignment, essay, test, report in multimedia format) to assess the achievement of each of the Unit's outcomes.

Is part of the regular teaching and learning program

Is completed mainly in class time, within a limited time frame.

School-Assessed Tasks (SATs)

Completed only in Units 3 and 4 in Media, Studio Art, Art and Visual Communication and Design

Designed to assess specific sets of skills for products or models

Tasks that will be teacher assessed according to criteria set by the VCAA.

Examinations

End of year examinations apply to all Unit 3 and 4 studies

General Achievement Test (GAT)

All students enrolled in a Unit 3 and 4 study will be required to sit the GAT in that year. The GAT is administered through VCAA and is used to verify student results by comparing individual GAT, SAC and SAT results. The GAT exam is held in June each year. VCAL students do not sit the GAT examination.

Tertiary entrance and career development

The Career Resource Centre, together with the careers counsellor will support students to develop their career planning pathways. Each are provided to assist students to prepare for Year 12 and to understand the various terms and information that are necessary when selecting courses and training pathways for 2018.

In term 2, all year 11 students are interviewed by the career counsellor who discusses subject choices and course options with the student.

The VTAC guide lists the courses available to Year 12 students at University, TAFE and other Private Providers. To apply through the VTAC system, the minimum tertiary entrance requirements are the satisfactory completion of both the VCE and English Units 3 and 4 (or English EAL or English Literature). Units 3 and 4 English must be completed in sequence in the same calendar year.

For TAFE courses listed in the VTAC Guide, an ATAR score is not always required. Satisfactory completion of the VCE and Units 3 and 4 English (any) or equivalent Senior Secondary completion such as Senior VCAL is needed.

Once you meet the minimum tertiary entrance requirements, you will compete with other applicants applying for a course. Criteria used for selection will vary from course to course. When applying to courses, you need to ensure you meet the prerequisite studies and fulfil any extra requirements such as a folio, interview, information session or special test.

The Australian Tertiary Admission Rank (ATAR) is the primary selection mechanism for Year 12 students. The ATAR is calculated and distributed by VTAC to all current VCE students who have successfully completed VCE English Units 3 and 4, and at least three other Unit 3 and 4 VCE studies and who have made an application to VTAC. Courses that do not select on ATAR will have extra requirements that will need to be fulfilled in order to be considered for entry.

VCAL students will not be eligible for an ATAR but may be eligible to apply for TAFE studies. Students will be assisted to make the transition to the workforce or further training by the Careers Counsellor.

VCAL Pathway

If you are interested in taking part in the VCAL program in year 11 please speak to the careers counsellor.

There will be an application process and interview.

VET (Vocational Education & Training)

To successfully complete your VCAL certificate at year 12, you will need to include a course of study from the TAFE sector. You can begin the VET course in year 11. All VET studies available are listed in the Northern Melbourne VET Cluster Handbook 2016.

Course descriptions and costs may vary depending on departmental policies and funding. Generally, VET courses cost around \$200 per year, depending on the course chosen. Courses will run depending on student numbers.

All courses listed above will have a compulsory information and enrolment session in term 4. Course Details are available in the Northern VET Cluster Handbook. See careers coordinator for a copy of the booklet. This booklet will be available to students on the course-counselling day.

School based apprenticeships

School-based Part-Time Traineeships/Apprenticeships allow students to train and get paid work while completing their Senior School and TAFE studies.

These studies will satisfy the industry specific strand in the VCAL programs. The benefits for students are:

VCAL certificate as well as a TAFE qualification, paid employment for the time spent at work, formal training with a TAFE College and a work history.

A range of traineeships is available and students will be supported by the school where they wish to access them.

The areas available include:

- Retail operations
- Horticulture
- Office Administration
- Information Technology
- Automotive
- Hairdressing
- Hospitality
- Business

Subjects offered in 2020

Accounting

Biology

Business Management

Chemistry

Computing

English/EAL

Food Studies

Geography

Health & Human Development

History Twentieth Century

Legal Studies

Literature

Mathematics

– **General**

– **Methods**

Media

Outdoor & Environmental Studies

Physical Education

Psychology

Studio Art

Textiles

Visual Communication & Design



Accounting

Unit 1: Establishing and operating a service business.

This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of accounting information by internal and external users. The cash basis of recording and reporting is used throughout this unit.

Using single entry recording of financial data and analysis of accounting information, students examine the role of accounting in the decision-making process for a sole proprietor of a service business.

Outcome 1

On completion of this unit the student should be able to describe the resources required, and explain and discuss the knowledge and skills necessary, to set up a small business.

Outcome 2

On completion of this unit the student should be able to identify and record the financial data, and report and explain accounting information, for a sole proprietor of a service business.

Unit 2: Accounting for a trading business

This unit extends the accounting process from a service business and focuses on accounting for a sole proprietor of a single activity trading business. Students use a single entry recording system for cash and credit transactions and the accrual method for determining profit. They analyse and evaluate the performance of the business using financial and non-financial information. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business. Students develop their understanding of the importance of ICT in the accounting process by using a commercial accounting software package to establish a set of accounts, record financial transactions and generate accounting reports.

Outcome 1

On completion of this unit the student should be able to record financial data and report accounting information for a sole trader.

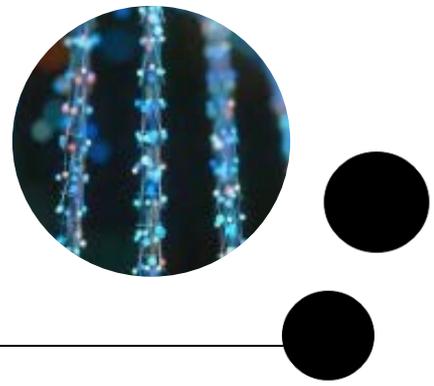
Outcome 2

On completion of this unit the student should be able to record financial data and report accounting information for a single activity sole trader using a commercial accounting software package, and discuss the use of ICT in the accounting process.

Outcome 3

On completion of this unit the student should be able to select and use financial and non-financial information to evaluate the performance of a business and discuss strategies that may improve business performance.





Biology Unit 1

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.

Area of study 1

How do organisms function?

In this area of study students examine the structure and functioning of cells and how the plasma membrane contributes to survival by controlling the movement of substances into and out of the cell.

Area of Study 2

How do living systems sustain life?

In this area of study students examine the structural, physiological and behavioural adaptations of a range of organisms that enable them to survive in a particular habitat and to maintain a viable population size over time. Students consider the distinction between the external and internal environment of an organism and examine how homeostatic mechanisms maintain the internal environment within a narrow range of values for factors including temperature, blood glucose and water balance.

Area of Study 3 Practical investigation

Survival requires control and regulation of factors within an individual and often outside the individual. In this area of study students design and conduct a practical investigation into the survival of an individual or a species. The investigation requires the student to develop a question, plan a course of action to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach a conclusion in response to the question.





Biology Unit 2

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.

Area of Study 1

How does reproduction maintain the continuity of life?

In this area of study students consider the need for the cells of multicellular organisms to multiply for growth, repair and replacement. They examine the main events of the cell cycle in prokaryotic and eukaryotic cells. Students become familiar with the key events in the phases of the cell cycle, and focus on the importance of the processes involved in a cell's preparation for cell division. Students investigate and use visualisations and modelling to describe the characteristics of each of the phases in mitosis.

Area of Study 2

How is inheritance explained?

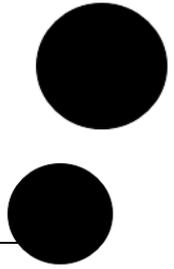
In this area of study students build on their understanding of the nature of genes and the use of genetic language to read and interpret patterns of inheritance and predict outcomes of genetic crosses.

Area of Study 3

The increasing uses and applications of genetics knowledge and reproductive science in society both provide benefits for individuals and populations and raise social, economic, legal and ethical questions. Human cloning, genetic modification of organisms, the use of forensic DNA databanks, assisted reproductive technologies and prenatal and predictive genetic testing challenge social and ethical norms.



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Business Management

Business management is the study of concepts, which apply to the management of businesses. It examines the ways in which people at various levels within a business organisation manage resources to achieve business objectives. Students develop an understanding of the challenges, complexity and rewards that come from business management and gain insight into the various ways resources can be managed in businesses whether they be small partnership businesses or large public companies.

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.

The three topic areas are:

- Business Idea
- External Environment
- Internal Environment

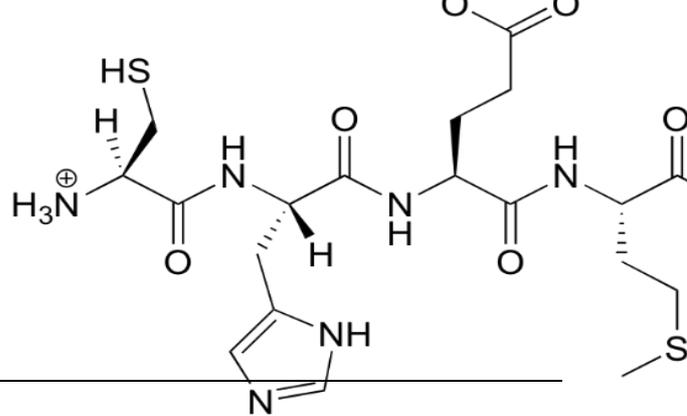
UNIT 2: Establishing a Business

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.

The three topic areas are:

- Legal and Financial considerations
- Marketing a business
- Staffing a business





Chemistry

Chemistry is a key science in explaining the workings of our universe through an understanding of the properties and interaction of substances that make up matter. Most processes, from the formation of molecules in outer space to the complex biological interactions occurring in cells, can be described by chemical theories. Although there are no sharp boundaries between sciences such as chemistry, physics and biology, chemistry is used to explain natural phenomena at the molecular level, as well as create new materials such as medicines and polymers.

UNIT 1: THE BIG IDEAS OF CHEMISTRY

Key knowledge

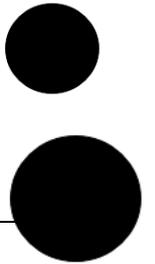
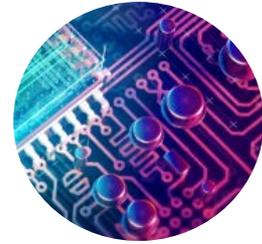
- Elements and the Periodic Table
- Metals
- Ionic compounds
- Quantifying atoms and compounds
- Materials from molecules
- Carbon lattices and carbon nanomaterials
- Organic compounds
- Polymers
- The mole concept including empirical and molecular formulas, percentage composition, Avogadro's constant
- Models of bonding to explain observed properties including melting temperature, electrical
- Conductivity, chemical reactivity, shape, polarity of bonds, intermolecular forces
- Properties and systematic naming of alkanes and alkenes up to C_6
- Structural isomers of C_4H_{10}

UNIT 2: ENVIRONMENTAL CHEMISTRY

Key knowledge:

- Properties of water
- Water as a solvent
- Acid base (proton transfer) in water
- Redox (electron transfer) in water
- Water sample analysis
- Measurement of solubility and concentration
- Analysis for salts in water
- Analysis for organic compounds in water
- Analysis for acids and bases in water
- Calculations including mass-mass stoichiometry and concentration and volume of solutions; pH of strong acids and of strong bases
- Role of the atmosphere in maintaining life in the environment





Computing

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:

Data and graphic solutions: students collect primary data and create a digital solution that graphically presents the findings of the investigation.

Networks: students examine the technical underpinnings of wireless and mobile networks, and security controls to protect stored and transmitted data, to design a network solution that meets an identified need or opportunity. They predict the impact on users if the network solution were implemented.

Collaboration and communication: students acquire and apply their knowledge of information architecture and user interfaces, together with web authoring skills, to present different viewpoints on a contemporary issue.

UNIT 2: COMPUTING

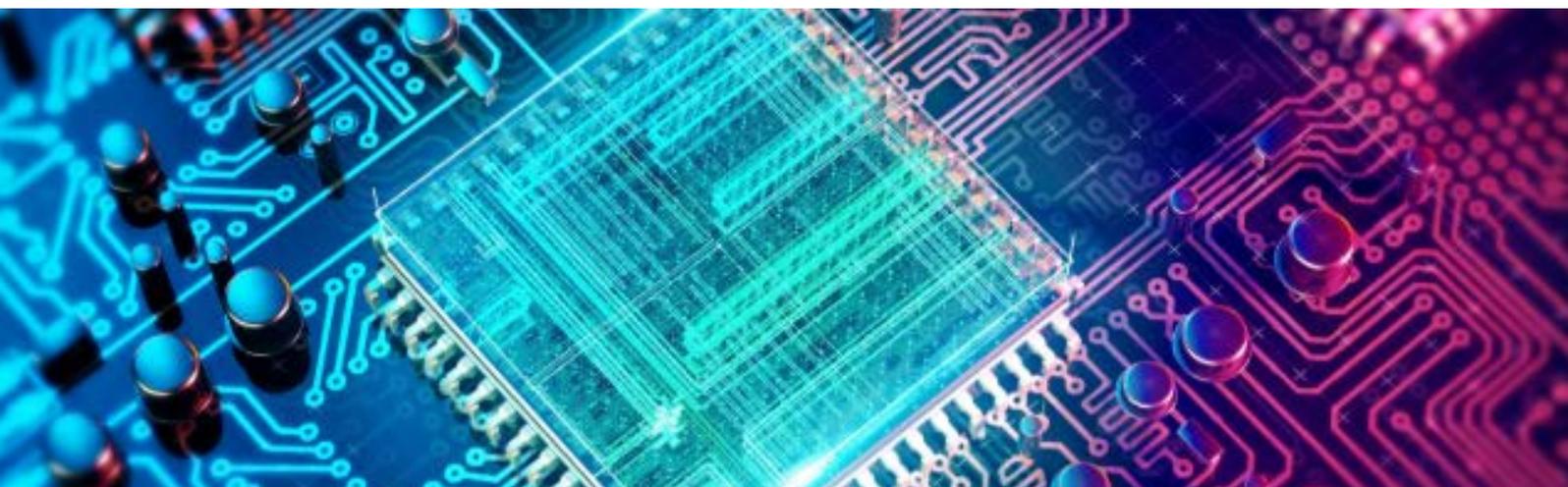
In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data.

Areas of Study:

Programming: students develop their computational thinking skills when using a programming or scripting language to create solutions. They engage in the design and development stages of the problem-solving methodology.

Data analysis and visualisation: students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations that are clear, usable and attractive, and reduce the complexity of data.

Data management: students apply all stages of the problem-solving methodology to create a solution using database management software and explain how they are personally affected by their interactions with a database system.





English

Unit 1:

Students read and respond to texts analytically and creatively. They explore how meaning is created by decisions authors make and consider how authors use features such as structure and language to build the world of the text. Students also analyse arguments and the use of persuasive language, including written, spoken and visual language, in pieces intended to position audiences to share the view of the writer or speaker. They create their own texts intended to position audiences.

ASSESSMENT:

An analytical response to a set text

A creative response to a set text

An analysis of the use of argument and persuasive language in texts

An oral presentation that presents an argument or viewpoint

OUTCOMES:

Produce analytical and creative responses to texts.

Analyse how argument and persuasive language can be used to position audiences and create their own texts intended to position audiences.

Unit 2:

Students explore texts compare ideas, issues and themes in ways that can deepen understanding of them both. They further consider how features of the writing reflect human experience, including historical and social contexts. Students build on their ability to analyse arguments and the use of persuasive language, in particular by considering how texts are constructed and the logical development of ideas within them. Students will craft a piece with the intent of positioning an audience to share the point of view.

ASSESSMENT:

A comparative analytical response to set texts

An analysis of the use of argument and persuasive language in texts

A written text that presents an argument or viewpoint

OUTCOMES:

Compare the presentation of ideas, issues and themes in two texts

Identify and analyse how argument and persuasive language are used in texts that attempt to influence an audience and create a text which presents a point of view





EAL

Unit 1: Approaches to Literature

Focuses on the ways in which the interaction between text and reader creates meaning. Students respond in a variety of ways to question and consider the ideas and concerns in texts, through investigation of literary features and conventions.

Understanding of texts is further developed through the analysis of and response to literary criticism.

ASSESSMENT:

Oral presentation

Folio of responses

Analysis of literary criticism

Examination

OUTCOMES:

Respond to a range of texts and reflect on influences shaping these responses.

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

Focuses on the ways literary texts connect with each other and with the world. 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 through close analysis.

ASSESSMENT:

Creative and critical response

Comparative response

Close analysis

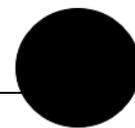
Examination

OUTCOMES:

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.

Compare texts considering the dialogic nature of texts and how they influence each other.





Food Studies

Unit 1: Food Origins

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world.

Area of study 1 Food around the World

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.

Outcome 1: Students should be able to 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.

Area of Study 2 Food in Australia

In this area of study students focus on the history and culture of food in Australia.

Outcome 2: Students should be able to 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.

Area of Study 1 Food industries

In this area of study students focus on commercial food production in Australia, encompassing primary production and food processing and manufacturing, and the retail and food service sectors.

Outcome 1: Students should be able to 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.

Area of Study 2 Food in the home

In this area of study students further explore food production, focusing on domestic and small-scale food production.

Outcome 2: Students should be able to 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.

Please note that there is a subject material charge.





Health and Human Development

Unit 1:

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.

Area of Study 1: Health perspectives and influences.

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

Area of Study 2: Health and nutrition

On completion of this unit the student should be able to apply nutrition knowledge and tools to the selection of food and the evaluation of nutrition information.

Area of Study 3: Youth health and wellbeing

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

Area of Study 1: Developmental transitions

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

Area of Study 2: Health care in Australia

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





History: Revolutions

UNIT 1: 1918–1939

Students explore the nature of political, social and cultural change in the period between the world wars.

The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political economic and social changes.

Areas of Study: Ideology and Conflict, Social and cultural change

Outcome 1

On completion of this unit the student should be able to 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

On completion of this unit the student should be able to 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: 1945–2000

In Unit 2 students explore 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.

Areas of Study: Competing Ideologies, Challenge & Change

Outcome 1

On completion of this unit the student should be able to 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

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





Legal Studies

Unit 1: Guilt and liability

Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

Outcome 1: On completion of this unit the student should be able to describe the main sources and types of law, and assess the effectiveness of laws.

Outcome 2: On completion of this unit the student should be able to explain the purposes and key concepts of criminal law, and use legal reasoning to argue the criminal culpability of an accused based on actual and/or hypothetical scenarios.

Outcome 3: On completion of this unit the student should be able to explain the purposes and key concepts of civil law, and apply legal reasoning to argue the liability of a party in civil law based on actual and/or hypothetical scenarios.

Unit 2: Sanctions, remedies and rights

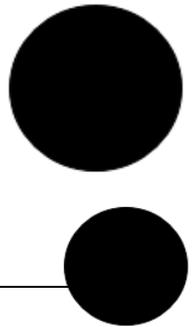
Students undertake a detailed investigation of two criminal cases and two civil cases from the past four years to form a judgment about the ability of sanctions and remedies to achieve the principles of justice.

Outcome 1: On completion of this unit the student should be able to explain key concepts in the determination of a criminal case, and discuss the principles of justice in relation to the determination of criminal cases, sanctions and sentencing approaches.

Outcome 2: On completion of this unit the student should be able to explain key concepts in the resolution of a civil dispute, and discuss the principles of justice in relation to the resolution of civil disputes and remedies.

Outcome 3: On completion of this unit the student should be able to evaluate the ways in which rights are protected in Australia, compare this approach with that adopted by another country and discuss the impact of an Australian case on the rights of individuals and the legal system.





Literature

Unit 1: Approaches to Literature

Focuses on the ways in which the interaction between text and reader creates meaning. Students respond in a variety of ways to question and consider the ideas and concerns in texts, through investigation of literary features and conventions.

Understanding of texts is further developed through the analysis of and response to literary criticism.

OUTCOMES:

Respond to a range of texts and reflect on influences shaping these responses.

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

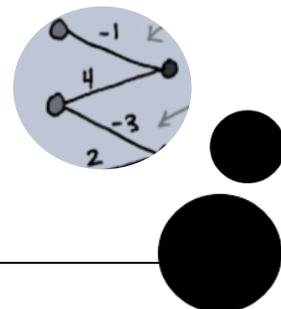
Focuses on the ways literary texts connect with each other and with the world. Students consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted through close analysis.

OUTCOMES:

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.

Compare texts considering the dialogic nature of texts and how they influence each other.





Mathematics: Methods

Areas of study

1 FUNCTIONS AND GRAPHS

Functions and graphs Circular functions

Exponential and logarithmic functions

2 ALGEBRA

Algebra and equations

Transformations of functions

Polynomials Logarithm laws

Equations

3 CALCULUS

Rate of change Gradient of a tangent

Differentiation by first principles

Applications of differentiation

Antidifferentiation

4 PROBABILITY AND

STATISTICS

Probability

Counting in probability

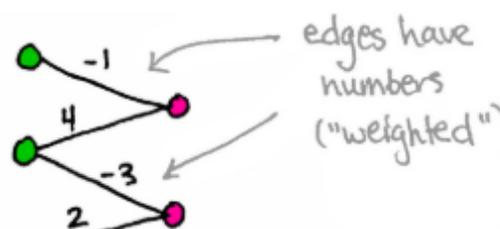
Outcomes for Units 1 and 2 will be assessed through a variety of tasks, which include the following; assignments, tests, summary reviews and notes, projects, short written responses, problem-solving tasks, modelling tasks and exams.

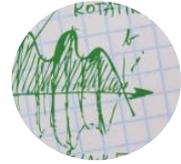
Entry

There are no pre-requisites for entry into any Units 1 and 2 in Mathematics, however students attempting Mathematical Methods, are expected to have a sound background in algebra, functions and probability.

M has **three rows** & **two columns** and corresponds to this weighted bipartite graph:

$$M = \begin{bmatrix} -1 & 0 \\ 4 & -3 \end{bmatrix} = \begin{bmatrix} -1 & 0 \\ 4 & -3 \end{bmatrix}$$





Mathematics: General

UNITS 1 AND 2

This subject is intended to provide courses of study for quite diverse groups of students. General Mathematics Units 1 and 2 may be taken alone or with Mathematical Methods Units 1 and 2.

Areas of study

1 ALGEBRA AND STRUCTURE

Linear relations and equations

2 ARITHMETIC AND NUMBER

Computation and practical arithmetic

Financial arithmetic

3 DISCRETE MATHEMATICS

Matrices

Graphs and networks

Number patterns and recursion

4 GEOMETRY, MEASUREMENT AND TRIGONOMETRY

Shape and measurement

Applications of trigonometry

5 GRAPHS OF LINEAR AND NON-LINEAR RELATIONS

Linear graphs and models

Inequalities and linear programming

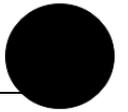
Variation

6 STATISTICS

Investigating and comparing data distributions

Investigating relationships between two numerical variables





Media

The media has significant impact on people's lives. They influence the way people spend their time, help shape the way they perceive themselves and others, and play a crucial role in the creation of personal, social, cultural and national identity.

In media we watch a lot of different types of film and television series to learn about important ideas.

You also get to make your own film or print media.

You make a proper folio.

We learn about famous photographers and the stories behind their images.

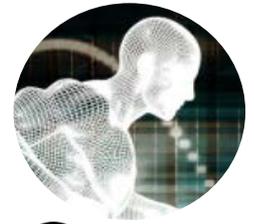
UNIT 1

Students are introduced to the concept of audience and what it entails. They consider how audiences engage with the media to construct understandings of the world and themselves. Students work in two or more media forms to design and create media exercises or productions that represent concepts covered in class. They analyse Australian fiction and non-fiction in stories.

UNIT 2

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. They develop and produce narratives of their own.





Physical Education Unit 1

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.

Area of Study 1

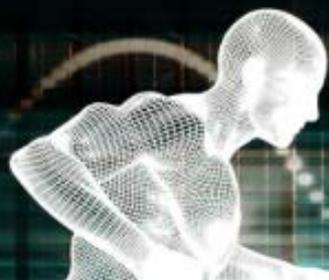
How does the musculoskeletal system work to produce movement?

In this area of study students examine the musculoskeletal system of the human body and how the muscles and bones work together to produce movement. Through practical activities they explore the major components of the musculoskeletal system and their contributions and interactions during physical activity, sport and exercise. Students evaluate the social, cultural and environmental influences on movement, and how the capacity and functioning of the muscular and skeletal systems may act as an enabler or barrier to participation in physical activity. Sedentary behaviour, overtraining and participation at the elite and recreational level are investigated as possible causes of illness and injury to the musculoskeletal system.

Area of Study 2

How does the cardiorespiratory system function at rest and during physical activity?

In this area of study students examine the cardiovascular and respiratory systems of the human body and how the heart, blood vessels and lungs function at rest and during physical activity. Through practical activities students explore the structure and function of the cardiorespiratory system and their contributions and interactions during physical activity, sport and exercise. Enablers and barriers to the capacity and functioning of the cardiovascular and respiratory systems are investigated from a sociocultural, environmental and physical perspective.





Physical Education Unit 2

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 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.

Area of Study 1

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

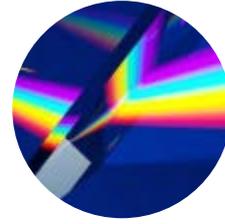
In this area of study students focus on the role of physical activity, sport and society in developing and promoting healthy lifestyles and participation in physical activity across the lifespan. Students explore the social, cultural and historical influences on participation in various forms of physical activity, including sport. Students investigate sociocultural factors that influence physical activity and consider opportunities and barriers to participation for various population groups and settings.

Area of Study 2

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

In this area of study students focus on a range of contemporary issues associated with physical activity and/or sport at the local, national and global level.





Physics

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.

Area of study 1: How can thermal effects be explained? Area of study 2: How do electric circuits work?

Area of study 3: What is matter and how is it formed?

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

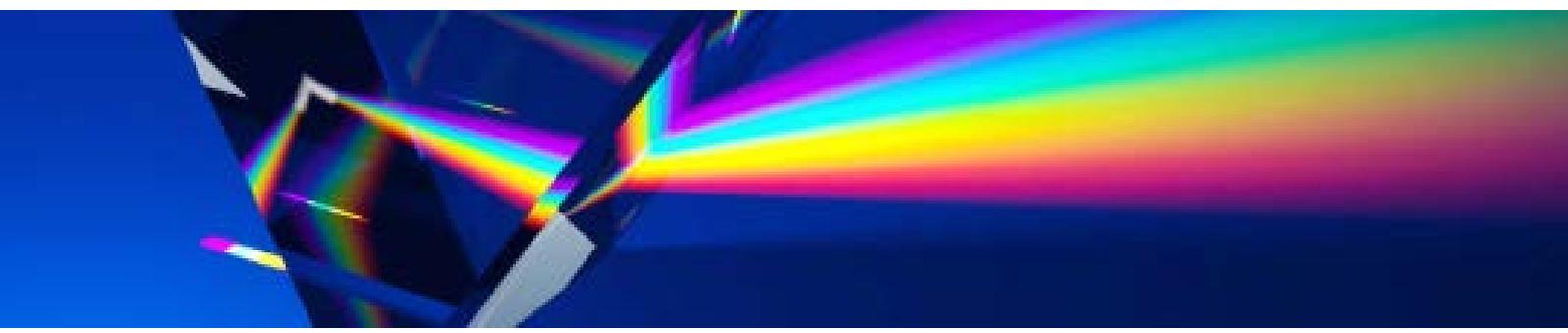
This unit focuses on the application of models to more complex phenomena – motion and light developed within contexts that are familiar to students and relevant to their experiences. Newtonian ideas of motion are extended to include a range of movements and more abstract ideas, while the wave and particle models of light provide a framework for exploring light phenomena in real world applications. The detailed studies provide opportunities to explore motion and/or light in nuclear, sustainable energy, flight, space and medical contexts.

Area of study 1: How can motion be described and explained?

Area of study 2: Twelve options are available for selection in Area of Study 2. Each option is based on a different observation of the physical world.

Area of study 3: Practical investigation

The investigation requires the student to develop a question, plan a course of action that attempts to answer the





Psychology

Unit 1: How are behaviour and mental processes shaped?

Area of Study 1: How does the brain function?

Outcome 1 On completion of this unit the student should be able to 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.

Area of Study 2: What influences psychological development?

Outcome 2 On completion of this unit the student should be able to 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.

Area of Study 3: Student-directed research investigation

Outcome 3 On completion of this unit the student should be able to 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.

Unit 2: How do external factors influence behaviour and mental processes?

Area of Study 1: What influences a person's perception of the world?

Outcome 1 On completion of this unit the student should be able to compare the sensations and perceptions of vision and taste, and analyse factors that may lead to the occurrence of perceptual distortions.

Area of Study 2: How are people influenced to behave in particular ways?

Outcome 2 On completion of this unit the student should be able to identify factors that influence individuals to behave in specific ways, and analyse ways in which others can influence individuals to behave differently.

Area of Study 3: Student-directed practical investigation.

Outcome 3 On completion of this unit the student should be able to design and undertake a practical investigation related to external influences on behaviour, and draw conclusions based on evidence from collected data.





Studio Art

Unit One

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.

Area of Study 1- Researching and recording ideas

Area of Study 2-Studio practice

Area of Study 3- Interpreting art ideas and use of materials and techniques

Unit Two

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.

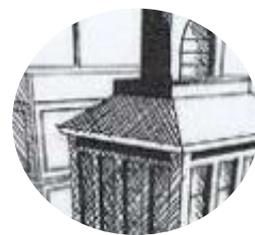
Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art. Analysis is used to understand the artists' ideas and how they have created aesthetic qualities and subject matter

Area of Study 1- Exploration of studio practice and development of artworks

Area of Study 2- Ideas and styles in artworks



Dare, Connect, Learn.



Visual Communication & Design

In Visual communication, you are being prepared for industry guidelines in the form of advertising for audiences, and creating innovative products for a variety of art/design businesses. These include area such as:

- Graphic Design
- Architecture
- Animation and Games
- Advertising
- Film Production
- Illustration
- Fashion Design

UNIT 1: INTRODUCTION TO VISUAL COMMUNICATION DESIGN

This unit focuses on using visual images to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to create messages, ideas and concepts, both 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.

- Area of Study 1 Drawing as a means of communication
- Area of Study 2 Design elements and design principles
- Area of Study 3 Visual communications in context

UNIT 2: Applications of visual communication within design fields

This unit focuses on the application of visual communication design knowledge, design thinking 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 also investigate how typography and imagery are used in these fields as well as the communication field of design and development and refinement of concepts to create visual communications.

- Area of Study 1 Technical drawing in context
- Area of Study 2 Type and imagery in context
- Area of Study 3 Applying the design process

