



VCE and VCAL Course Guide 2021

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Welcome to VCE and VCAL

Entering into Year 11 and 12 is an important milestone for students. Both the Victorian Certificate of Education (VCE) and the Victorian Certificate of Applied Learning (VCAL) prepare students for further education, training and employment. While Year 11 and 12 are not without their challenges, these important years provide students with a fantastic opportunity to set students up for future success in their chosen fields.

Sunbury College offers the opportunity to complete a tailored VCE or VCAL program. The college supports students in achieving academic success with a support network that includes the Senior Programs Leader, VCAL Coordinator, House Leaders and the Careers and Wellbeing teams. Academic success is fostered through programs like the weekly Homework Club, study skills program and the 'Big Day Out' at RMIT University. Students also have access to a range of Vocational Education and Training pathways.

In selecting their VCE or VCAL pathway, students should take the time to reflect on career pathways that interest them. The nature of their intended career, and any further education or training required beyond secondary school, will provide a guide as to what subjects to undertake as part of their chosen program.

This guide provides advice on pathways and typical courses of study suitable for specific career areas. Students should also be aware of any prerequisites for entry to tertiary courses when selecting subjects. Students are encouraged to attend open days in August and visit relevant websites suggested by the Senior Programs Leader. Above all, students should seek advice on what course of study is the best fit for them.

The senior years of schooling are an exciting time, a time in which our young people will forge a pathway for themselves beyond Sunbury College. Success will come only with hard work and determination. We look forward to supporting them as they take this journey.

VCE Entry Requirements

Promotion Policy

The college has a Promotion Policy from Year 10 to VCE. The policy stipulates the criteria a student needs to meet before entering a VCE program. The policy is designed to make sure that students entering a VCE program are equipped with the skills, knowledge base and work habits to enable them to successfully complete VCE. The college does take into account individual circumstances when applying this policy. The Promotion Policy requires that students meet the following criteria:

- Average Work Habit Rating of 3.00 or above
- On the semester reports, the student achieves a minimum of eight satisfactory results across the course of the year, including a satisfactory result in English
- Satisfactory performance in at least four Year 10 exams each semester
- Minimum of 90% attendance in class. Note: the policy for VCE is 90% attendance

Students who are unable to meet the criteria will be supported in accessing other options including: external VCAL opportunities, three-year VCE, TAFE or a repeat year at Year 10.

VCAL Entry Requirements

The selection process for VCAL ensures students enrolled in the program have the commitment, work habits and skills to be successful in their school-based subjects, external VET and structured work placement. The VCAL program has a limited number of places and those places are provided to students that best exhibit the requirements outlined below. These requirements form the foundation for success at VCAL and ensure students are ready and have the capacity to meet the learning outcomes.

To be considered for an interview for the Sunbury College Year 11 Intermediate VCAL program, students must first submit a written application and meet the following entry requirements:

- Be a current year 10 student at Sunbury College
- Minimum Work Habit Rating of 3.00 in Semester 2 of the current year
- A demonstrated commitment to improving work habits in English and Maths
- Minimum of 90% attendance in class
- Completion of 'My Career Portfolio' online to a high standard
- Have a clear area of vocational interest and demonstrate commitment to pursuing that pathway
- Organisation and participation in Structured Workplace Learning

Entry to the Year 12 Senior Certificate Level is based on performance in Year 11. Students must meet the following requirements for promotion interview:

- Be a current Year 11 student at Sunbury College
- Satisfactory completion of current VCAL program and ability to continue in a VET subject
- Participation in VCAL activities related to Personal Development and Work Related skills
- Minimum Work Habit Rating of 3.00 in Semester 2 of the current year
- A demonstrated commitment to improving their Literacy and Numeracy skills
- Minimum of 90% attendance
- Completion of 'My Career Portfolio' online to a high standard

If selected to go through to the interview stage for consideration into the Sunbury College VCAL program, students must provide evidence of the following:

- An identified vocational pathway
- Keen interest in a VET program relevant to their career aspirations
- A demonstrated "hands-on" learning style
- A demonstrated ability to work positively with class mates and teachers in group activities
- A commitment to organise a work placement

The Two Certificates

Victorian Certificate of Education (VCE)

The Victorian Certificate of Education (VCE) is a certificate which recognises the successful completion of a student's secondary education. This certificate is administered and governed by the rules of the Victorian Curriculum and Assessment Authority (VCAA). To obtain the VCE, students must satisfactorily complete a minimum of sixteen units of study, usually undertaken over two years. These units are semester long and may include VCE and VCE VET programs. At Sunbury College we offer an extensive range of subjects and the option of off-campus VET subjects.

Successful Completion of VCE

Students at Sunbury College normally study twelve units (six subjects) at Year 11 and ten units (five subjects) at Year 12 – combining for a total of twenty-two units across the two years. Successful completion of the VCE requires satisfactory completion of a minimum of sixteen units which must include:

- Three units from the English group, including both Units 3 and 4
- 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.

Study Score and ATAR

At the completion of the VCE students will receive a study score for each subject. Study scores are calculated using the results from school-assessed coursework, school-assessed tasks and examination scores for each unit of study. The combined study scores from all subjects completed is used by VTAC to calculate the student's Australian Tertiary Admissions Rank (ATAR). The ATAR is primarily used for entrance into university.

To receive a study score students must receive two or more graded assessments in the study and be awarded an S for both units 3 and 4 in the same year. Study Scores and ATAR scores are calculated and distributed mid-December.

Assessment

Students will receive an 'S' (for 'satisfactorily completed') or 'N' (for 'not satisfactorily completed') for each unit depending on whether or not Learning Outcomes have been successfully met. Each unit has between two and four Learning Outcomes.

Satisfactory completion of a Learning Outcome means:

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

Graded Assessment

Units 1 and 2 are school assessed. Students will receive an S or N in conjunction with a graded mark for School-Assessed Coursework (SAC) to provide feedback on their level of performance. Graded assessment is not included on the official statement of S/N results provided by the Victorian Curriculum and Assessment Authority.

In every Unit 3 and 4 study, one or more examinations will be given as part of the assessment in the study during the end of year examination period. VCE studies also have a system of graded assessment based on SACs. Some folio-based studies, such as Visual Communication, Product Design, Applied Computing and Studio Arts, will also have School Assessed Tasks (SATs).

Unit Structure

Unit 1 and 2 subjects are undertaken at Year 11.

Unit 3 and 4 subjects are undertaken at Year 12.

In cases of acceleration, students in Year 10 and 11 will undertake a VCE study a year earlier than normal.

All unit 3 and 4 subjects are completed in sequence. Typically students complete both Unit 1 and 2 of their allocated subject. However there is flexibility for students to apply to change subject/s at the end of Semester 1 of Year 11.

Standard VCE Course Structures at Sunbury College		
Year Level	No. of Units Required	Must Include
Year 11	12 per year [six per semester]	At least two units of an English and 10 other units
Year 12	10 per year [five per semester]	At least two units of an English and four other Unit 3-4 sequences [Year 12 course will include one block of Private Study]

Variations in VCE Programs

Students may vary the usual VCE program requirements if they:

- have transferred from interstate or overseas
- have results from VCAL
- are exchange students
- have previously been enrolled in the International Baccalaureate
- wish to complete VCE as a three year program

Victorian Certificate of Applied Learning (VCAL)

The Victorian Certificate of Applied Learning (VCAL) is a Victorian school certificate that offers an alternate completion of secondary schooling to VCE. VCAL is offered at three certificate levels: Foundation, Intermediate and Senior. At Sunbury College VCAL will be offered for Year 11 at the Intermediate level and for Year 12 at the senior level.

There are four curriculum strands within a VCAL certificate:

1. Literacy and Numeracy Skills: Studies related to literacy (English) and numeracy (Maths)
2. Industry Specific Skills: VET units of competency
3. Work Related Skills: preparing students for the world of work
4. Personal Development Skills unit: students participate in community-based projects, voluntary work and/or structured activities

Successful Completion of a VCAL qualification

A student is awarded a certificate when they gain credits for 10 units that fulfil the minimum requirements for their learning program. A credit is gained for successful completion of a unit of study. At Sunbury College, a unit of study can be:

- one VCAL unit
- 90 hours for VET modules or units of competency and/or Further Education (FE) modules.

A student's VCAL learning program must include:

- at least one literacy unit
- at least one numeracy unit
- at least one unit from the Industry Specific Skills strand (at the Intermediate and Senior level this must include a s from a VET qualification)
- at least one unit from the Work Related Skills strand
- at least one unit from the Personal Development Skills strand

How VCAL might look at Sunbury College

Year 11- Semester 1- Intermediate VCAL

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	Personal Development	Literacy	External VET	Numeracy	Integrated Project
2	Literacy	Literacy		Numeracy	
3	Numeracy	Personal development		Work Related skills	
4	Numeracy	Numeracy		Work Related skills	
5	Literacy	Work Related skills		Personal Development	
6	Personal Development	Work Related skills		Personal Development	

Year 11 Semester 2- Intermediate VCAL

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	Personal Development	Literacy	External VET	Numeracy	Structured Workplace Learning
2	Literacy	Literacy		Numeracy	
3	Numeracy	Personal Development		Work Related skills	
4	Numeracy	Numeracy		Work Related skills	
5	Literacy	Work Related skills		Personal Development	
6	Personal Development	Work Related skills		Personal Development	

Year 12 Senior VCAL (full year)

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	Personal Development	Work related skills	External VET	Work related skills	Structured Workplace Learning
2	Personal Development	Numeracy		Numeracy	
3	Numeracy	Literacy		Numeracy	
4	Numeracy	Literacy		Literacy	
5	Work related skills	Personal Development		Literacy	
6	Literacy	Work related skills		Personal Development	

Vocational Education and Training (VET)

VET courses provide students with specific training in a variety of industries and recognition of their competency to undertake work tasks. The courses are more practical in structure than traditional VCE curriculum. The courses offered by schools range from Certificate II to Certificate III level under the Australian Qualification Framework, are nationally recognised and often delivered under the auspices (guidance) of a Registered Training Organisation, such as a TAFE. Completion of parts or all of a certificate program can contribute towards the successful completion of the VCE or VCAL. The level of contribution varies according to the hours undertaken in the program. Some can contribute to a student's Australian Tertiary Admissions Rank (ATAR). Most courses require a student to undertake structured workplace learning with an employer.

Internal VET

Note: Students must complete the first year of the program to be able to access the second year of the program. Most programs commence at Year 10.

- Sport and Recreation
- Music
- Business
- Community Services

External VET

VCAL students attend a Registered Training Organisation (RTO) such as a TAFE (generally Kangan Batman TAFE and Victorian University). Courses offered include: Allied Health, Aged Care, Animal Studies, Automotive, Beauty Services, Carpentry, Community Services, Electro-technology, Engineering, Equine, Hairdressing, Kitchen Operations, Logistics, Plumbing and Retail Cosmetics. Students must be able to independently travel to the Registered Training Organisation. These locations include: Broadmeadows, Sunshine and the city.

A requirement for all external VET courses is that students undertake a work placement relevant to their course. Students are required to organise their own work placement but can receive help from the Careers and Pathways team for letters requesting placements, etc.

School Based Apprenticeships

School Based Apprenticeships and Traineeships (SBATs) are a distinct pathway within Vocational Education and Training in Schools (VETiS). They are available to secondary school students over 15 years old and enrolled in the VCAL program.

An SBAT offers students the option of combining part-time employment, school and training. The SBAT is undertaken under a training contract with an employer, has a Training Plan signed by the school, is formally registered with the Victorian Registration and Qualifications Authority (VRQA) and leads to a nationally recognised qualification. An SBAT forms an integral part of the student's school learning program; students spend a minimum of one day of the normal school week in employment and/or structured training as an apprentice or trainee.

Like other VETiS offerings, the vocational training components of SBATs also contribute credit towards a senior secondary certificate. Many school based apprentices and trainees move on to a full-time contract with their employer after leaving school, while others choose to continue their education and training.

SBAT students must undertake at least seven hours of employment and six hours of training per week which may be averaged over three periods of four months in each year of the program.

Further information can be gained from the: **Careers and Pathways Leader: Wes Pfitzner**

Designing your VCE Program

When selecting VCE subjects it is important to select a balanced course that reflects your strengths, interests and future educational or career objectives, without narrowing your options. The following is a list of some subjects that may be complementary to your field of interest. **Whatever your field of interest you need to ensure you have checked the prerequisite at www.vtac.edu.au**

Field	Complementary Subjects	Field	Complementary Subjects
Architecture/ Building and related trades	English Accounting Business Management Applied Computing Design and Technology History Mathematics Media Studio Arts Visual Communication	Engineering and related trades	English Chemistry Computing Design and Technology English Language - Japanese Mathematical Methods Specialist Maths Physics
Arts – Humanities	English Geography History Legal Studies Language - Japanese Media Psychology	Health and Sport	Biology Chemistry Business Management English Food and Technology Health and Human Development Mathematics Physical Education Psychology Sport and Recreation
Business Hospitality Tourism and related trades	Accounting Business Management Applied Computing English Food Technology Geography Legal Studies Language - Japanese Mathematics	Information Technology	Accounting Business Management Applied Computing Design and Technology English Mathematics Media Physics
Arts and Design	Design and Technology Drama Media Music VET Studio Arts Visual Communication	Law	Accounting Business Management English History Legal Studies Mathematics
Education	English Geography History Language - Japanese Mathematics Drama Physical Education Psychology	Science and Medicine	Biology Chemistry Applied Computing Mathematics Physical Education Physics Psychology

Summary of VCE Subject Offerings and Key Contacts

Arts and Technology	Applied Computing	Andrew Shortell
	Drama	Janet Seviar
	Food Studies	Craig Day
	Media	Natasha Fella
	Music [VET]	Candeece Brown
	Product Design and Technology – Textiles	Lisa Wills
	Visual Communication	Carey O’Grady
	Studio Art	Belinda Brants
English	English	Branka Shallies
Health and Physical Education	Health and Human Development	Kate Hedin
	Outdoor and Environmental Education- Unit 3 and 4 only	Nick Matricardi
	Physical Education	John Lane
	Sport and Recreation [VET]	Josh Pritchard
Humanities	Accounting	Chris Fellows
	Australian Politics- Unit 3 and 4 only	Siobhan Shaw
	Business [VET] Unit 3 and 4 only	Ipek Hossain
	Business Management	Jane Cheeseman
	Community Services [VET] Unit 1 and 2 only	Wes Pfitzner
	Geography	Nick Loadman
	History	Sarah Heath
	Legal Studies	Max Lowry
Mathematics	General Mathematics – Unit 1 and 2 only	Sally Birchnell
	Mathematical Methods	Rachel Strawhorn
	Further Mathematics – Unit 3 and 4 only	Tracey Martin
	Specialist Mathematics	Karen Gregory
Languages	Japanese	Chiemi Sheppard
Science	Biology	Helen Myroforidis-Papadopoulos
	Chemistry	Melissa Norwood
	Physics	Meshak Bain
	Psychology	Claire Crawford
VCAL	Literacy	Julie Newton
	Numeracy	Marion McCasker
	Personal Development	Megan Fitzgerald
	Work Related Skills	Bo Kelly

Essential Education Items

Year 11 Education Items

This charge is used by the school to provide the following items to students: **\$252.00**

This is applied to enhance the educational experience of all Year 11 students and includes the provision of a diary, ID card, printing, the swimming and athletics carnivals. At Year 11 students select subjects to support their chosen pathway. The levy also supports choices and access to high quality classroom resources. An extra levy for electives that have demands for consumables and high level of activity will ensure a high quality program.

- Food Technology \$152.
- Studio Art \$82.
- Outdoor Education and Environment Studies \$452

Year 12 Education Items

This charge is used by the school to provide the following items to students: **\$277.00**

This is applied to enhance the educational experience of all Year 12 students and includes the provision of a diary, ID card, printing, the swimming and athletics carnivals. This levy also includes a graduation folder. At Year 12 students select subjects to support their chosen pathway. The levy also supports choices and access to high quality classroom resources. An extra levy for electives that have demands for consumables and high level of activity will ensure a high quality program.

- Food Technology \$152
- Studio Art \$82

Vocational Education and Training

For senior students undertaking a VET subject, there may be a materials charge. The program is heavily supported by government funding and all enrolment costs are covered. However, the materials charge is not covered and will need to be paid by the enrolling student.

VCE Accounting

Accounting involves modelling, forecasting and providing advice to stakeholders through the process of collecting, recording, reporting, analysing and interpreting financial and non-financial data and accounting information. This data and information is communicated to internal and external stakeholders and is used to inform decision-making within the business with a view to improving business performance. Accounting plays an integral role in the successful operation and management of businesses.

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.

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.

Unit 3: Financial accounting for a trading business

This unit focuses on financial accounting for a trading business owned by a sole proprietor, and highlights the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording.

Unit 4: Recording, reporting, budgeting and decision-making

In this unit students further develop their understanding of accounting for a trading business owned by a sole proprietor and the role of accounting as an information system. Students use the double entry system of recording financial data, and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Both manual methods and ICT are used to record and report.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%

Final examination – 50%

VCE Applied Computing

VCE Applied Computing focuses on the strategies and techniques for creating digital solutions to meet specific needs and to manage the threats to data, information and software security. The study examines the attributes of each component of an information system including people, processes, data and digital systems (hardware, software, networks), and how their interrelationships affect the types and quality of digital solutions.

Unit 1: Applied computing

In this unit students are introduced to the stages of the problem-solving methodology. Students focus on how data can be used within software tools such as databases and spreadsheets to create data visualisations, and the use of programming languages to develop working software solutions.

Unit 2: Applied computing

In this unit students focus on developing innovative solutions to needs or opportunities that they have identified, and propose strategies for reducing security risks to data and information in a networked environment.

Unit 3: Software development

In this unit students apply the problem-solving methodology to develop working software modules using a programming language. Students develop an understanding of the analysis, design and development stages of the problem-solving methodology.

Unit 4: Software development

In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions. They consider the risks to software and data during the software development process, as well as throughout the use of the software solution by an organisation.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 20%

School-assessed task – 30%

End-of-year examination – 50%

VCE Australian Politics

Note: Students can only choose this subject as a Unit 3 and 4 in either Year 11 or Year 12

VCE Australian Politics offers students the opportunity to engage with key political, social and economic issues, and to become informed citizens, voters and participants in their local, national and international communities. Australian Politics increases awareness of the nature of power and its influence. It allows students to become informed observers of, and active participants in, their political system. As students begin to think critically, they recognise that democratic ideals are often difficult to achieve in practice.

Australian Politics provides knowledge and skills that prepare students for formal study at the tertiary level or in vocational education and training settings. It also leads to opportunities in a range of careers, including academia, management and government. Students may also pursue occupations in corporate and private enterprises in fields such as journalism, education, law, research and politics.

Unit 3: Evaluating Australian democracy

This unit introduces students to the core principles and operation of the Australian political system. Area of Study 1 focuses on the values and principles that underpin the Australian political system. It introduces the key elements of liberal democracy and representative government and explores how

they operate in theory and practice. Area of Study 2 evaluates the Australian liberal democratic system further by comparing it with the political system of the United States of America (USA). Students analyse key aspects of the US political system, including the electoral process, the operation of the legislative branch and the protection of rights and freedoms. VCE Australian Politics is a contemporary study and focus must be on examples and case studies from within the last 10 years

Unit 4: Australian public policy

This unit focuses on Australian federal public policy formulation and implementation. During the formulation stage of many public policies, the government is subject to pressures from competing stakeholders and interests. As the government responds to these influences and pressures, policy proposals are often subject to change and compromise. Students investigate the complexities the government faces in putting public policy into operation. They also investigate Australian foreign policy and the key challenges facing contemporary Australian foreign policy. VCE Australian Politics is a contemporary study and focus must be on examples and case studies from within the last 10 years.

Assessment

Units 3 and 4 School-assessed coursework – 50%
End-of-year examination – 50%

VCE Biology

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. Despite the diversity of organisms and their many adaptations for survival in various environments, all life forms share a degree of relatedness and a common origin. The study explores the dynamic relationships between organisms and their interactions with the non-living environment.

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.

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 asexual and sexual

reproductive strategies, and consider the advantages and disadvantages of each.

Unit 3 – How do cells maintain life?

An understanding of the workings of the cell enables an appreciation of both the capabilities and the limitations of living organisms whether animal, plant, fungus or microorganism. In this unit students investigate the workings of the cell from several perspectives. They explore the importance of the plasma membrane 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 the binding of enzymes and substrates, the response of receptors to signaling molecules and reactions between antigens and antibodies.

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. Students examine change in life forms using evidence from palaeontology, biogeography, developmental biology and structural morphology.

Assessment

Unit 1 and 2 School-assessed coursework

Unit 3 and 4 School-assessed coursework – 40%
End-of-year examination – 60%

VCE Business Management

In contemporary Australian society there are a range of businesses managed by people who establish systems and processes to achieve a variety of objectives. These systems and processes are often drawn from historical experience and management theories designed to optimise the likelihood of achieving success.

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

Unit 2 – Establishing a business

This unit focuses on the establishment phase of a business' 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.

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 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.

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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%

Final examination – 50%

VCE Chemistry

Chemistry explores and explains the composition and behaviour of matter and the chemical processes that occur on Earth and beyond. Chemical models and theories are used to describe and explain known chemical reactions and processes. Chemistry underpins the production and development of energy, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes

Unit 1 – How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms.

Unit 2 – The chemistry of water

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 examine the polar nature of a water molecule and the intermolecular forces between water molecules. They explore the relationship between these bonding forces and the physical and chemical properties of water. In this context students investigate solubility,

concentration, pH and reactions in water including precipitation, acid-base and redox.

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. They investigate the combustion of fuels, including the energy transformations involved and the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions.

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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 40%
End-of-year examination – 60%

VCE Drama

In VCE Drama, students tell stories, explore ideas, make sense of their worlds and communicate meaning through the practice of performance-making. The study of drama enables students' individual and collective identities to be explored, expressed and validated. Students develop an ability to empathise through understanding and accepting diversity. Students draw from, and respond to, contexts and stories that reflect different cultures, genders, sexualities and abilities.

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.

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.

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.

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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 40%

End-of-year performance examination – 35%

End-of-year written examination – 25%

VCE English

The VCE course focuses on how English language is used to create meaning in written, spoken and multimodal texts of varying complexity. Literary texts selected for study are drawn from the past and present, from Australia and from other cultures. Other texts are selected for analysis and presentation of argument. The course aims to develop literate individuals capable of critical and creative thinking, aesthetic appreciation and creativity. This study also develops students' ability to create and analyse texts, moving from interpretation to reflection and critical analysis.

Units 1 and 2

In Unit 1 students read and respond to texts analytically and creatively. In Unit 2 students compare the presentation of ideas, issues and themes in texts. In both Units 1 and 2 students analyse arguments and the use of persuasive language in texts and create their own texts intended to position audiences. They also develop their skills in creating written, spoken and multimodal texts.

Reading and creating texts

In this area of study students explore how meaning is created in two texts. They identify, discuss and analyse decisions authors have made. They explore how authors use structures, conventions and language to represent characters, settings, events, explore themes and build the world of the text for the reader. Students develop the ability to respond to texts in written and spoken and/or multimodal form. They develop analytical responses dealing with the ways in which texts convey meaning on key issues. They also develop creative responses to texts, exploring how purpose and audience affect the choices they make as writers in developing ideas and planning work.

Reading and comparing texts

In this area of study students explore how comparing texts can provide a deeper understanding of ideas, issues and themes. They

investigate how the readers' understanding of one text is broadened and deepened when considered in relation to another text. Students produce a written comparison of the selected texts, discussing important similarities and differences, and exploring how the text deals with similar or related ideas, issues or themes from different perspectives.

Analysing and presenting argument

In this area of study students focus on the analysis and construction of texts that attempt to influence an audience. Students read a range of texts that attempt to position audiences in various ways. They explore the use of language for persuasive effect and the structure and presentation of an argument. Students practice written analysis of the presentation of argument and the uses of language to position the intended audience. They craft and present reasoned, structured and supported arguments and experiment with language to position audiences.

Units 3 and 4

In Unit 3 students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts. In Unit 4 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.

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. In identifying and analysing explicit and implied ideas and values in texts, students examine the ways in which readers are invited to respond to texts. They develop and justify their own interpretations of texts. Students prepare sustained analytical interpretations and creative responses to selected texts.

Analysing argument

In this area of study students analyse and compare the use of argument and language in texts that debate a topical issue. Students read and view media texts in a variety of forms, including print, non-print and multimodal, and develop their understanding of the way in which language and argument complement one another in positioning the reader. Students develop written and spoken critical analyses of the use of argument and language in written, spoken and/ or multimodal forms, including analysis of the quality of the reasoning presented and the use of features to position audiences. They compare different written texts presenting argument on similar ideas or issues, considering the ways authors use language to express arguments.

Reading and comparing texts

In this area of study students explore the meaningful connections between two texts. They analyse texts, including the interplay between character and setting, voice and structure, and how ideas, issues and themes are conveyed. By comparing texts, they gain a deeper

understanding of the ideas, issues and themes that reflect the world and human experiences. Students produce a written analysis comparing selected texts, discussing important similarities and differences and exploring how the texts deal with similar or related ideas, issues or themes from different perspectives to reflect particular values.

Presenting argument

In this area of study students build their understanding of both analysis and construction of texts that attempt to influence audiences. They use their knowledge of argument and persuasive language as a basis for the development of their own persuasive texts in relation to a topical issue. This area of study focuses on the construction of persuasive texts. Students use their understanding of argument and language as the basis for the development of an oral presentation of their points of view.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%
End-of-year examination – 50%

VCE Food Studies

The food sector is dynamic, diverse and creative. Innovative food products are continually being introduced in response to society's changing social, economic and environmental needs. Technology plays an important role in food product development and the way food is produced, processed, packaged and marketed. An understanding of the links between the history of food, food processing, nutrition, health and wellbeing is a high priority in contemporary society. Food Studies challenges students to make these links and provides them with the knowledge and skills to make informed choices when selecting, storing, purchasing, preparing and consuming foods.

Unit 1 – Food origins

Students explore the origins and cultural roles of food, from early civilizations 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.

Unit 2 – Food makers

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. Students apply an inquiry approach, with emphasis on the ever changing and dynamic nature of our food industries and their ongoing importance to Australia's economy. Students will then consider the influences on the effective provision and preparation of food in the home. Their practical skills are extended through designing and adapting recipes, encompassing a range of dietary requirements.

Unit 3 – Food in daily life

In this unit students explore 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. They also investigate the functional properties of food and the changes that occur during food preparation and cooking. They analyse the scientific rationale behind food selection models including the Australian Dietary Guidelines. Students develop knowledge of the role of media, technology and advertising as influences on the formation of food habits and beliefs, and investigate the principles of encouraging healthy food patterns in children.

Unit 4 – Food issues, challenges and futures

In this unit students examine debates about global and Australian food systems. Firstly, students explore issues about the environment, ecology, ethics, farming practices, the development and application of technologies, the challenges of food security, food safety and food wastage, and the use and management of water and land. Students finish the unit by focusing 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. Students consider how to assess information and draw evidence-based conclusions. They apply this methodology to navigate contemporary food fads, trends and diets.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 60%
End-of-year examination – 40%

VCE Geography

Geography is the study of where geographical features are located, why they are there, what makes one place different from another and how and why these differences matter. It looks at the interaction between human activities and natural processes and develops understanding of the distribution of human and natural phenomena on or near the surface of the Earth from a spatial perspective.

Unit 1 – Hazards and disasters

In this unit students undertake an overview of hazards before investigating two contrasting types of hazards and people's responses to them. Hazards include a wide range of situations including those within local areas, such as fast moving traffic or the likelihood of coastal erosion, to regional and global hazards such as drought and infectious disease. Students examine the processes involved with hazards and hazard events, including their causes and impacts, human responses to hazard events and interconnections between human activities and natural phenomena. Students undertake fieldwork in this unit and report on fieldwork using the structure provided.

Unit 2 – Tourism

In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments. The study of tourism at local, regional and global scales emphasises the interconnection within and between places. There is an interconnection between places tourists originate from and their destinations through the development of communication and transport infrastructure, employment, together with cultural preservation and acculturation. The

growth of tourism requires careful management to ensure environmentally sustainable and economically viable tourism. Students undertake fieldwork in this unit and report on fieldwork using the structure provided.

Unit 3 – Changing the land

This unit focuses on two investigations of geographical change: change to land cover and change to land use. Students investigate three major processes that are changing land cover in many regions of the world: deforestation, desertification, and melting glaciers and ice sheets. Students investigate the distribution and causes of these three processes. At a local scale students investigate land use change using appropriate fieldwork techniques and secondary sources. They investigate the scale of change, the reasons for change and the impacts of change. Students undertake fieldwork and produce a fieldwork report using the structure provided.

Unit 4 – Human population – trends and issues

In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. Population movements such as voluntary and forced movements over long or short terms add further complexity to population structures and to economic, social, political and environmental conditions.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%

End-of-year examination – 50%

VCE Health and Human Development

VCE Health and Human Development provides students with broad understandings of health and wellbeing that reach far beyond the individual. Students learn how important health and wellbeing is to themselves and to families, communities, nations and global society. Students explore the complex interplay of biological, sociocultural and environmental factors that support and improve health and wellbeing and those that put it at risk. The study provides opportunities for students to view health and wellbeing, and development, holistically – across the lifespan and the globe, and through a lens of social equity and justice.

Unit 1 – Health and development of Australia’s youth

This unit take the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. Students identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs and practices, including 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.

Unit 2 – Individual human development and health issues

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. Students enquire into

the Australian healthcare system and extend their capacity to access and analyse health information. 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.

Unit 3 – Australia’s health

This unit explores the dynamic and subjective nature of Australia’s health and wellbeing and the benefits of optimal health on an individual and global scale. Students enquire into health being used as an individual and collective resource and research the fundamental conditions required for health improvement as listed by the World Health Organisation (WHO). They use this knowledge as a background to analyse data in interpreting variations in the health status of Australians.

Unit 4 – Global health and human development

This unit focuses on global health and human development and explores the interrelationship between health, human development and sustainability. Students will investigate health status and burden of disease in different countries through data analysis, specifically exploring factors that contribute to health inequalities. They will consider health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and mass movement of people (migration).

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%
End-of-year examination - 50%

VCE History

The study of VCE History assists students to understand themselves, others and their world, and broadens their perspective by examining people, groups, events, ideas and movements. Through studying VCE History, students develop social, political, economic and cultural understanding. They also explore continuity and change: the world is not as it has always been, and it will be subject to change in the future. In this sense, history is relevant to contemporary issues. It fosters an understanding of human agency and informs decision making in the present.

The study of history fosters the ability to ask searching questions, to engage in independent research, and to construct arguments about the past based on evidence. Historical comprehension enables a source to be understood in relation to its context; that is, students make links between the source and the world in which it was produced.

Unit 1 – 1918-1939

In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars. They study the events, ideologies and movements of the period after World War I including the post-war peace treaties, the emergence of extremism and the causes of World War II. In addition, students investigate social life and cultural expression in the interwar period and their relation to technological, political and economic changes of the era.

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 20th Century. They investigate the causes and

consequences of the Cold War -- the competing ideologies that underpinned events, the effects on people, groups and nations, and the reasons for the end of this sustained period of ideological conflict. They also study the ways in which traditional ideas, values and political systems were challenged and changed by individuals and groups in a range of contexts.

Unit 3 and 4 Revolutions

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society.

The French Revolution

The revolution is covered from 1774 and the growing signs of trouble in the Ancien Régime to 1795 (Year III of the Republic), just after the end of the Terror.

The Russian Revolution

This unit looks at the causes of the downfall of the archaic Romanov regime, one of the world's last remaining absolute monarchies, and the consequences that resulted from the revolutions of 1917.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%
End-of-year examination - 50%

VCE Japanese

The study of Japanese contributes to student 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.

Unit 1

In this unit students develop an understanding of the language and culture/s of Japanese-speaking communities through the study of three or more topics. Students access and share useful information on the topics and subtopics through Japanese and consolidate and extend vocabulary and grammar knowledge and language skills. They focus on analysing cultural products or practices including visual, spoken or written texts.

Unit 2

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 Japanese and consolidate and extend vocabulary, grammar knowledge and language skills.

Unit 3

In this unit students investigate the way Japanese speakers interpret and express ideas, and negotiate and persuade in Japanese through the study of three or more topics. Students interpret information, inform others, and reflect upon and develop persuasive arguments. They access and share useful information on the topics through Japanese, and consolidate and extend vocabulary and grammar knowledge and language skills.

Unit 4

In this unit students investigate aspects of culture through the study of two or more topics. Students build on their knowledge of Japanese-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 Japanese.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%
End-of-year examination (oral component and written component) - 50%

VCE Legal Studies

In contemporary Australian society there is a range of complex laws that exist to protect the rights of individuals and to achieve social cohesion. These laws are made by bodies such as parliament and the courts and are upheld by a number of institutions and processes within the legal system. Members of society interact with the laws and the legal system in many aspects of their lives and can influence law makers.

Unit 1 – Guilt and liability

In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. 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.

Unit 2 – Sanctions, remedies and rights

This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness. 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.

Unit 3 – Rights and justice

In this unit students examine the methods and institutions in the justice system and consider their appropriateness in determining criminal cases and resolving civil disputes. Students consider the Magistrates' Court, County Court and Supreme Court within the Victorian court hierarchy, as well as other Victorian legal institutions and bodies available to assist with cases. Students explore matters such as the rights available to an accused and to victims in the criminal justice system, the roles of the judge, jury, legal practitioners and the parties, and the ability of sanctions and remedies to achieve their purposes.

Unit 4 – The people and the law

In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments, and protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationship between the two in lawmaking, and consider the roles of the individual, the media and law reform bodies in influencing law reform.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework - 50%
End-of-year examination - 50%

VCE Mathematics

Mathematics is the study of function and pattern in number, logic, space and structure, and of randomness, chance, variability and uncertainty in data and events.

This study is designed to provide access to worthwhile and challenging mathematical learning. This study enables students to develop mathematical concepts, knowledge and skills, and to apply mathematics to analyse, investigate and model a variety of contexts and solve practical and theoretical problems. Students also learn to use technology effectively as a tool for working mathematically.

A student may count a maximum of two Unit 3 and 4 Mathematics subject marks in their top four for the purpose of calculating their ATAR. A third Unit 3 and 4 Mathematics subject can only be counted as their fifth or sixth subject.

Calculators and Devices

A CAS calculator is required for all VCE Mathematics subjects (retained from Year 10) as well as a device (laptop, iPad or similar).

Entry Requirements for Year 11 General Maths

- The student should have done Mathematics at Year 10 and achieved the expected Victorian Curriculum standard of 9.5 and have an S (satisfactory) for both Semester 1 and Semester 2.
- It is not recommended that any student attempt Year 11 General Maths if they were graded below the expected standard in Maths at Year 10 because they will not be adequately prepared to succeed.

Entry Requirements for Year 11 Maths Methods and Specialist Maths

- Students wishing to undertake a Maths Methods Unit 1 will sit an entrance exam in Year 10 to determine their eligibility for VCE Maths Methods. This will also determine their eligibility for Specialist Maths if they wish to do this subject at Year 11.
- The entrance exam will be undertaken by all Year 10 Advanced Mathematics students as well as any other Year 10 maths student wishing to undertake VCE Maths Methods
- The entrance exam will be held in Term 2 Week 10.
- The results from the entrance exam (after cross marking) will be made available to students during **Term 3 Week 1** prior to the subject selection due date.

Course Combinations

The following table gives possible combinations of units for students who choose to continue with Mathematics at Units 3 and 4 level.

Year 10	Year 11	Year 12
	Specialist Maths	Specialist Maths
Advanced Mathematics	Maths Methods	Maths Methods
Standard Mathematics	General Maths	Further Maths

Subjects

Units 1 and 2 (year 11)

- General Mathematics
- Mathematical Methods
- Specialist Mathematics

Units 3 and 4 (year 12)

- Further Mathematics
- Mathematical Methods
- Specialist Mathematics

General Mathematics Units 1 and 2

This subject provides a real life mathematics based course for a broad range of students. The six possible areas of study for Units 1 and 2 are algebra, financial maths, matrices (discrete mathematics), geometry, measurement and trigonometry, graphs of linear and non-linear relations, and statistics (data analysis).

Mathematical Methods Units 1 and 2

This subject provides a course for able and interested students of mathematics who enjoy the challenges of abstract concepts and applying these in both standard and unfamiliar contexts. The areas of study are functions and graphs, algebra, calculus, and probability and statistics.

Specialist Mathematics Units 1 and 2

This subject provides a course for very able and interested students of mathematics who enjoy the challenges of abstract concepts and applying these in both standard and unfamiliar contexts. The areas of study are algebra and structure, arithmetic and number, geometry, measurement and trigonometry, graphs of linear and non-linear relations, discrete mathematics and statistics.

Assessment

Unit 1 and 2 School-assessed coursework

Units 3 and 4 Subjects Further Mathematics Units 3 and 4

This is a real life mathematics course designed to be widely accessible for a broad range of

students. The content provides general preparation for employment or further study, in particular where data analysis and/or financial literacy are important. The areas of study consist of the core topics of data analysis (statistics), recursion and financial modelling, and two modules selected from: matrices (discrete mathematics), networks and decision mathematics, geometry and measurement, or graphs and relations. Students need to complete either Unit 1 and 2 General Mathematics or Unit 1 and 2 Mathematical Methods to have the skills needed to successfully complete this subject.

Assessment

School-assessed coursework (SACs) – 34%
Examination 1 – 33% Examination 2 – 33%

Mathematical Methods Units 3 and 4

This course extends the content studied in Units 1 and 2, preparing students for background or further study in, for example, science, economics, computer/technology and medicine. The areas of study are functions and graphs, algebra, calculus, and probability and statistics. Students need to have successfully completed Units 1 and 2 Mathematical Methods in order to undertake Units 3 and 4.

Assessment

School-assessed coursework (SACs) – 34%
Examination 1 – 22% Examination 2 – 44%

Specialist Mathematics Units 3 and 4

This subject extends the content studied in Units 1 and 2. The areas of study are functions and graphs, algebra, calculus, vectors, mechanics, and probability and statistics. Students need to have successfully completed Units 1 and 2 Specialist Mathematics in order to undertake Units 3 and 4.

Assessment

School-assessed coursework (SACs) – 34%
Examination 1 – 22% Examination 2 – 44%

VCE Media

Stories in all their forms are at the heart of the media and its relationship with audiences. Through stories narratives are constructed that engage, and are read, by audiences. Representations of ideas, realities and imagination are constructed and deconstructed, remixed and reimagined with ever increasing technological sophistication, ease and speed to engage audiences.

Unit 1 – Media forms, representations and Australian stories

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.

Unit 2 – Narrative across media forms

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.

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.

Unit 4 – Media production and issues in the media

In this unit students focus on the production and postproduction 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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 20%
School-assessed task – 40% Exam – 40%

VCE Outdoor and Environmental Studies

Note: This subject is only offered to Year 11 students

VCE Outdoor and Environmental Studies is concerned with the ways humans interact with and relate to outdoor environments. 'Outdoor environments' include environments that have minimum influence from humans, as well as those environments that have been subject to different levels of human intervention. The study enables students to make critically informed comment on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts.

Unit 3 - Relationships with outdoor environments

In this unit students focus on 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 will consider a number of factors that influence relationships with outdoor environments and 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.

Unit 4 - Sustainable outdoor relationships

In this unit students are encouraged to explore the sustainable use and management of outdoor environments. They will 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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework - 50%
End-of-year examination - 50%

VCE Physical Education

VCE Physical Education explores the complex interrelationships between anatomical, biomechanical, physiological and skill acquisition principles to understand their role in producing and refining movement. It examines behavioural, psychological, environmental and sociocultural influences on performance and participation in physical activity. The assimilation of theoretical understanding and practice is central to the study of VCE Physical Education.

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.

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. 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.

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.

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 depend on the ability of the individual and/or coach to gain, apply and evaluate knowledge and understanding of training.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 50%
End-of-year examination - 50%

VCE Physics

Physics seeks to understand and explain the physical world. It examines models and ideas used to make sense of the world, which are sometimes challenged as new knowledge develops. By looking at the way matter and energy interact through observations, measurements and experiments, physicists gain a better understanding of the underlying laws of nature.

Unit 1 – What ideas explain the physical world?

In this unit students explore how physics explains phenomena which are not always visible to the unaided human eye. 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.

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. 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.

Unit 3 – How do fields explain motions 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. 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.

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

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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 40%
End-of-year examination – 60%

VCE Product Design and Technology- Textiles

Product design is a response to changing needs and to improve quality of life by designing creative, innovative and sustainable products. Product design is enhanced through knowledge of social, technological, economic, historical, ethical, legal, environmental and cultural factors. These factors influence the aesthetics, form and function of products.

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 redevelopment 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. |

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.

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.

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.

Assessment

Unit 1 and 2 School-assessed coursework

Unit 3 and 4 School-assessed coursework -- 20%
School-assessed task -- 50%

End-of-year examination -- 30%

VCE Psychology

Psychology is a broad discipline that incorporates both the scientific study of human behaviour through biological, psychological and social perspectives and the systematic application of this knowledge to personal and social circumstances in everyday life. VCE Psychology enables students to explore how people think, feel and behave through the use of a biopsychosocial approach. The study explores the connection between the brain and behaviour by focusing on the interplay between genetics and environment, individual differences and group dynamics, sensory perception and awareness, memory and learning, and mental health.

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.

Unit 2 – How do external factors influence behaviour and mental process?

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.

Unit 3 – How does experience affect behaviour and mental processes?

The nervous system influences behaviour and the way people experience the world. 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.

Unit 4 – How is wellbeing developed and maintained?

Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. 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.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 40%
End-of-year examination – 60%

VCE Studio Arts

The creative nature of visual art provides individuals with the opportunity for personal growth, the expression of ideas and a process for examining identity. Exhibitions of artworks offer insight into the diverse interpretations of life and experiences of artists. VCE Studio Arts encourages and supports students to recognise their individual potential as artists and develop their understanding and development of art making.

Unit 1 – Studio inspiration and techniques

This unit focuses on developing an individual understanding of the stages of studio practice and 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. S

Unit 2 – Studio exploration and concepts

This unit focuses 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. 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 of art history.

Unit 3 – Studio practices and processes

This unit focuses on the implementation of an individual studio process leading to the production of a range of potential directions. Students 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.

Unit 4 – Studio practice and art industry contexts

This unit focuses on the planning, production and evaluation required to develop, refine and present artworks. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions to produce at least two finished artworks. Once the artworks have been made, students provide an evaluation about the cohesive relationship between the artworks. This unit also investigates aspects of artists' involvement in the art industry.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework - 10%

School-assessed task - 60%

End-of-year examination - 30%

VCE Visual Communication Design

Visual communicators in fields such as architecture, engineering, graphic design, multimedia, industrial design, advertising, fashion and interior design all depend on visual imagery to develop and communicate ideas and information. This subject uses text and images in imaginative and original ways, to communicate a message to an audience. This study is designed to teach an understanding of the application and function of freehand drawing, drawing conventions such as technical drawing, computer aided design and design elements and principles.

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 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.

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.

Unit 3 – Visual communication design practices

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 and materials, and the application of design elements and design principles, can create effective visual communications for specific audiences and purposes.

Unit 4 – Visual communication design development, evaluation and presentation

The focus of this unit is on 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 communication needs. Having completed their brief and generated ideas in Unit 3, students continue the design process by developing and refining concepts for each communication need stated in the brief.

Assessment

Units 1 and 2 School-assessed coursework

Units 3 and 4 School-assessed coursework – 25%
School-assessed task – 40%

End-of-year examination – 35%

VCE VET Business

Note: This program is only available in Unit 3 and 4 in 2021.

This program provides students with the opportunity to complete Certificate II Business (VET) in year 10 over two semesters. The course can then be continued in year 11 to receive a statement of attainment towards Certificate III. Students who complete both years of this two-year program in VET business will develop a broad range of skills and knowledge to work in a variety of work contexts using discretion, judgement and relevant theoretical knowledge. It is great practical training if you are interested in working in a business capacity.

Units of Competency

- Deliver and monitor a service to customers
- Organise personal work priorities and development
- Recommend products and services
- Design and produce business documents
- Organise workplace information

Assessment

Unit 3 and 4 School-assessed coursework -- 66%
End-of-year examination -- 34%

VCE VET Community Services

Note this subject is only available at Unit 1 and 2 level in 2021.

The Certificate II in Community Services qualification allows students to develop the skills and knowledge to undertake community services work such as providing support and assistance to a variety of clients including childcare, the elderly and the disability sector.

This program is perfect for students looking to move into a range of areas of the community services sector and is the perfect building block

for developing a sound educational base specific to the fastest growing sector in Australia.

Units of Competency

- Working with diverse people
- Being an effective volunteer
- Participate in workplace health and safety
- Communicate in the workplace
- Work with diverse people

Assessment

Unit 1 and 2 School-assessed coursework

VCE VET Music Industry- Performance

This subject provides students with the opportunity to apply a broad range of knowledge and skills in varied work contexts in the music industry. Units 1 and 2 include composing simple songs or musical pieces and preparing for performances. Units 3 and 4 offer scored assessment and include units such as developing improvisation skills, applying knowledge of genre to music making and performing music as part of a group or as a soloist.

Units of Competency

Unit 1 and 2

- Contribute to health and safety of self and others
- Implement copyright arrangements
- Work effectively in the music industry
- Compose simple songs or musical pieces

- Apply knowledge of style and genre to music industry
- Develop ensemble skills for playing or singing music

Unit 3 and 4

- Develop technical skills in performance
- Prepare for performances
- Develop improvisation skills
- Develop and maintain stagecraft skills
- Perform music as part of a group – or --
Perform music as a soloist

Assessment

Unit 1 and 2 School-assessed coursework

Unit 3 and 4 School-assessed coursework -- 50%

End-of-year examination -- 50%

VCE VET Sport and Recreation

Note: To undertake Year 2 of this course, current Year 10 students must have completed Year 1 in 2020.

The VCE Sport and Recreation program provides students with the opportunity to undertake sport activity studies that enable them to become multi-skilled, thereby enhancing entry to employment and further training across many sectors in the sport and recreation industry. The course requires students to undertake a number of core competencies, stream competencies plus a range of electives which are intended to enhance student skills and knowledge in more specialised areas of sporting activity.

There are significant charges for this course. All students have to pay an annual materials fee of \$100 to participate in this program. This cost is directly related to certificate completion including resource booklets and training in First Aid. There may be other costs incurred for excursions and gym sessions.

Units of Competency

Unit 1 and 2

- Organise personal work priorities and development
- Participate in workplace health and safety

- Conduct non-instructional sport, fitness or recreation sessions
- Provide First Aid
- Use social media tools for collaboration and engagement
- Book athlete travel and accommodation
- Participate in conditioning for sport
- Provide quality service
- Respond to emergency situations
- Conduct sport, fitness or recreation events

Unit 3 and 4

- Participate in WHS hazard identification, risk assessment and risk control
- Facilitate groups
- Plan and conduct programs
- Educate user groups
- Provide equipment for activities
- Conduct sport coaching sessions with foundation level participants

Assessment

Unit 1 and 2 School-assessed coursework

Unit 3 and 4 School-assessed coursework --66%

End-of-year examination -- 34%