



# **SENIOR PATHWAYS HANDBOOK 2026**



College

Values

### RESPECT

Treating yourself, others, and the school environment with integrity and honesty; Embracing diversity; Treating others with kindness and compassion; Engaging in our community with empathy, pride, and self-awareness.

### EXCELLENCE

Achieving success within a culture of high expectations; Promoting an aspirational and creative culture that celebrates success; Empowering each other to learn and grow; Being a motivated, life-long learner and critical global citizen

### RESPONSIBILITY

Taking ownership of your personal and educational growth; Acting with honesty and resilience; Collaborating to create a safe, effective, and respectful school environment; Taking initiative in, and ownership of, all learning, and encouraging others to do the same.

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# HANDBOOK ACRONYMS

|         |  |
|---------|--|
| ATAR    | Australian Tertiary Admission Rank                     |
| CAP     | Career Action Plan (formerly MIP)                      |
| GAT     | General Achievement Test                               |
| HES     | Higher Education Study                                 |
| LOTE    | Languages other than English                           |
| MSV     | Monbulk Student Voice                                  |
| SAC     | School-assessed Coursework                             |
| SAT     | School-assessed Task                                   |
| TAFE    | Tertiary Entrance Requirements                         |
| VCAA    | Victorian Curriculum and Assessment Authority          |
| VCE     | Victorian Certificate of Education                     |
| VCE VET | VCAA – managed VET programs comprised of VCE Vet units |
| VCE VM  | Victorian Certificate of Education – Vocational Major  |
| VET     | Vocational Education and Training                      |
| VTAC    | Victorian Tertiary Admissions Centre                   |



# INTRODUCTION

Monbulk College was established in 1962. Set in eight hectares of native gardens and bush land, Monbulk College is a Year 7-12 co-educational school drawing its students from the communities of the Dandenong Ranges.

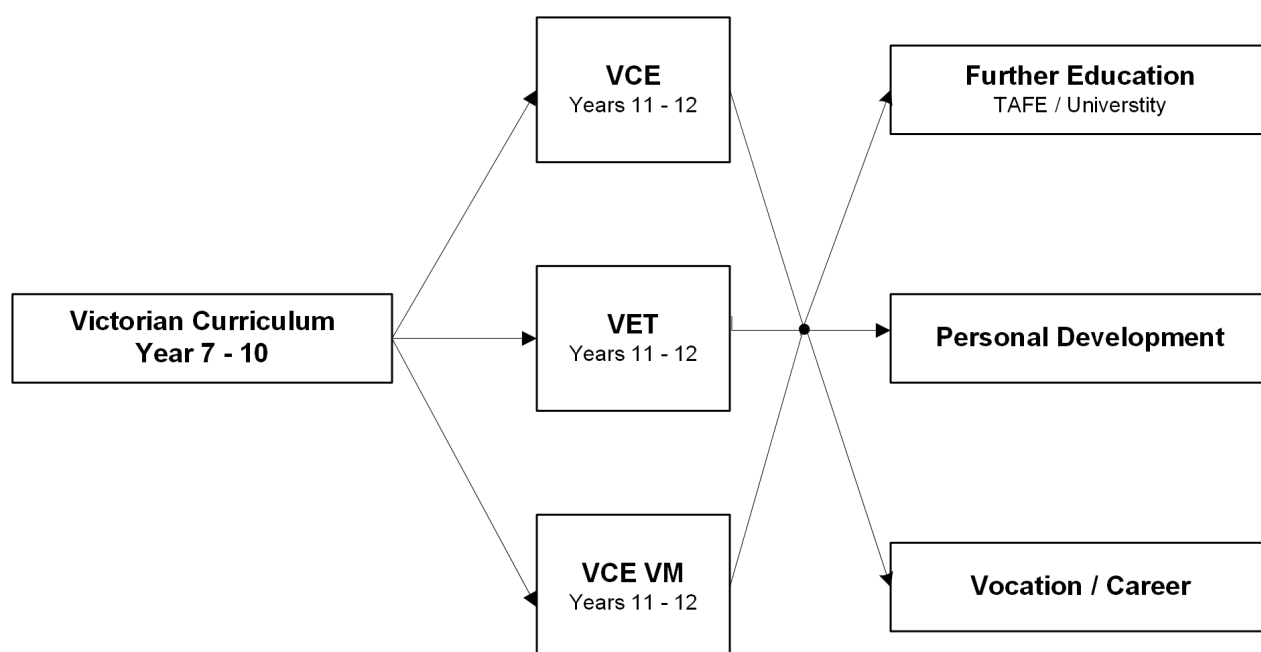
The College offers its post-compulsory students a wide range of services that include:

- A comprehensive curriculum within the Victorian Certificate of Education (VCE), Vocational Education and Training (VET) and the new Victorian Certificate of Education Vocational Major (VCE VM).
- Access to School Based Apprenticeships and Traineeships (SBATs).
- Access to excellent facilities and equipment, including the College library, sports stadium, theatre, arts and technology complexes, and VCE study rooms.
- Opportunities to enhance their learning through participation in College leadership, co-curricular and acceleration programs.
- Individual support and attention through its career/pathways programs, as well as its student welfare, learning support, and year level programs.
- 

## SENIOR PATHWAYS AT MONBULK COLLEGE

Senior Pathways refers to the options available to senior students as they move through Years 10, 11 and 12. While Year 10 students are still completing the compulsory Victorian Curriculum, they are able to select a range of electives and have the opportunity to discuss their future aspirations in individual pathways interviews.

Monbulk College provides a variety of pathway options to cater for the diverse needs of its students. At Years 11 and 12, students have the option of completing the Victorian Certificate of Education (VCE), Victorian Certificate of Education Vocational Major (VCE VM) or an unscored VCE and apprenticeship or traineeship with an SBAT. Students are supported to select individual pathways that will lead to their preferred life goals in vocation, personal development or further education.



From 1 January 2010, all Victorian students must complete Year 10. After Year 10 and until the age of 17 students must be:

- in school, or registered for home schooling, OR
- in approved education or training (e.g. TAFE, traineeship, apprenticeship), OR
- in full-time paid employment, OR
- in a combination of 1, 2 and/or 3
- for a minimum of 25 hours per week.

A wide range of studies are offered to meet the diverse interests and ambitions of students. Post-compulsory education links schooling, further study and the world of work, to cater for all students. It offers students the opportunity to shape their program of studies to suit their capabilities, interests and goals.

All teachers at Monbulk College are committed to assisting students develop their skills and potential. Each student is provided with careful advice on course selection, and the College careers and welfare staff assist students with specific concerns about their studies and future pathways. Parents are informed about their student's course options at information sessions and through the College News. Parents are welcome to discuss their student's progress with the Year Level Team Leader, Careers Manager or Welfare Coordinator.

The College offers a wide range of programs to meet the diverse needs of students, including VCE units in The Arts, English, Health & Physical Education, Humanities, Languages other than English (LOTE), Mathematics, Science, and Technology, as well as the College VET programs, VCE VM and SBATs.

Active student leadership is encouraged by participation in the College's sport, debating, music and drama programs, through student involvement in the Student Representative body, Monbulk Student Voice (MSV) and the College Council, and by performing a leadership role such as College, Sports or Technology Captains.

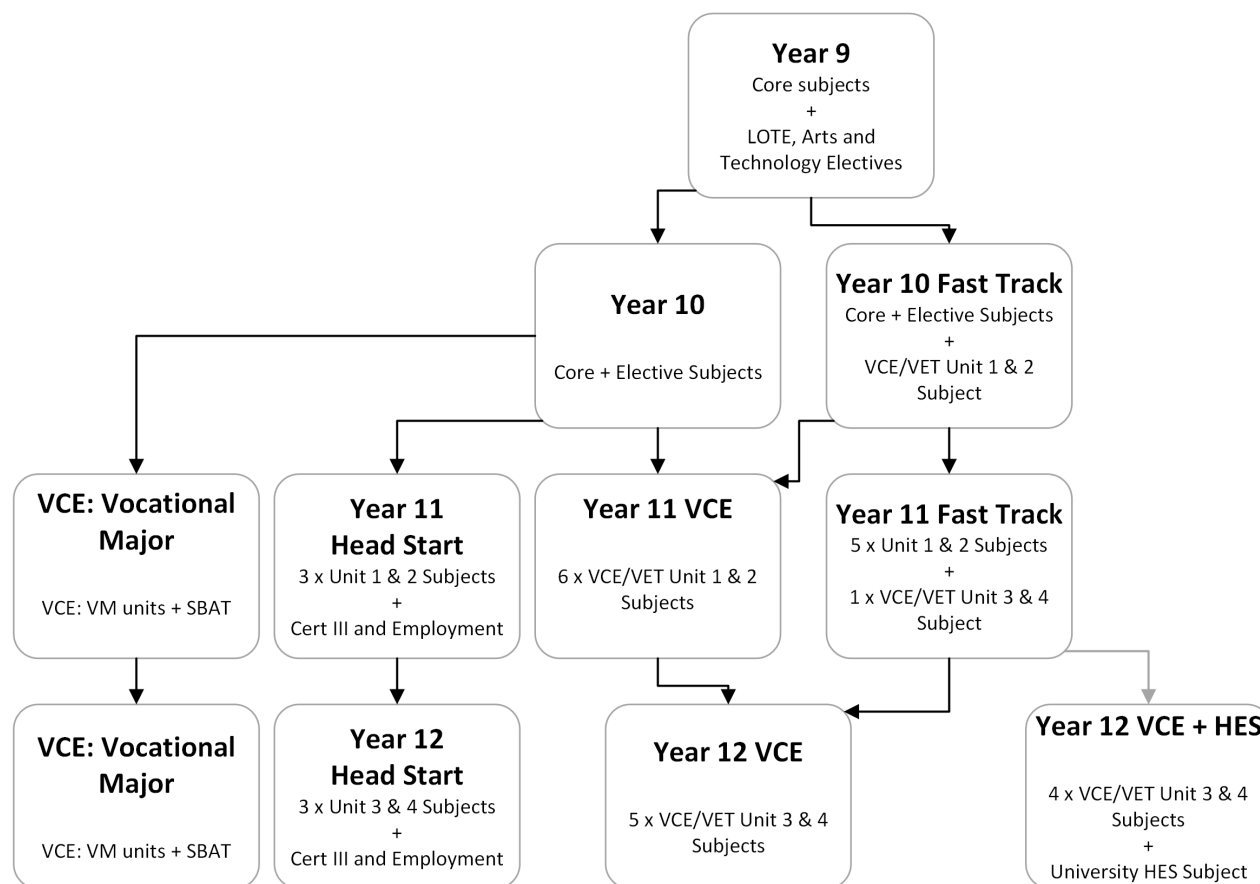
Getting the most out of your senior years and preparing for the future requires balance in your activities. Your academic achievements are important, but they must be balanced with other facets of your life. Similarly, part-time work and sporting activities must not be allowed to overshadow study time.

An important aspect to success in VCE is communication between students, teachers and parents. College staff are available to support you and to help you make the most of your senior years.

|                              |                  |
|------------------------------|------------------|
| Year 12 Team Leader:         | Thomas Mahoney   |
| Year 11 Team Leader:         | Claire Mosley    |
| Year 10 Team Leader:         | Rebecca Noone    |
| Applied Learning Leader:     | Joel Guye        |
| Careers Manager:             | Michelle Graco   |
| Curriculum Leader:           | Joel Guye        |
| Director of Senior School:   | Glenn Rockelmann |
| Assistant Principal:         | Kevin Osborne    |
| Student Welfare Coordinator: | JP Giuliani      |

# PATHWAYS PLANNING PROCESS – FROM YEAR 9

At Monbulk College, we plan pathways with students from Year 9 onwards. This is an ongoing process with students which includes careers education, Morrisby careers profiling, and information sessions about pathways and subject selection. This process supports students to make informed decisions about their senior courses and the path they would like to follow through the College and beyond.



Note: Students may transfer from a full VCE program into a vocational pathway at the end of a year – midyear transfers may be possible but will depend on individual circumstances. Any considerations for a change of subject and/or pathway should be discussed with Year Level Team Leader and the Careers Manager. Changes between a VCE program and vocational pathway can have implications on the timeline for completing the VCE and VCE VM.

## YEAR 10

The Year 10 curriculum offers a diverse range of subjects, allowing students to undertake a general course of study or begin to specialise and gain valuable knowledge for their VCE studies. Students may elect to study:

- Core Year 10 Curriculum
- Year 10 Curriculum, including a VCE or VCE VET Unit
- Vocational Pathway Subjects

The Year 10 curriculum consists of a combination of core and elective units, designed to cover the eight Learning Areas. Students at this level complete six units per semester. Each unit is studied in greater depth, over four periods each week.

English and Mathematics are CORE subjects and must be studied in Semester 1 and 2. Students may complete up to four other subjects across the Learning Areas each semester, for a total of up to 8 per year. With the exception of Languages, which is studied in both semesters. Students should consider a breadth of studies and not undertake more than two units in any one area.

As a College, we encourage students to consider undertaking a VCE Unit as part of their Year 10 studies as this provides extension, challenge and an introduction into the requirements of VCE Units prior to their full VCE study in Year 11 and 12.

Students can express interest in all other VCE Unit 1 & 2 subjects and will be allocated a place based on pre-requisite requirements and availability (preference is given to Year 11 students).

The Year 10 subject selection process involves pathways sessions for students, parent information sessions, pathways planning forms and pathways interviews in Term 3 each year.

# VCE: VICTORIAN CERTIFICATE OF EDUCATION

Students select a program of studies from the units offered by the College. Some students may choose to include vocational studies (VET) in their program.

Most studies have 4 units, and each unit lasts one semester or half-year. Units 1 and 2 are usually taken in Year 11, while Units 3 and 4, which are more advanced, are usually taken in Year 12. However, some students 'fast track' and study a Unit 1 and 2 subject in Year 10 and a Unit 3 and 4 subject in Year 11. It is important to note that while you may take Units 1 and 2 as single units i.e. just Unit 1 or 2 of a study, you must take Units 3 and 4 as a sequence.

## Satisfactory Completion of the VCE

To be awarded the VCE a student must satisfactorily complete a minimum of **16 Units**, which must include:

3 of the 4 Units from the 'English Group' that includes English or Literature Units 1 to 4

and

3 sequences of Unit 3 and 4 in studies other than from the 'English Group'.

A satisfactory pass in Units 3 and 4 of English is required to gain an ATAR score. An ATAR score and a VTAC application are required for courses at all recognised tertiary institutions.

A unit of study is satisfactorily completed when the specified learning outcomes are satisfactorily completed. A student must successfully complete all outcomes in a unit to gain a satisfactory result in that unit. These learning outcomes are specified in the study design for each study. They describe the knowledge and skills you should have achieved by the time you have completed a unit. Each unit of each study has between 2 and 4 outcomes.

For all studies, your school decides whether you have satisfactorily completed a unit by achieving the learning outcomes. School Assessed Coursework is set and marked within the school. You will need to plan to get all your work done by the time it is due. Failure to meet deadlines may mean unsatisfactory completion of a unit.

At Monbulk College, a Senior School full time study load is considered to be:

- Year 11: 6 subjects from Units 1 and 2 in Year 11 (total of 12 Units).
- Year 12: 5 subjects from Units 3 and 4 (total of 10 Units).

### NOTE:

Some Year 10 students may choose to take a VCE Unit 1 or 2, whilst Year 11 students may study a Unit 3 and 4 sequence but this requires consideration of previous results and College approval.



## **SBAT: SCHOOL BASED APPRENTICESHIP AND TRAINEESHIPS**

Students who are seeking completion of their VCE but would also like to commence an apprenticeship or traineeship through the support of a school-based program may like to undertake an SBAT. This means that they will be able to complete an unscored VCE or VCE VM alongside an apprenticeship/traineeship in a range of industries.

In an unscored VCE and SBAT program, students complete 3 units of VCE subjects per semester in Years 11 and 12 (12 units) and 4 recognised Certificate III units whilst at TAFE during Years 11 and 12 to total the 16 required units. They also work 2 days a week with an employer within their chosen industry.

## **VCE VM: VICTORIAN CERTIFICATE OF EDUCATION VOCATIONAL MAJOR**

The VCE Vocational Major is a new vocational and applied learning program that sits within the VCE. It is a two-year senior secondary certificate that is completed over Years 11 and 12. The subjects in VCE VM are Literacy, Numeracy, Work Related Skills and Personal Development Skills. There are subject descriptions for each of these studies in this handbook.

The VCE Vocational Major takes what is called an 'Applied Learning approach.' Applied learning involves students engaging in relevant and authentic learning experiences. It is a method of learning where theoretical information comes to life for students in a real-world context that relates directly to their own future, is within their own control and is within an environment where they feel safe and respected. Students' knowledge grows and expands as they take action to learn, reflect on that action and plan how to do it better next time.

The VCE Vocational Major will prepare students to move successfully into apprenticeships, traineeships, further education and training, university through alternative entry programs or directly into the workforce. The four main studies are assessed at a school level through authentic assessment activities. There are no external examinations for the VCE VM studies and therefore students do not receive a study score or an ATAR (Australian Tertiary Admission Rank). Students who satisfactorily complete the requirements of the VCE VM will receive a Victorian Certificate of Education with the words Vocational Major on it to recognise their achievements.

Whilst most VCE VM students would complete a total program of VCE VM subjects, some students may also include accredited VCE units and Vocational Education and Training (VET) modules that meet national and State quality requirements. Where VCE units and VET modules are used in a VCE VM program, current assessment requirements will apply.

School Based Australian Apprenticeships (Traineeships) are an option for students as part of their VCE VM. School Based New Apprenticeships are recommended for students who are unlikely to complete a traditional VCE and would prefer to combine their studies with training and employment in industries where they are likely to seek future employment or apprenticeships.

The College offers a number of Australian School Based Apprenticeships to students. Under this scheme, students spend two days per week at school, one day per week at TAFE and up to two days

per week in the workplace over two-years. On completion of the two-year School Based Apprenticeship, students will have completed their VCE VM and gained a nationally recognised traineeship in their chosen industry, with most students gaining full-time employment or an apprenticeship. However, it is possible to return to undertake another training program, enter into Diploma level courses at TAFE or University in some industries.

### **SATISFACTORY COMPLETION OF VCE VM**

To successfully complete the VCE VM there are a number of requirements that need to be met.

Like VCE, students must successfully finish at least 16 units, to attain the VCE VM this must include:

- 3 VCE VM Literacy or VCE English units (including a Unit 3–4 sequence)
- 3 other Unit 3-4 sequences
- 2 VCE VM Numeracy or VCE Mathematics units
- 2 VCE VM Work Related Skills units
- 2 VCE VM Personal Development Skills units, and
- 2 VET credits at Certificate II level or above (180 hours)

The VCE VM program is comprised of the units described in this handbook and/or a selection of VCE and VET units.

## **VET PROGRAMS**

The College offers VET programs that reflect the employment focus of the Monbulk area. The VET Certificate currently offered on site include:

### **VET CERTIFICATE II IN WORKPLACE SKILLS**

This certificate is offered to Year 10 students looking to move into a vocational pathway.

Other Programs such as in Beauty, Hairdressing and Hospitality can be pursued in certain circumstances in co-operation with the VET Mullum Cluster and other Registered Training Organisations.

VET subjects contribute to satisfactory completion of the VCE and VCE VM. VCE VET units at Unit 3 & 4 level contribute to a student's ATAR score for tertiary studies and credit transfer for TAFE courses.

Further information about each of the VET subjects are available in the subject descriptions.

# ASSESSMENT AND REPORTING

The College reports on student progress through continuous reporting available to parents and guardians through the school management system, Compass.

Satisfactory completion of a VCE or VCE VM unit is based on whether a student has demonstrated achievement of the outcomes specified for the unit. This decision is made by the teacher considering the student's performance in assessment tasks (VCE) or other coursework (VCE and VCE VM).

The Victorian Assessment and Curriculum Authority (VCAA) outlines assessment tasks in each VCE and VCE VM unit study design and advises schools on the scope of assessment tasks and criteria for assessment. Schools report satisfactory completion results to VCAA and these are recorded on each student's Statement of Results.

At VCE Units 1 and 2, the College also reports on levels of achievement in school-based assessment tasks.

However, at VCE Units 3 and 4, the VCAA supervises teachers' assessments of levels of achievement by designating the school-assessed coursework or tasks, and by setting and marking external examinations. Teachers' assessments of school-assessed coursework and tasks are reported to the VCAA and contribute to a student's final score in each study. The final assessments for school-assessed coursework, tasks, and external examinations are used by the VCAA to calculate the student's study score, which is then used to calculate the ATAR score used for tertiary entrance. At midyear, all students taking a Unit 3 and 4 sequences must sit a General Achievement Test (GAT), which the VCAA uses to check school assessments.

Unscored VCE and SBAT: Students undertaking the unscored VCE and SBAT program do not sit the external Unit 3 and 4 exams and do not receive a score for their VCE. They do not receive an ATAR, however, they must successfully complete all Outcomes in all Units to complete their VCE.

This Handbook outlines the outcomes and assessment tasks for VCE units offered by the College. It should be noted that assessment tasks vary from year to year and that the descriptions in this Handbook are only a guide to assessment of levels of achievement. VCE teachers will give students comprehensive information and advice during their studies.

In VET units (modules), a student is designated as Competent if all outcomes are satisfactorily demonstrated. Pending satisfactory completion, all VET units are designated as Not Yet Competent for each student.

## COURSE SELECTION

The College assists every student to carefully plan their post-compulsory course of study. The College is committed to providing a comprehensive post-compulsory curriculum that will maximise student opportunity for future pathways, either tertiary or vocational. The Careers Manager along with staff providing course counselling advise students about selecting appropriate courses.

As part of the course selection process, the College surveys all students to determine their preferred pathways and expressions of interest in units of study. The students' preferences are then matched to the College's resources to ensure that a best fit is made to maximise the delivery of most first preferences for most students.

## WORK PRACTICES

Monbulk College has developed procedures for the satisfactory completion of units of study.

Under the VCE, gaining an 'S' requires the student to demonstrate that they:

- Can meet the learning outcomes by performing to a standard on the school-assessed coursework as agreed by the teacher and the relevant Learning Area
- Has submitted the work on time.
- Has submitted work that can be authenticated as their own.
- Has not breached other rules.

The following rules apply to assessment tasks:

- Assessments will generally be undertaken under suitable test conditions for the task.
- Students must work individually and be separated as much as practicable.
- There should be no talking after the commencement of the task.

Breaches of these rules will result in students having to leave the classroom. They will not be allowed to make up the time. In some cases, in keeping with directions of the Study Design, students may bring prepared material (tables, graphs, research notes) into the room for a SAC. The prepared work should necessarily be presented in a different format to the way the school assesses coursework tasks.

Under special circumstances, a student may be granted an extension of time to complete coursework. This extension should be negotiated with the classroom teacher at least 2 days before the due date and an extension application form should be completed. It is the student's responsibility to apply for an extension and any such application should be supported by additional information such as a medical certificate.

A student who uses a computer to produce work for assessment is responsible for ensuring that:

- There is an alternative system available in case of computer or printer malfunction or unavailability.
- Hard copies of the work in progress are produced regularly.
- Each time changes are made the work is saved onto a back-up file.
- The back-up file should not be stored with the computer.

# EXAMS & GUIDELINES

Exams at Monbulk College are taken seriously. Students in Year 10, 11 and 12 will undergo examinations as part of their assessment.

Students will:

- have 15 minutes reading time at the beginning of their exam.
- only be allowed to enter the exam during reading time if they arrive late to their exam; otherwise, students missing exams will need to complete their exams during the 'catch up' period.
- raise their hand if they require something, and the supervisor will attend to their request.
- place all non-exam material on the floor under their chair. Permitted items include pens, pencils, pencil sharpeners, erasers, highlighters (not pencil cases); and when required by the examination – calculators, dictionaries, study notes.
- be encouraged to read over their exam before submitting to the supervising teacher.

Students will not:

- look at anyone else's exam, only their own.
- communicate (talk, make eye contact, pass notes) at any time inside the exam room.
- be permitted to leave the exam room once the exam has commenced.
- be permitted to leave early if their exam has been completed. Students may bring reading materials, e.g. novel, to read if they finish their exam early.
- bring electronic devices into the examination room. If they are seen, they will be confiscated and only returned at the conclusion of the examination period.

Further information about the externally set Unit 3 and 4 Examination Timetable (assigned by VCAA) can be found here:

<https://www.vcaa.vic.edu.au/administration/Key-dates/Pages/VCE-exam-timetable.aspx>

## THE GENERAL ACHIEVEMENT TEST

The GAT is a test of general knowledge and skills in writing, mathematics, science and technology, humanities, the arts and social sciences. It is an essential part of the VCE assessment procedures, although it does not form part of a satisfactory completion for VCE or contribute to your VCE results or your ATAR. The VCAA uses the GAT to check that all schools are marking to the same standard in their school assessments and to check its own marking of school-assessed work and of examinations. These checks are an important part of ensuring that the VCE is fair to everyone. Where a school's assessments for a study disagree with the school's GAT results by a large margin, the VCAA will review the school's assessments in that study.

The GAT is broken into two parts:

- Section A will assess literacy and numeracy skills
- Section B will assess skills in mathematics, science, technology, the arts and humanities, with an increased focus on critical and creative thinking skills

All students enrolled in one or more VCE or scored VCE VET Unit 3 –4 sequence, will be required to sit Sections A and B of the GAT. VCE VM students and Unsourced VCE students will be required to sit Section A of the GAT.

Further information about The GAT can be found here:

<https://www.vcaa.vic.edu.au/assessment/vce-assessment/general-achievement-test/Pages/Index.aspx>



# STUDENT ATTENDANCE

To make the most of your educational opportunities at the College, you are expected to be in all scheduled classes unless there is a valid reason for absence.

## Absences

It is **your** responsibility to ensure all absences are explained. In order to satisfactorily complete each unit, students must attend 90% of classes in each unit. We recognise that some absences are not of a serious nature and in these cases a note from the parent/guardian explaining the absence is required. Where absence is due to a medical/dental appointment, please arrange a certificate and send a note. Parents must keep in mind that absences without a medical certificate must be below 10%. If students are in danger of failing a unit due to poor attendance, the Year Level Team Leader will notify parents in writing.

Obviously, if students are absent from class they will miss work and are required to catch up. Lesson plans are available to students on Compass, and these should be used to catch up on what has been missed in class. In Year 11, students should negotiate with each teacher involved as to the most appropriate way to get their work completed. In Year 12, the situation is different as there are selected School Assessed Coursework tasks that must be completed under test conditions. These tasks are in different formats depending on the subject involved.

Students with unapproved absences who miss School Assessed Coursework tasks will not be able to complete these tasks. They will not get marks for that coursework and their overall school assessed coursework mark (usually made up of marks for at least 3 tasks) will be lower.

Students with medical/approved absences where appropriate, can complete School Assessed Coursework tasks under test conditions when they have private study by arrangement with their teacher. In other situations where students are required to complete practical investigation or demonstration etc., students must arrange this with their teachers.

## PRIVATE STUDY

Most Year 12 VCE students at Monbulk College will have unsupervised private study periods available to them during normal class time. During these periods, students must choose to work in the VCE Centre, library or classrooms available for VCE private study periods.

Students may not leave the College during private study periods.

If a teacher is absent and the class has not been covered by another teacher, students are expected to remain in that classroom or VCE Centre and work quietly.

# VCE, VCE VET & VCE VM UNIT DESCRIPTIONS

The following unit descriptions are organised into alphabetical order.

- VCE courses that students in Year 11 and 12 may undertake
- VET courses that students in Year 10, 11 and 12 may undertake
- VCE VM subjects

More detailed information about each unit is contained in the VCAA and study designs and is presented to students as they undertake their studies.

<https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Pages/vce-study-designs.aspx>

Monbulk College offers VET (Vocational Education and Training) studies at Certificate II and III Level.

The Learning Area Leaders, who have prepared this information for staff, students and parents, welcome enquiries from students and parents about courses of study.

# VCE: ART CREATIVE PRACTICE

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## Unit 1: Interpreting artworks and exploring the Creative Practice

In Unit 1 students focus on the making of art and examine how artists communicate ideas and meaning in artworks. They study artists in different societies, cultures and historical periods and explore how artists create new ways of thinking and representation, while developing their own art practice. Students explore the practices of artists who have been inspired by ideas relating to personal identity.

Students use a range of materials, techniques, processes and art forms to create a body of experimental work in response to their research of the practices of artists and a range of inspiration. They experiment with a range of approaches to develop technical skills.

### Outcome 1: Artists, artworks and audiences

On completion of this unit the student should be able to discuss the practices of three artists and consider the ways these artists use visual language to communicate ideas and meaning.

### Outcome 2: The Creative Practice

Students explore materials, techniques and processes within a range of three selected artforms to develop ideas and meaning. They produce visual responses informed by their exploration of personal interests and ideas linked to an investigation of chosen artists.

### Outcome 3: Documenting and reflecting on the Creative Practice

On completion of this unit the student should be able to document and evaluate the components of their Creative Practice. Within this, students will evaluate their use of materials, techniques and processes used to make personal visual responses. This exploration will be progressively documented.

#### Assessment:

- Written component
- Folio including annotations
- Exam

## Unit 2: Interpreting artworks and developing the Creative Practice

In Unit 2 students investigate the artistic and collaborative practices of artists. They examine artworks from different periods of time and cultures, and explore the different ways that artists interpret and communicate social and personal ideas in artworks

Students use the Creative Practice to make and present artworks. They develop visual responses based on their investigations, exploring the way historical and contemporary cultural contexts, ideas and approaches have influenced the artworks and the practices of the artists they investigate, as well as their own art practice.

### Outcome 1: The artist, society and culture

On completion of this unit students will analyse and compare the role and purpose of art in different cultural contexts and times. Students will examine the artworks created as well as the practices of artists from different historical and contemporary cultures and times.

### Outcome 2: The collaborative Creative Practice

Students will explore collaborative practices to make and present artworks. Collaborative practice can include working with other students to create a collective artwork, working with practicing artists, or creating artworks that involve or collaborate with the audience through interaction and participation. On completion of this unit students should be able to explore social and cultural ideas or issues to make and present at least one finished artwork using collaborative approaches.

### Outcome 3: Documentation of collaboration using the Creative Practice

On completion of this unit the student should be able to critically reflect on, evaluate and document their use of the Creative Practice to develop and make collaborative visual responses.

#### Assessment:

- Written component
- Folio including annotations
- Exam

### **Unit 3: Investigation, ideas, artworks and the Creative Practice**

In this unit students explore ideas and materials, techniques and processes using the Creative Practice. Students research artists from differing historical and contemporary artists and this is the basis of their Creative Practice. Students investigate the issues that may arise from the artworks they view and discuss, or those evolving from the practice of the artist. Unit 3 begins with students researching the practice of a selected artist as the starting point to develop a finished artwork. The finished artwork will contribute to the Body of Work developed over Units 3 and 4.

In Unit 3, students explore and develop ideas, and experiment with materials, techniques and processes within their own Creative Practice. Students research artworks and use reflective analysis and evaluation of their use of the Creative Practice.

#### **Outcome 1: Investigation and presentation, Research and exploration**

On completion of this unit students should be able to develop personal ideas using research that examines one artwork and the practice of an artist and produce at least one finished artwork using the Creative Practice.

#### **Outcome 2: Personal investigation using the Creative Practice**

On completion of this unit the student should be able to apply and explore ideas and an area of personal artistic interest using the Creative Practice. Students will use a range of materials, techniques and processes and progressively evaluate and reflect upon their Creative Practice.

### **Unit 4: Interpreting, resolving and presenting artworks and the Creative Practice**

In Unit 4 students continue to develop their art practice as their research and exploration continues to support the development of their Body of Work. Students study the practices of selected historical and contemporary artists to inform their own art practice. Students analyse, compare and interpret the meanings of artworks produced by the artists they study. Students resolve and refine their Body of Work.

Students continue to build upon the ideas begun in Unit 3 and present an evaluation of their individual use of the Creative Practice. They reflect on the feedback from their critique to further refine and resolve a Body of Work that demonstrates their use of the Creative Practice and the realisation of their personal ideas. The students present their Body of Work to an audience accompanied by documentation of their use of the Creative Practice.

#### **Outcome 1: Documentation and critique of the Creative Practice**

Students develop, refine and resolve the ideas they developed in Unit 3. After beginning Unit 4 students present a critique to evaluate and reflect upon their use of the Creative Practice. They evaluate how they have responded to inspiration and influences throughout their Body of Work, and how they have explored and experimented with materials, techniques and processes in at least one selected art form.

#### **Outcome 2: Resolution and presentation of a Body of Work**

On completion of this unit the student should be able to use the Creative Practice to resolve and present a Body of Work. Students will refine and resolve their ideas, their use of materials, techniques and processes in selected art forms using the Creative Practice in a Body of Work.

#### **Outcome 3: Comparison of artists, their practice and their artworks**

On completion of this unit the student should be able to compare the practices of historical and contemporary artists analyse and interpret the meanings and messages of selected artworks.

#### **Assessment**

- School-assessed task (combined Unit 3 and Unit 4) contributes 60% to the final assessment.
- Studio production (folio of finished artwork)
- End of year external examination contributes 30% to the final assessment
- School-assessed Coursework for Unit 4 will contribute 10% to the study score.

# VCE: BIOLOGY

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## Unit 1: How do organisms regulate their functions?

In this unit students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation and renewal of cells. They explore how systems function through cell specialisation in vascular plants and animals and consider the role homeostatic mechanisms play in maintaining an animal's internal environment.

### Outcome 1: How do organisms function?

On completion of this unit the student should be able to explain and compare cellular structure and function and analyse the cell cycle and cell growth, death and differentiation.

### Outcome 2: How do plant and animal systems function?

On completion of this unit the student should be able to explain and compare how cells are specialised and organised in plants and animals and analyse how specific systems in plants and animals are regulated.

### Outcome 3: How do scientific investigations develop understanding of how organisms regulate their functions?

On completion of this unit the student should be able to adapt or design and then conduct a scientific investigation related to function and/or regulation of cells or systems, and draw a conclusion based on evidence from generated primary data.

### Assessment Tasks

Reports on practical investigations and fieldwork activities

Data analysis

Media response

Problem solving

Presentation of an investigation

Tests

Exam

## Unit 2: How does inheritance impact on diversity?

In this unit students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They apply their understanding of chromosomes to explain the process of meiosis. Students consider how the relationship between genes, and the environment and epigenetic factors influence phenotypic expression. They explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses.

### Outcome 1: How is inheritance explained?

On completion of this unit the student should be able to explain and compare chromosomes, genomes, genotypes and phenotypes, and analyse and predict patterns of inheritance.

### Outcome 2: How do inherited adaptations impact on diversity?

On completion of this unit the student should be able to analyse advantages and disadvantages of reproductive strategies and evaluate how adaptations and interdependencies enhance survival of species within an ecosystem.

### Outcome 3: How do humans use science to explore and communicate contemporary bioethical issues?

On completion of this unit the student should be able to identify, analyse and evaluate a bioethical issue in genetics, reproductive science or adaptations beneficial for survival.

### Assessment Tasks

Reports on practical investigations and fieldwork activities

Data analysis

Media response

Problem solving

Presentation of an investigation

Tests

Exam



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

In this unit students investigate the workings of the cell from several perspectives. They explore the relationship between nucleic acids and proteins as key molecules in cellular processes. Students analyse the structure and function of nucleic acids as information molecules, gene structure and expression in prokaryotic and eukaryotic cells and proteins as a diverse group of functional molecules. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies.

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

#### **Outcome 1: What is the role of nucleic acids and proteins in maintaining life?**

On completion of this unit the student should be able to analyse the relationship between nucleic acids and proteins and evaluate how tools and techniques can be used and applied in the manipulation of DNA.

#### **Outcome 2: How are biochemical pathways regulated?**

On completion of this unit the student should be able to analyse the structure and regulation of biochemical pathways in photosynthesis and cellular respiration and evaluate how biotechnology can be used to solve problems related to the regulation of biochemical pathways.

#### **Assessment Tasks**

School-assessed coursework for Units 3 contributes 16 per cent to the final assessment:

Practical activities: Summary report of a practical activity related to a biochemical process; movement of substances across membrane; plant or animal response to stimuli or bacterial response to stimuli

Presentation: Annotated poster or oral or multimedia presentation on one aspect of the immune system

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

In this unit students consider the continual change and challenges to which life on Earth has been, and continues to be, subjected to. They study the human immune system and the interactions between its components to provide immunity to a specific pathogen. Students consider how the application of biological knowledge can be used to respond to bioethical issues and challenges related to disease.

#### **Outcome 1: How do organisms respond to pathogens?**

On completion of this unit the student should be able to analyse the immune response to specific antigens, compare the different ways that immunity may be acquired and evaluate challenges and strategies in the treatment of disease.

#### **Outcome 2: How are species related over time?**

On completion of this unit the student should be able to analyse the evidence for genetic changes in populations and changes in species over time, analyse the evidence for relatedness between species, and evaluate the evidence for human change over time.

#### **Outcome 3: How is scientific inquiry used to investigate cellular processes and/or biological change?**

On completion of this unit the student should be able to design and conduct a scientific investigation related to cellular processes and/or how life changes and responds to challenges, and present an aim, methodology and methods, results, discussion and a conclusion in a scientific poster.

#### **Assessment Tasks**

School-assessed coursework for Units 4 contributes 24 per cent to the final assessment:

Practical activities: genetic cross using first-hand data; manipulation of DNA.

Research report: oral or written report demonstrating evolutionary relationships; response to an issue related to an application of gene technology, in the form of written, multimedia or poster

End of year external examination contributes 50 per cent to the final assessment.

# VCE: BUSINESS MANAGEMENT

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## Unit 1: Planning a business

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

### Outcome 1: The business idea

On completion of this unit the student should be able to describe how and why business ideas are created and developed and explain the methods by which a culture of business innovation and entrepreneurship may be fostered in a nation.

### Outcome 2: External environment

On completion of this unit the student should be able to describe the external environment of a business and explain how the macro and operating factors within it may affect business planning.

### Outcome 3: Internal environment

On completion of this unit the student should be able to describe the internal business environment and analyse how factors from within it may affect business planning.

### Assessment Tasks

Case study analysis

A school based, short term business activity

Tests

Analytical exercises

Examination

## Unit 2: Establishing a business

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

### Outcome 1: Legal requirements and financial considerations

On completion of this unit the student should be able to explain the importance when establishing a business of complying with legal requirements and financial record keeping and establishing effective policies and procedures.

### Outcome 2: Marketing a business

On completion of this unit the student should be able to explain the importance of establishing a customer base and a marketing presence to achieve the objectives of the business, analyse effective marketing and public relations strategies and apply these strategies to business-related case studies.

### Outcome 3: Staffing a business

On completion of this unit the student should be able to discuss the staffing needs for a business and evaluate the benefits and limitations of management strategies in this area from both an employer and an employee perspective.

### Assessment Tasks

Case study analysis

A school based, short term business activity

Tests

Analytical exercise

Examination

### Unit 3: Managing a business

In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives.

Students develop an understanding of the complexity and challenge of managing businesses and through the use of contemporary business case studies from the past four years have the opportunity to compare theoretical perspectives with current practice.

#### Outcome 1: Business foundations

On completion of this unit the student should be able to discuss the key characteristics of businesses and stakeholders, and analyse the relationship between corporate culture, management styles and management skills.

#### Outcome 2: Managing employees

On completion of this unit the student should be able to explain theories of motivation and apply them to a range of contexts and analyse and evaluate strategies related to the management of employees.

#### Outcome 3: Operations management

On completion of this unit the student should be able to analyse the relationship between business objectives and operations management and propose and evaluate strategies to improve the efficiency and effectiveness of business operations.

#### Assessment Tasks

School-assessed coursework contributes 25 per cent to the final assessment.

The student's performance on each outcome should be assessed using one or more of the following:

- Case study
- Structured questions
- Media analysis
- Tests

### Unit 4: Transforming a business

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

#### Outcome 1: Reviewing performance – the need for change

On completion of this unit the student should be able to explain the way business change may come about, use key performance indicators to analyse the performance of a business, discuss the driving and restraining forces for change and evaluate management strategies to position a business for the future.

#### Outcome 2: Implementing change

On completion of this unit the student should be able to evaluate the effectiveness of a variety of strategies used by managers to implement change and discuss the effect of change on the stakeholders of a business.

#### Assessment Tasks

School-assessed coursework contributes 25 per cent to the final assessment.

The student's performance on each outcome should be assessed using one or more of the following:

- Case study
- Structured questions
- Media analysis
- Tests

End of year external examination contributes 50 per cent to the final assessment for both Units 3 and 4.

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

In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials.

### Outcome 1: How can knowledge of elements explain the properties of matter?

Students will investigate and explain the properties of carbon lattices and molecular substances with reference to their structures and bonding, use systematic nomenclature to name organic compounds, and explain how polymers can be designed for a purpose.

### Outcome 2: How can the versatility of non-metals be explained?

On completion of this unit the student should be able to investigate and explain the properties of carbon lattices and molecular substances with reference to their structures and bonding, use systematic nomenclature to name organic compounds, and explain how polymers can be designed for a purpose.

### Outcome 3: Research investigation

Students will investigate a question related to the development, use and/or modification of a selected material or chemical and communicate a substantiated response to the question.

### Assessment

Assessment tasks may be selected from the following:

For Outcomes 1 and 2:

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

For Outcome 3:

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

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

Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis.

### Outcome 1: How do substances interact with water?

On completion of this unit the student should be able to relate the properties of water to its structure and bonding and explain the importance of the properties and reactions of water in selected contexts.

### Outcome 2: How are substances in water measured and analysed?

On completion of this unit the student should be able to measure amounts of dissolved substances in water and analyse water samples for salts, organic compounds and acids and bases.

### Outcome 3: Practical investigation

On completion of this unit the student should be able to design and undertake a quantitative laboratory investigation related to water quality, and draw conclusions based on evidence from collected data.

### Assessment

For this unit students are required to demonstrate achievement of three outcomes. Suitable tasks for assessment may be selected from the following:

For Outcomes 1 and 2

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

For Outcome 3:

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

### Unit 3: How can design and innovation help to optimise chemical processes?

The global demand for energy and materials is increasing with world population growth. In this unit students investigate the chemical production of energy and materials. They explore how innovation, design and sustainability principles and concepts can be applied to produce energy and materials while minimising possible harmful effects of production on human health and the environment.

Students analyse and compare different fuels as energy sources for society, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts and potential applications. They explore food in the context of supplying energy in living systems. The purpose, design and operating principles of galvanic cells, fuel cells, rechargeable cells and electrolytic cells are considered when evaluating their suitability for supplying society's needs for energy and materials. They evaluate chemical processes with reference to factors that influence their reaction rates and extent. They investigate how the rate of a reaction can be controlled so that it occurs at the optimum rate while avoiding unwanted side reactions and by-products. Students conduct practical investigations involving thermochemistry, redox reactions, electrochemical cells, reaction rates and equilibrium systems.

#### Outcome 1: What are the current and future options for supplying energy?

In this area of study students focus on analysing and comparing a range of fossil fuels and biofuels as energy sources for society, and carbohydrates, proteins and lipids as fuel sources for the body. They write balanced thermochemical equations for the combustion of various fuels. The amounts of energy and gases produced in combustion reactions are quantified using stoichiometry. They explore how energy can be sustainably produced from chemicals to meet the needs of society while minimising negative impacts on the environment.

#### Outcome 2: How can the rate and yield of chemical reactions be optimised?

In this area of study, students explore the factors that affect the rate and yield of equilibrium and electrolytic reactions involved in producing important materials for society. Reactants and products in chemical reactions are treated qualitatively through the application of Le Chatelier's principle and quantified using equilibrium expressions, reaction quotients and Faraday's Laws. Students explore the sustainability of different options for producing useful materials for society.

#### Assessment Tasks

Unit 3 school-assessed coursework contributes 20% to the final assessment.

For each outcome, one task selected from:

- comparison and evaluation of chemical concepts, methodologies and methods, and findings from at least two practical activities
- analysis and evaluation of primary and/or secondary data, including identified assumptions or data limitations, and conclusions
- problem-solving, including calculations, using chemistry concepts and skills applied to real-world contexts
- analysis and evaluation of a chemical innovation, research study, case study, socio-scientific issue, or media communication.

### Unit 4: How are carbon-based compounds designed for purpose?

Carbon is the basis not only of the structure of living tissues but is also found in fuels, foods, medicines, polymers and many other materials that we use in everyday life. In this unit students investigate the structures and reactions of carbon-based organic compounds, including considering how green chemistry principles are applied in the production of synthetic organic compounds. They study the metabolism of food and the action of medicines in the body. They explore how laboratory analysis and various instrumentation techniques can be applied to analyse organic compounds in order to identify them and to ensure product purity.

A student-designed scientific investigation involving the generation of primary data related to the production of energy and/or chemicals and/or the analysis or synthesis of organic compounds is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4 Outcome 3.

#### Outcome 1: How are organic compounds categorised and synthesised?

In this area of study students focus on the structure, naming, properties and reactions of organic compounds, including the chemical reactions associated with the metabolism of food. They explore how synthetic organic compounds can be produced more sustainably for use in society.

#### Outcome 2: How are organic compounds analysed and used?

In this area of study students focus on laboratory and instrumental analyses of organic compounds, and the function of some organic compounds as medicines. They use distillation to separate mixtures, use volumetric analysis to calculate redox quantities, and explore how instrumental analysis is used to ensure the quality of consumer products. Students explain how some medicines that bind to the active sites of enzymes function by inhibiting the enzymes' mode of action.

#### Outcome 3: Practical investigation

Students undertake a student-designed scientific investigation in either Unit 3 or Unit 4, or across both Units 3 and 4 and present it as a scientific poster.

#### Assessment

School-assessed Coursework for Unit 4 will contribute 30 per cent of the study score.

- For each outcome, one task selected from:
- comparison and evaluation of chemical concepts, methodologies and methods, and findings from at least two practical activities
- analysis and evaluation of primary and/or secondary data, including identified assumptions or data limitations, and conclusions
- problem-solving, including calculations, using chemistry concepts and skills applied to real-world contexts
- analysis and evaluation of a chemical innovation, research study, case study, socio-scientific issue, or media communication.

And:

- a practical investigation presented in a scientific poster according to the VCAA standard template.
- The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50 per cent.



## Unit 1: English

### Outcome 1: Reading and exploring texts

On completion of this unit the student should be able to make personal connections with, and explore the vocabulary, text structures, language features and ideas in, a text.

### Outcome 2: Crafting texts

On completion of this unit the student should be able to demonstrate an understanding of effective and cohesive writing through the crafting of their own texts designed for a specific context and audience to achieve a stated purpose; and to describe individual decisions made about the vocabulary, text structures, language features and conventions used during writing processes.

### Assessment Tasks

Suitable Assessment Tasks for Unit 1:

- a personal response to a set text
- two student-created texts such as: short stories, speeches (with transcripts), essays (comment, opinion, reflective, personal), podcasts (with transcripts), poetry/songs, feature articles (including a series of blog postings) and memoirs
- a description of writing processes.

## Unit 2: English

### Outcome 1: Reading and exploring texts

On completion of this unit the student should be able to explore and analyse how the vocabulary, text structures, language features and ideas in a text construct meaning.

### Outcome 2: Exploring argument

On completion of this unit the student should be able to explore and analyse persuasive texts within the context of a contemporary issue, including the ways argument and language can be used to position an audience; and to construct a point of view text for oral presentation.

### Assessment Tasks

Suitable Assessment Tasks for Unit 2:

- an analytical response to a set text
- a set of annotated persuasive texts (including visual texts) that identify arguments, vocabulary, text structures and language features
- an analysis of the use of argument and persuasive language and techniques in text(s)
- an oral presentation of a point of view text.

### Unit 3: English

In this unit, students analyse the ways authors construct meaning through vocabulary, text structures, language features and conventions, and the presentation of ideas. Students also create their own texts, drawing on ideas and features from mentor texts to create their own pieces of writing about "Country".

#### Outcome 1: Reading and Responding to Texts

On completion of this unit the student should be able to analyse ideas, concerns and values presented in a text, informed by the vocabulary, text structures and language features and how they make meaning.

#### Outcome 2: Crafting Texts

On completion of this unit the student should be able to demonstrate effective writing skills by producing their own texts, designed to respond to a specific context and audience to achieve a stated purpose; and to explain their decisions made through writing processes.

#### Assessment Tasks

Assessment tasks for this unit are:

- An analytical response to text in written form.
- A written text constructed in consideration of audience, purpose and context.
- A written text constructed in consideration of audience, purpose and context.
- A commentary reflecting on writing processes.

School-assessed coursework for Unit 3 will contribute 25 per cent to the study score.

### Unit 4: English

In this unit, students further sharpen their skills of reading and viewing texts, developed in the corresponding area of study in Unit 3. Students also analyse the use of argument and language, and visuals in texts that debate a contemporary and significant national or international issue.

#### Outcome 1: Reading and Responding to Texts

On completion of this unit the student should be able to analyse explicit and implicit ideas, concerns and values presented in a text, informed by vocabulary, text structures and language features and how they make meaning.

#### Outcome 2: Analysing Argument

On completion of this unit the student should be able to analyse the use of argument and language in persuasive texts, including one written text (print or digital) and one text in another mode (audio and/or audio visual); and develop and present a point of view text.

#### Assessment Tasks

Assessment tasks for this unit are:

- An analytical response to text in written form
- An analytical response to argument in written form.
- A point of view oral presentation.

School-assessed coursework for Unit 4 will contribute 25 per cent to the study score.

School-assessed coursework for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50 per cent to the study score.

# VCE: FOOD STUDIES

## Unit 1: Food Origins

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world. In Area of Study 1 students explore how humanity has historically sourced its food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food. Students consider the origins and significance of food through inquiry into particular food-producing regions of the world. In Area of Study 2 students focus on Australia. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine.

### Outcome 1: Food From Around the World.

On completion of this unit the student should be able to identify and explain major factors in the development of a globalised food supply and demonstrate adaptations of selected food from earlier cuisines through practical activities.

#### Assessment Tasks

The assessment for Outcome 1 is:

a range of practical activities, with records that reflect on two of the practical activities that use ingredients found in earlier cultures. Records can include production plans and evaluations of products or analysis of dietary intake.

In addition, at least one task for the assessment of Outcome 1 should be selected from the following:

- a short-written report: media analysis, research inquiry, historical timeline, comparative food-testing analysis or product evaluation
- an oral presentation
- a practical demonstration
- a video or podcast

### Outcome 2: Food in Australia

On completion of this unit the student should be able to describe patterns of change in Australia's food industries and cultures and use foods indigenous to Australia and those introduced through migration in the preparation of food products.

The assessment for Outcome 2 is a range of practical activities, with records that reflect on two of the practical activities that use ingredients indigenous to Australia and/or ingredients introduced through migration. Records can include production plans and evaluations of products or analysis of dietary intake.

In addition, at least one task for the assessment of Outcome 2 should be selected from the following:

- a short-written report: media analysis, research inquiry, historical timeline, comparative food-testing analysis or product evaluation
- an oral presentation
- a practical demonstration
- a video or podcast.

## Unit 2: Food Makers

In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in small-scale domestic settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

### Outcome 1: Food Industries

On completion of this unit the student should be able to describe Australia's major food industries, analyse relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.

#### Assessment task

Design and develop a practical food solution in response to an opportunity or a need in the food industry or school community.

### Outcome 2: Food in the Home

On completion of this unit the student should be able to compare and evaluate similar foods prepared in different settings, explain the influences on effective food provision and preparation in the home, and design and create a food product that illustrates potential adaptation in a commercial context.

#### Assessment task

Design and develop a practical food solution in response to an opportunity or a need in a domestic or small-scale setting.

## Unit 3: Food in daily life

In this unit students investigate the many roles and everyday influences of food.

### Outcome 1: The Science of Food

On completion of this unit the student should be able to explain the processes of eating and digesting food, and the utilisation of macronutrients, and justify the science behind the development of the Australian Dietary Guidelines and apply principles of nutrition in practical activities to examine specific dietary needs.

### Outcome 2: Food choices, health and wellbeing

On completion of this unit the student should be able to analyse factors affecting food behaviours of individuals through examining the relationships between food access, values, beliefs and choices, and demonstrate practical skills to evaluate factors affecting planning and preparing healthy meals for children and families.

#### Assessment Tasks

The assessment for Outcome 1 is:

- a reflection on three practical activities and two records of practical activities related to nutritious foods to examine specific dietary needs

Any one or a combination of the following:

- an annotated visual report
- an oral presentation: face-to-face or recorded as a video or podcast
- a practical demonstration: face-to-face or recorded as a video or podcast
- a short-written report: data analysis, media analysis, research inquiry or case study analysis.

The assessment for Outcome 2 is:

- a reflection on three practical activities and two records of practical activities related to healthy meals for children and families to evaluate factors influencing food choices

Any one or a combination of the following:

- an annotated visual report
- an oral presentation: face-to-face or recorded as a video or podcast
- a practical demonstration: face-to-face or recorded as a video or podcast
- a short-written report: data analysis, media analysis, research inquiry or case study analysis.

School assessed coursework will contribute 60 per cent to the study score

The examination will contribute 40 per cent to the study score.

## Unit 4: Food issues, challenges and futures

In this unit students examine debates about Australia's food systems as part of the global food systems and describe key issues relating to the challenge of adequately feeding a rising world population.

### Outcome 1: Navigating food information

On completion of this unit the student should be able to analyse food information by applying principles of evidence-based research and healthy eating recommendations to evaluate a selected food trend, fad or diet, and claims on food packaging and advertisements, and undertake practical activities that meet the healthy eating recommendations of the Australian Dietary Guidelines.

### Outcome 2: Environment and ethics

On completion of this unit the student should be able to critique issues affecting food systems in terms of ethics, sustainability and food sovereignty, and through practical activities propose future solutions that reflect sociocultural, sustainable and ethical food values and goals.

#### Assessment Tasks

The assessment for Outcome 1 is:

- a reflection on three practical activities and two records of practical activities related to healthy food choices based on the recommendations of the Australian Dietary Guidelines.

Any one or a combination of the following:

- an annotated visual report
- an oral presentation: face-to-face or recorded as a video or podcast
- a practical demonstration: face-to-face or recorded as a video or podcast
- a short-written report: data analysis, media analysis, research inquiry or case study analysis.

The assessment for Outcome 2 is:

- A research inquiry report that includes a selected food-related topic based on three practical activities, explanation of concerns related to ethics, sustainability and/or food sovereignty, analysis of work being done to solve problems and support solutions, and a conclusion outlining major findings and suggested set of practical guidelines for food consumers.

# VCE: HEALTH AND HUMAN DEVELOPMENT

## Unit 1: Understanding health and wellbeing

In this unit, students explore health and wellbeing as a concept with varied and evolving perspectives and definitions. They come to understand that it occurs in many contexts and is subject to a wide range of interpretations, with different meanings for different people. As a foundation to their understanding of health, students investigate the World Health Organization's (WHO) definition and other interpretations. They also explore the fundamental conditions required for health as stated by the WHO, which provide a social justice lens for exploring health inequities.

### Area of Study 1: Concepts of health

In this area of study, students take a broad, multidimensional approach to health and wellbeing. Such an approach acknowledges that defining and measuring concepts of health are complicated by a diversity of social and cultural contexts. Students consider the measurable indicators of population health and look at data reflecting the health status of young Australians. Focusing on youth, students inquire into the reasons for variations and inequalities in health status, including the sociocultural factors that contribute to variations in health outcomes.

### Area of Study 2: Youth health and wellbeing

In this area of study, students apply the broad concepts of health and wellbeing from Area of Study 1 to their study of Australia's youth. They identify major health inequalities impacting Australia's youth and reflect on the causes. Students inquire into how governments and organisations develop and implement youth health programs and consider factors that influence the implementation of and access to these programs.

Students conduct a research investigation and apply research skills to find out what young people are most focused on and concerned about regarding health outcomes. The focus for this research could include key areas such as mental health and wellbeing, smoking and vaping, alcohol and other drugs, gambling, relationships and sexuality, and safety (for example, on the road, in the water and the sun, and online).

Students select a particular focus area and conduct research, interpret data and draw conclusions on how the health of Australia's youth can be promoted and improved.

### Area of Study 3: Health and nutrition

In this area of study, students explore food and nutrition as foundations for good health. They investigate the roles and sources of major nutrients and the use of food selection models and other initiatives to promote healthy eating. Students explore the health consequences of nutritional imbalance, especially for youth, and consider the sociocultural and commercial factors that influence the food practices of, and food choices made, by youth. They develop strategies for building health literacy and evaluating nutrition information from various sources, including advertisements and social media.

## Unit 2: Managing health and development

In this unit, students investigate transitions in health and wellbeing, and human development, from lifespan and societal perspectives. They explore the changes and expectations that are integral to the progression from youth to adulthood. Students apply health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes.

Students explore health literacy through an investigation of the Australian healthcare system from the perspective of youth and analyse health information. They investigate the challenges and opportunities presented by digital media and consider issues surrounding the use of health data and access to quality health care.

### Area of Study 1: Developmental transitions

In this area of study, students examine the developmental transitions from youth to adulthood, with a focus on expected changes, significant decisions, and protective factors including behaviours. They consider perceptions of what it means to be a youth and an adult and investigate the expected physical and social changes. They inquire into factors that influence both the transition from youth to adulthood and later health status. They consider the characteristics of respectful, healthy relationships. Students examine parenthood as a transition in life. With a focus on the influence of parents or carers, and families, they investigate factors that contribute to development, and health and wellbeing during the prenatal, infancy and early childhood stages of the human lifespan. Health and wellbeing are considered as an intergenerational concept; that is, the health and wellbeing of one generation affects the next.

### Area of Study 2: Youth health literacy

In this area of study, students investigate the health system in Australia from the perspective of youth and their rights and responsibilities. They examine the functions of various entities that play a role in our health system. Students inquire into equity of access to health services, as well as the rights and responsibilities of youth receiving health care. They research the range of health services in their communities and suggest ways of improving the health literacy and health outcomes of youth.

## Assessment (for Units 1 and 2)

Suitable tasks for assessment in these units may be selected from the following:

- a short-written report, such as a media analysis, a research inquiry, a blog or a case study analysis
- oral presentation, such as a debate or a podcast
- a visual presentation such as a graphic organiser, a concept/mind map, an annotated poster, a digital presentation
- structured questions, including data analysis.

### **Unit 3: Australia's health in a globalized world**

In this unit, students look at health and wellbeing, disease and illness as being multidimensional, dynamic and subject to different interpretations and contexts. They explore health and wellbeing as a global concept and take a broader approach to inquiry. Students consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource. They extend this to health as a universal right, analysing and evaluating variations in the health status of Australians.

Students focus on health promotion and improvements in population health over time. Through researching health improvements and evaluating successful programs, they explore various public health approaches and the interdependence of different models. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

#### **Area of Study 1: Understanding health and wellbeing**

In this area of study, students explore health and wellbeing, and illness as complex, dynamic and subjective concepts. They reflect on both the universality of public health goals and the increasing influence of global conditions on Australians. Students develop their understanding of the indicators used to measure and evaluate health status, and the factors that contribute to variations in health status between different groups.

#### **Area of Study 2: Promoting health in Australia**

In this area of study, students look at different approaches to public health over time, with an emphasis on changes and strategies that have succeeded in improving health outcomes. They examine the progression of public health in Australia since 1900, noting global changes and influences such as the Ottawa Charter for Health Promotion, and the general transition of focus from the health and wellbeing of individuals to that of population groups including Aboriginal and Torres Strait Islander Peoples. Students investigate the Australian health system and its role in promoting health and wellbeing. They apply their understanding of successful health promotion campaigns, programs and case studies to evaluate the ability of initiatives to identify priorities and improve health outcomes in Australia.

### **Unit 4: Health and human development in a global context**

In this unit, students examine health and human development in a global context. They use data to investigate health status and human development in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in health status over time and studying the key concept of sustainability. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade, tourism, conflict and the mass movement of people.

#### **Area of Study 1: Global health and human development**

In this area of study, students explore similarities and differences in health status and human development in low-, middle- and high-income countries, including Australia. They investigate a range of factors that contribute to health inequalities and study the concepts of sustainability and the Human Development Index to further their understanding of health and human development in a global context. Students inquire into the effects of global trends on health and human development.

#### **Area of Study 2: Health and the Sustainable Development Goals**

In this area of study, students look at action for promoting health globally. They consider the importance of and relationships between the UN's SDGs, focusing on their promotion of health and human development. Students investigate the priorities of the WHO and evaluate Australia's aid program and the role of non-government organisations. They reflect on meaningful and achievable individual and social actions that could contribute to the work of national and international organisations that promote health and wellbeing.

#### **Assessment:**

School-assessed Coursework for Unit 3 will contribute 25 per cent to the study score.

School-assessed Coursework for Unit 4 will contribute 25 per cent to the study score.

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination.



# VCE: MODERN HISTORY

## Unit 1: Modern History – Change and Conflict

In Unit 1 students explore the nature of political, social and cultural change in the later part of the 19th century and the first half of the 20th century.

The late 19th century marked a challenge to existing empires, alongside growing militarism and imperialism. Modernisation and industrialisation also challenged and changed the existing political, social and economic authority of empires and states. During this time the everyday lives of people significantly changed. World War One was also a significant turning point in modern history, with significant consequences for the rest of the twentieth century. The post-war treaties ushered in a period where the world was, to a large degree, reshaped with new borders, movements, ideologies and power structures. These changes had many unintended consequences that would lay the foundations for future conflict and instability across the world. Economic instability caused by the Great Depression contributed to great social hardship as well as to the development of new political movements. The period after World War One was characterised by significant social, political, economic, cultural and technological change. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism.

### Outcome 1: Change and Conflict

On completion of this unit the student should be able to explain how significant events, ideologies and individuals contributed to political and economic changes in the first half of the 20th century and analyse how these contributed to the causes of World War Two.

### Outcome 2: Social and Cultural Change

On completion of this unit the student should be able to explain patterns of social and cultural change in everyday life in the first half of the twentieth century and analyse the conditions which influenced these changes.

#### Assessment tasks:

- A historical inquiry
- Evaluation of historical sources
- Short answer questions
- An essay
- Extended responses
- A multimedia presentation

## Unit 2: Twentieth-Century History (1945 – 2000)

In Unit 2 students explore the nature and impact of the Cold War and challenges and changes to political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century.

The establishment of the United Nations in 1945 was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. The Universal Declaration of Human Rights adopted in 1948 was the first global expression of human rights. Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War. The period also saw challenge and change to the established order in many countries. The continuation of moves towards decolonisation led to independence movements in former colonies in Africa, the Middle East, Asia and the Pacific. New countries were created, and independence was achieved through both military and diplomatic means. Old conflicts also continued, and terrorism became increasingly global. The second half of the twentieth century also saw the rise of social movements that challenged existing values and traditions, such as the civil rights movement, feminism and environmental movements. The beginning of the twenty-first century heralded both a changing world order and further advancements in technology and social mobility on a global scale. However, terrorism remained a major threat, influencing politics, social dynamics and the migration of people across the world. Technology also played a key role in shaping social and political change in different contexts.

### Outcome 1: Causes and consequences of the Cold War

On completion of this unit the student should be able to explain the causes of the Cold War and analyse its consequences on nations and people.

### Outcome 2: Challenge and Change

On completion of this unit the student should be able to explain the challenges to social, political and/or economic structures of power and evaluate the extent to which continuity and change occurred.

#### Assessment tasks:

- A historical inquiry
- Evaluation of historical sources
- Short answer questions
- An essay
- Extended responses
- A multimedia presentation

### **Unit 3: Revolutions - The Russian Revolution (26<sup>th</sup> October 1917 - 1927)**

#### **Outcome 1: Causes of Revolution**

On completion of this unit students should be able to analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements.

#### **Outcome 2: Consequences of Revolution**

On completion of this unit the student should be able to analyse the consequences of revolution and evaluate the extent of continuity and change in the post-revolutionary society.

#### **Assessment Tasks**

- School assessment tasks may include:
- A historical inquiry
- Evaluation of historical sources
- Extended responses
- An essay

School-assessed coursework contributes 25 per cent to the final assessment.

### **Unit 4: Revolutions: The Chinese Revolution (Oct. 1949 - 1976)**

#### **Outcome 1: Causes of Revolution**

On completion of this unit students should be able to analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements.

#### **Outcome 2: Consequences of Revolution**

On completion of this unit the student should be able to analyse the consequences of revolution and evaluate the extent of continuity and change in the post-revolutionary society.

#### **Assessment Tasks**

School-assessed coursework contributes 25 per cent to the final assessment:

- School assessment tasks may include:
- A historical inquiry
- Evaluation of historical sources
- Extended responses
- An essay

The end of year examination will contribute 50 per cent to the final assessment for both Units 3 and 4.



## Unit 1: Organisation of Music

In this unit students explore and develop their understanding of how music is organised. By performing, creating, analysing and responding to music works that exhibit different approaches, students explore and develop their understanding of the possibilities of musical organisation.

They prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding on their chosen instrument/sound source. At least two works should be associated with their study of approaches to music organisation.

They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.

They develop knowledge of music language concepts as they analyse and respond to a range of music, becoming familiar with the ways music creators treat elements of music and concepts and use compositional devices to create works that communicate their ideas.

### Outcome 1: Performing

On completion of this unit the student should be able to rehearse and present planned performances using technical control, expression and stylistic understanding in at least two works (solo or ensemble), which demonstrate knowledge drawn from their investigation of music organisation.

### Outcome 2: Creating

On completion of this unit the student should be able to create short music works/responses that demonstrate their understanding of different approaches to musical organisation, and reflect on the creative process.

### Outcome 3: Analysing and responding

On completion of this unit the student should be able to describe how music is organised in at least two music examples, responding to music characteristics in a range of music excerpts and identifying how music is organised, and identifying, recreating and documenting music language concepts presented in context and in isolation.

### Assessment tasks:

- Performances of at least two works, including at least one ensemble/group work

A discussion of the challenges presented by these works which may be presented as:

- oral
- multimedia
- written

Aural, oral, written and practical tasks such as:

- a folio of exercises
- responses to structured questions
- a workbook of class activities

Composition and/or improvisation exercises and accompanying discussion that demonstrate an understanding of the organisation of music which may be presented as:

- oral
- multimedia
- written.

## Unit 2: Effect in music

In this unit, students focus on the way music can be used to create an intended effect. By performing, analysing and responding to music works/examples that create different effects, students explore and develop their understanding of the possibilities of how effect can be created. Through creating their own music, they reflect this exploration and understanding.

Students prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding using their chosen instrument/sound source. They should perform at least one work to convey a specified effect and demonstrate this in performance.

They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.

As they analyse and respond to a wide range of music, they become familiar with the ways music creators treat elements and concepts of music and use compositional devices to create works that communicate their ideas. They continue to develop their understanding of common musical language concepts by identifying, recreating and notating these concepts.

### Outcome 1: Performing

In this area of study, students prepare and perform solo and group works, one of which should demonstrate their understanding of effect in music. They convey meaning and/or emotion to an audience through practical music-making and further development of performance skills.

### Outcome 2: Creating

In this area of study, students assemble a folio of brief responses using a variety of sound sources demonstrating their understanding of the possibilities of creating effect in music. They develop appropriate methods of recording and preserving their music. Students reflect on their responses by documenting their approach to creating effect in their music, and identifying and describing their use of music elements, concepts and compositional devices.

### Outcome 3: Analysing and responding

In this area of study, students develop skills in analysing how effect can be created in music and how the treatment of elements of music, concepts and compositional devices contribute to this effect. They respond to a range of excerpts in different styles and traditions, building understanding of how effect is realised. They continue to develop their auditory discrimination and memory skills through identifying, recreating and recording common musical language concepts and their effect, for example chords, scales and melodic and rhythmic patterns.

# VCE: JAPANESE (Second Language)

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## Unit 1

### Area of Study 1: Interpersonal communication

#### Outcome 1

On completion of this unit the student should be able to exchange meaning in a spoken interaction in Japanese.

### Area of Study 2: Interpretive communication

#### Outcome 2

On completion of this unit the student should be able to interpret information from two texts on the same subtopic presented in Japanese and respond in writing in Japanese and in English.

### Area of Study 3: Presentational communication

#### Outcome 3

On completion of this unit the student should be able to present information, concepts and ideas in writing in Japanese on the selected subtopic and for a specific purpose and audience

#### Assessment Tasks

Assessment tasks for this unit are selected from the following:

- Participate in a conversation, interview or role-play
- Give a talk to the class about the selected subtopic, asking and answering questions
- Write a descriptive summary of a film including information from a review of the film
- Listen to a conversation and view a map to write directions
- Read an article and listen to an announcement to write instructions
- Create a written presentation which may include pictures; this may be supported by media such as Photo Story or PowerPoint
- Write an imaginative children's story.

## Unit 2

### Area of Study 1: Interpersonal communication

#### Outcome 1

On completion of this unit the student should be able to respond in writing in Japanese to spoken, written or visual texts presented in Japanese.

### Area of Study 2: Interpretive communication

#### Outcome 2

On completion of this unit the student should be able to analyse and use information from written, spoken or visual texts to produce an extended written response in Japanese.

### Area of Study 3: Presentational communication

#### Outcome 3

On completion of this unit the student should be able to explain information, ideas and concepts orally in Japanese to a specific audience about an aspect of culture within communities where Japanese is spoken.

#### Assessment Tasks

- Assessment tasks for this unit are selected from the following:
- Write a personal answer to an email
- Write an informative blog in response to texts
- Respond in a written letter to a radio announcement or editorial.
- Describe in writing an experience seen from different perspectives
- Write a reflective article on a cultural insight, such as the attitudes of Japanese-speaking people in Australia and elsewhere to traditional customs
- Evaluate opposing arguments put forward on an issue such as attitudes to health or the long-term impact of social media on society.
- Narrate a life story, event or incident that highlights an aspect of culture
- Tell the class a personal or reflective story about a cultural event
- Present and explain an aspect of culture, referring to a portfolio or a PowerPoint presentation.
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## **Unit 3 – Available through VSL in 2026**

### **Area of Study 1: Interpersonal communication**

#### **Outcome 1**

On completion of this unit the student should be able to participate in a spoken exchange in Japanese to resolve a personal issue.

### **Area of Study 2: Interpretive communication**

#### **Outcome 2**

On completion of this unit the student should be able to interpret information from texts and write responses in Japanese.

### **Area of Study 3: Presentational communication**

#### **Outcome 3**

On completion of this unit the student should be able to express ideas in a personal, informative or imaginative piece of writing in Japanese.

#### **Assessment Tasks**

Assessment tasks for this unit are.

- A 3–4-minute role play, focusing on negotiating a solution to a personal issue.
- Responses to specific questions or instructions using information extracted from written, spoken and viewed texts on the selected subtopic.
- An approximately 450 –ji personal, informative or imaginative piece of writing.

## **Unit 4 – Available through VSL in 2026**

### **Area of Study 1: Interpersonal communication**

#### **Outcome 1**

On completion of this unit the student should be able to share information, ideas and opinions in a spoken exchange in Japanese

### **Area of Study 2: Interpretive communication**

#### **Outcome 2**

On completion of this unit the student should be able to analyse information from written, spoken and viewed texts for use in a written response in Japanese.

### **Area of Study 3: Presentational communication**

#### **Outcome 3**

On completion of this unit the student should be able to present information, concepts and ideas in evaluative or persuasive writing on an issue in Japanese.

#### **Assessment Tasks**

Assessment tasks for this unit are selected from the following:

- A 3–4-minute interview providing information and responding to questions about a cultural product or practice.
- An approximately 450-ji written response for a specific audience and purpose, incorporating information from three or more texts
- An approximately 500-ji evaluative or persuasive piece of writing.

# VCE: LEGAL STUDIES

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## Unit 1: The Presumption of Innocence

Laws, including criminal law, aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order. When a criminal law is broken, a crime is committed which is punishable and can result in criminal charges and sanctions.

In this unit, students develop an understanding of legal foundations, such as the different types and sources of law, the characteristics of an effective law, and an overview of parliament and the courts. Students are introduced to and apply the principles of justice. They investigate key concepts of criminal law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime. In doing this, students develop an appreciation of the manner in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused. Students also develop an appreciation of how a criminal case is determined, and the types and purposes of sanctions. Students apply their understanding of how criminal cases are resolved and the effectiveness of sanctions through consideration of recent criminal cases from the past four years.

### Outcome 1 Legal Foundations

On completion of this outcome the student should be able to describe the main sources and types of law and evaluate the effectiveness of laws.

### Outcome 2 Proving Guilt

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

### Outcome 3 Sanctions

On completion of this outcome the student should be able to explain the key concepts in the determination of a criminal case, discuss the principles of justice in relation to experiences of the criminal justice system, and discuss the ability of sanctions to achieve their purpose

### Assessment Tasks

- a folio of exercises
- structured questions
- a classroom presentation
- a test
- a report

## Unit 2 Wrongs and Rights

Civil law aims to protect the rights of individuals. When rights are infringed, a dispute may arise requiring resolution, and remedies may be awarded. In this unit, students investigate key concepts of civil law and apply these to actual and/or hypothetical scenarios to determine whether a party is liable in a civil dispute. Students explore different areas of civil law, and the methods and institutions that may be used to resolve a civil dispute and provide remedies. They apply knowledge through an investigation of civil cases from the past four years. Students also develop an understanding of how human rights are protected in Australia and possible reforms to the protection of rights, and investigate a contemporary human rights issue in Australia, with a specific focus on one case study.

### Outcome 1 Civil Liability

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

### Outcome 2 Remedies

On completion of this outcome the student should be able to explain key concepts in the resolution of a civil dispute, discuss the principles of justice in relation to experiences of the civil justice system, and discuss the ability of remedies to achieve their purposes.

### Outcome 3 Human Rights

On completion of this outcome the student should be able to explain one contemporary human rights issue in Australia and evaluate the ways in which rights are protected in Australia.

### Assessment Tasks

- a folio of exercises
- structured questions
- a classroom presentation
- a test
- a report

## Unit 3 Rights and Justice

The Victorian justice system, which includes the criminal and civil justice systems, aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. In this unit students examine the methods and institutions in the criminal and civil 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 means and institutions used to determine and resolve cases.

Students explore topics 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. Students investigate the extent to which the principles of justice are upheld in the justice system. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

### Outcome 1 The Victorian Criminal Justice System

On completion of this outcome the student should be able to explain the key principles in the criminal justice system, discuss the ability of sanctions to achieve their purposes and evaluate the ability of the criminal justice system to achieve the principles of justice during a criminal case.

### Outcome 2 The Victorian Civil Justice System

On completion of this outcome the student should be able to explain the key principles in the civil justice system, discuss the ability of remedies to achieve their purposes and evaluate the ability of the civil justice system to achieve the principles of justice during a civil dispute.

### Assessment Tasks

- School-assessed Coursework for Unit 3 will contribute 25 per cent to the study score. The student's performance will be assessed using two or more of the following:
- a case study
- structured questions
- an essay
- a report
- a folio of exercises

## Unit 4 People and the Law

The study of Australia's laws and legal system includes an understanding of institutions that make and reform our laws. In this unit, students explore how the Australian Constitution established the law-making powers of the Commonwealth and state parliaments, and how it 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 law-making, and consider the roles of the individual, the media and law reform bodies in influencing changes to the law, and past and future constitutional reform. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

### Outcome 1 The People and the Lawmakers

On completion of this outcome the student should be able to discuss the ability of parliament and courts to make law and evaluate the means by which the Australian Constitution acts as a check on parliament in law-making.

### Outcome 2 The People and Reform

On completion of this outcome the student should be able to explain the reasons for law reform and constitutional reform, discuss the ability of individuals to change the Australian Constitution and influence a change in the law, and evaluate the ability of law reform bodies to influence a change in the law.

### Assessment Tasks

- School-assessed Coursework for Unit 4 will contribute 25 per cent to the study score. The student's performance will be assessed using two or more of the following:
- a case study
- structured questions
- an essay
- a report
- a folio of exercises
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- The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 50 per cent to the study score.

# VCE: LITERATURE

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Literature focuses on the meaning derived from texts, the relationship between texts, the contexts in which texts are produced and read, and the experiences the reader brings to the texts.

In Literature students undertake close reading of texts and analyse how language and literary elements and techniques function within a text. Emphasis is placed on recognition of a text's complexity and meaning, and on consideration of how that meaning is embodied in its literary form. The study provides opportunities for reading deeply, widely and critically, responding analytically and creatively, and appreciating the aesthetic merit of texts.

Literature enables students to examine the historical and cultural contexts within which both readers and texts are situated. It investigates the assumptions, views and values which both writer and reader bring to the texts, and it encourages students to contemplate how we read as well as what we read. It considers how literary criticism informs the readings of texts and the ways texts relate to their contexts and to each other. Accordingly, the texts selected for study are drawn from the past through to the present and vary in form and social and cultural contexts.

## Unit 1

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

### Outcome 1: Reading practices

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

### Outcome 2: Ideas and concerns in texts

Analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society.

## Unit 2

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

### Outcome 1: The text, the reader and their contexts

Analyse and respond critically and creatively to the ways a text from a past era and/or a different culture reflect or comment on the ideas and concerns of individuals and groups in that context.

### Outcome 2: Exploring connections between texts

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

### Unit 3

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

#### Outcome 1

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

#### Outcome 2

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

#### Assessment

School-assessed coursework contributes 25 per cent to the final assessment:

An analysis of how the form of a text influences meaning:

Students may:

- compare a dramatized version of a scene or scenes from a text with the original text
- compare a print text with the text's adaptation into another form
- compare the performance of either a substantial individual text or group of texts with the original

A creative response to a text:

Students may:

- submit an original piece of writing, presented in a manner consistent with the style and context of the original text

- re-create or rework an aspect of the text, such as adding to the text, recasting a part of the text in another setting or form, or presenting an episode in the text from another point of view

AND

Students must submit:

A reflective commentary establishing connections with the original text.

### Unit 4

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

#### Outcome 1

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

#### Outcome 2

On completion of this unit the student should be able to analyse features of texts and develop and justify interpretations of texts.

#### Assessment

School-assessed coursework contributes 25 per cent to the final assessment:

A written interpretation of a text using two different perspectives to inform their response.

#### Task 1

A written interpretation of a text, supported by close textual analysis.

AND

#### Task 2

A written interpretation of a different text from Task 1, supported by close textual analysis.

Students may:

- select and discuss the role and significance of particular sections of a text in interpreting the text as a whole
- analyse how certain literary features contribute to an interpretation of a text
- analyse the linkages, parallels and contrasts between different passages from a text.

End of year external examination contributes 50 per cent to the final assessment of both Units 3 and 4.



# VCE: GENERAL MATHEMATICS

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## Unit 1

### Area of Study 1 - Data analysis, probability and statistics

In this area of study students cover types of data, display and description of the distribution of data, summary statistics for centre and spread, and the comparison of sets of data.

### Area of Study 2 - Algebra, number and structure

In this area of study students cover the concept of a sequence and its representation by rule, table and graph, arithmetic or geometric sequences as examples of sequences generated by first-order linear recurrence relations, and simple financial and other applications of these sequences.

### Area of Study 3 - Functions, relations and graphs

In this area of study students cover linear function and relations, their graphs, modelling with linear functions, solving linear equations and simultaneous linear equations, line segment and step graphs and their applications.

### Area of Study 4 - Discrete mathematics

In this area of study students cover the concept of matrices and matrix operations to model and solve a range of practical problems, including population growth and decay.

### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

## Unit 2

### Area of Study 1 - Data analysis, probability and statistics

In this area of study students cover association between two numerical variables, scatterplots, and lines of good fit by eye and their interpretation.

### Area of Study 2 - Discrete mathematics

In this area of study students cover the use of graphs and networks to model and solve a range of practical problems, including connectedness, shortest path and minimum spanning trees.

### Area of Study 3 - Functions, relations and graphs

In this area of study students cover direct and inverse variation, transformations to linearity and modelling of some non-linear data.

### Area of Study 2 – Space and measurement

In this area of study students cover units of measurement, accuracy, computations with formulas for different measures, similarity and scale in two and three dimensions, and their practical applications involving simple and composite shapes and objects, trigonometry, problems involving navigation and Pythagoras' theorem and their applications in the plane.

### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.



## Unit 3 & 4

### Area of Study 1 - Data analysis, probability and statistics

Students cover data types, representation and distribution of data, location, spread, association, correlation and causation, response and explanatory variables, linear regression, data transformation and goodness of fit, times series, seasonality, smoothing and prediction.

### Area of Study 2 - Discrete mathematics

Students cover the use of first-order linear recurrence relations and the time value of money (TVM) to model and analyse a range of financial situations, and using technology to solve related problems involving interest, appreciation and depreciation, loans, annuities and perpetuities.

#### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

#### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

#### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

## Assessment Unit 3

School-assessed Coursework for Unit 3 will contribute 24 per cent to the study score.

The **Application task** is a guided investigation of a given data set with several variables. The task has three components of increasing complexity:

- the construction, description and interpretation of data plots, including smoothed plots where time series data is used
- the calculation and interpretation of summary statistics, including seasonal indices and their application where time series data is used
- the modelling of linear associations, or trends where time series data is used, including the use of data transformation as appropriate.

The application task is to be of 4–6 hours' duration over a period of 1–2 weeks.

## Assessment Unit 4

School-assessed Coursework for Unit 4 will contribute 16 per cent to the study score.

# VCE: MATHEMATICAL METHODS

## Unit 1 & 2: Mathematical Methods

### Area of Study 1: Functions, relations and graphs

In Unit 1, this area of study students cover the graphical representation of simple algebraic functions (polynomial and power functions) of a single real variable and the key features of functions and their graphs such as axis intercepts, domain (including the concept of maximal, natural or implied domain), co-domain and range, stationary points, asymptotic behaviour and symmetry. The behaviour of functions and their graphs is to be explored in a variety of modelling contexts and theoretical investigations.

In Unit 2, this area of study students cover graphical representation of circular, exponential and logarithmic functions of a single real variable and the key features of graphs of functions such as axis intercepts, domain (including maximal, natural or implied domain), co-domain and range, asymptotic behaviour, periodicity and symmetry. The behaviour of functions and their graphs is to be explored in a variety of modelling contexts and theoretical investigations.

### Area of Study 2: Algebra, number and structure

This area of study supports students' work in the 'Functions, relations and graphs', 'Calculus' and 'Data analysis, probability and statistics' areas of study, and content is to be distributed between Units 1 and 2. In Unit 1 the focus is on the algebra of polynomial functions of low degree and transformations of the plane.

In Unit 2 the focus is on the algebra of some simple transcendental functions and transformations of the plane. This area of study provides an opportunity for the consolidation and revision, further development and application of content prescribed in Unit 1, as well as the study of additional algebra material introduced in the other areas of study in Unit 2

### Area of Study 3: Calculus

Unit 1 - In this area of study students cover constant and average rates of change and an introduction to instantaneous rate of change of a function in familiar contexts, including graphical and numerical approaches to estimating and approximating these rates of change.

Unit 2 - In this area of study students cover differentiation and anti-differentiation of polynomial functions by rule, different notations, and related applications including the analysis of graphs.

### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study, and apply a range of related mathematical routines and procedures.

### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

### Assessment Tasks

Demonstration of achievement of Outcomes 1 and 2 must be based on the student's performance on a selection of assessment tasks. Where teachers allow students to choose between tasks, they must ensure that the tasks they set are of comparable scope and demand.

Demonstration of achievement of Outcome 1 must be based on a selection of the following tasks:

- Assignments
- Tests
- Solutions to sets of worked questions
- Summary notes or review notes

Demonstration of achievement of Outcome 2 must be based on a selection of the following tasks:

- Modelling tasks
- Problem-solving tasks
- Mathematical Investigations

Demonstration of achievement of Outcome 3 should be based on the student's performance on aspects of tasks completed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for computational thinking and the effective and appropriate use of technology.

## Unit 3 and 4

Mathematical Methods Units 1 and 2 are designed as preparation for Mathematical Methods Units 3 and 4. The areas of study for Unit 1 are 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'. At the end of Unit 1, students will be expected to have covered the material outlined in each area of study given below, with the exception of 'Algebra', which should be seen as extending across Units 1 and 2. This material should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections among and across the areas of study being developed consistently throughout both Units 1 and 2.

### Area of Study 1: Functions, relations and graphs

In this area of study students cover the graphical representation of simple algebraic functions (polynomial and power functions) of a single real variable and the key features of functions and their graphs such as axis intercepts, domain (including the concept of maximal, natural or implied domain), co-domain and range, stationary points, asymptotic behaviour and symmetry. The behaviour of functions and their graphs is to be explored in a variety of modelling contexts and theoretical investigations.

### Area of Study 2: Algebra, number and structure

This area of study supports students' work in the 'Functions, relations and graphs', 'Calculus' and 'Data analysis, probability and statistics' areas of study, and content is to be distributed between Units 1 and 2. In Unit 1 the focus is on the algebra of polynomial functions of low degree and transformations of the plane. In Unit 2 the focus is on the algebra of some simple transcendental functions and transformations of the plane. This area of study provides an opportunity for the consolidation and revision, further development and application of content prescribed in Unit 1, as well as the study of additional algebra material introduced in the other areas of study in Unit 2.

### Area of Study 3: Calculus

Unit 1 - In this area of study students cover constant and average rates of change and an introduction to instantaneous rate of change of a function in familiar contexts, including graphical and numerical approaches to estimating and approximating these rates of change.

Unit 2 - In this area of study students cover differentiation and anti-differentiation of polynomial functions by rule, different notations, and related applications including the analysis of graphs.

### Area of Study 4: Data analysis, probability and Statistics

In this area in Unit 1 of study, students cover the concepts of experiment (trial), outcome, event, frequency, probability and representation of finite sample spaces and events using various forms such as lists, grids, Venn diagrams and tables. They also cover introductory counting principles and techniques and their application to probability.

In Unit 2, students cover introductory counting principles and techniques and their application to probability and the law of total probability in the case of two events.

### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures. To achieve this outcome the student will draw on knowledge and skills outlined in all the areas of study.

### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics. To achieve this outcome the student will draw on key knowledge and key skills outlined in all the areas of study.

### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches. To achieve this outcome the student will draw on key knowledge and key skills outlined in all the areas of study.

### Assessment Tasks

Demonstration of achievement of Outcomes 1 and 2 must be based on the student's performance on a selection of assessment tasks. Where teachers allow students to choose between tasks, they must ensure that the tasks they set are of comparable scope and demand.

Demonstration of achievement of Outcome 1 must be based on a selection of the following tasks:

- Assignments
- Tests
- Solutions to sets of worked questions
- Summary notes or review notes

Demonstration of achievement of Outcome 2 must be based on a selection of the following tasks:

- Modelling tasks
- Problem-solving tasks
- Mathematical Investigations

Demonstration of achievement of Outcome 3 should be based on the student's performance on aspects of tasks completed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for computational thinking and the effective and appropriate use of technology.

# VCE: SPECIALIST MATHEMATICS

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## Unit 1 & 2 Specialist Mathematics

### Unit 1

#### Area of Study 1: Algebra, Number and Structure

In this area of study students cover the development of formal mathematical notation, definition, reasoning and proof applied to number systems, graph theory, sets, logic, and Boolean algebra, and the development of algorithms to solve problems.

#### Area of Study 2: Discrete mathematics

In this area of study students cover the study of sequences, series, and first-order linear difference equations, combinatorics, including the pigeon-hole principle, the inclusion-exclusion principle, permutations and combinations, combinatorial identities, and matrices.

#### Mathematical Investigation

This comprises one to two weeks of investigation into one or two practical or theoretical contexts or scenarios based on content from areas of study and application of key knowledge and key skills for the outcomes.

### Unit 2

#### Area of Study 1: Data analysis, probability and statistics

In this area of study students cover the study of linear combinations of random variables and the distribution of sample means of a population, with the use of technology to explore variability of sample means.

#### Area of Study 2: Space and measurement

In this area of study students cover trigonometry and identities, rotation and reflection transformations of the plane and vectors for working with position, shape, direction and movement in the plane and related applications.

#### Area of Study 3: Algebra, number and structure

In this area of study students cover the arithmetic and algebra of complex numbers, including polar form, regions and curves in the complex plane and introduction to factorisation of quadratic functions over the complex field.

#### Area of Study 3: Functions, relations and graphs

In this area of study students cover an introduction to partial fractions; reciprocal and inverse circular functions and their graphs and simple transformations of these graphs; locus definitions of lines, parabolas, circles, ellipses and hyperbolas and the cartesian, parametric and polar forms of these relations.

### Units 1 and 2

#### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

#### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

#### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

#### Assessment Tasks

Demonstration of achievement of Outcome 1 should be based on the student's performance on a selection of the following assessment tasks:

- assignments
- tests
- solutions to sets of worked questions
- summary notes or review notes.

Demonstration of achievement of Outcome 2 should be based on the student's performance on mathematical investigations and a selection of modelling or problem-solving tasks.

Demonstration of achievement of Outcome 3 should be based on the student's performance on aspects of tasks completed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for computational thinking and the effective and appropriate use of technology.

## Unit 3 & 4

### Area of Study 1: Discrete mathematics

In this area of study students cover the development of mathematical argument and proof. This includes conjectures, connectives, quantifiers, examples and counterexamples, and proof techniques including mathematical induction. Proofs will involve concepts from topics such as: divisibility, inequalities, graph theory, combinatorics, sequences and series including partial sums and partial products and related notations, complex numbers, matrices, vectors and calculus. The concepts, skills and processes from this area of study are to be applied in the other areas of study.

### Area of Study 2: Functions, relations and graphs

In this area of study students cover rational functions and other simple quotient functions, curve sketching of these functions and relations, and the analysis of key features of their graphs including intercepts, asymptotic behaviour and the nature and location of stationary points and points of inflection and symmetry.

### Area of Study 3: Algebra, number and structure

In this area of study students cover the algebra of complex numbers, including polar form, factorisation of polynomial functions over the complex field and an informal treatment of the fundamental theorem of algebra.

### Area of Study 4: Calculus

In this area of study students cover the advanced calculus techniques for analytical and numerical differentiation and integration of a broad range of functions, and combinations of functions; and their application in a variety of theoretical and practical situations, including curve sketching, evaluation of arc length, area and volume, differential equations and kinematics, and modelling with differential equations drawing from a variety of fields such as biology, economics and science.

### Area of Study 5: Space and measurement

In this area of study students cover the arithmetic and algebra of vectors; linear dependence and independence of a set of vectors; proof of geometric results using vectors; vector representation of curves in the plane and their parametric and cartesian equations; vector kinematics in one, two and three dimensions; vector, parametric and cartesian equations of lines and planes.

### Area of Study 6: Data analysis, probability and statistics

In this area of study students cover the study of linear combinations of random variables and introductory statistical inference with respect to the mean of a single population, the determination of confidence intervals, and hypothesis testing for the mean using the distribution of sample means.

### Outcome 1

On completion of this unit the student should be able to define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

### Outcome 2

On completion of this unit the student should be able to apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

### Outcome 3

On completion of this unit the student should be able to apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

### Assessment Tasks

School-assessed Coursework for Unit 3 will contribute 20 per cent to the study score.

School-assessed Coursework for Unit 4 will contribute 20 per cent to the study score.

# VCE: PHYSICAL EDUCATION

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## Unit 1: The human body in motion

In this unit, students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Students investigate the role and function of the main structures in each system and how they respond to movement. Through participation in practical activities, students explore and analyse the relationships between the body systems and movement, and how these systems interact and respond at various intensities. Students investigate possible conditions and injuries associated with the musculoskeletal system and recommend and implement strategies to minimise and manage such injuries and conditions. They consider the ethical implications of using permitted and prohibited practices to improve the performance of the body systems, evaluating perceived physiological benefits and describing potential harms.

### Outcome 1: How does the musculoskeletal system work to produce movement?

In this area of study, students examine the muscular and skeletal systems of the human body and how the muscles and bones work together to produce movement. Through practical activities, they explore, from a biophysical perspective, the major components of the musculoskeletal system and its contributions and interactions during physical activity, sport and exercise.

Possible causes of illness and injury to the musculoskeletal system are investigated. Strategies and aids to assist in the prevention and management of such conditions are also explored. Students consider a variety of permitted and prohibited substances and methods used to enhance performance of the musculoskeletal system.

### Outcome 2: What role does the cardiorespiratory system play in movement?

In this area of study, students investigate the cardiovascular and respiratory systems of the human body and how the heart, blood vessels and lungs function at rest and during physical activity. Through practical activities, students explore the structures and function of the cardiorespiratory system and the contributions and interactions of each system during physical activity, sport and exercise at various intensities. The impacts of regular aerobic exercise on the functioning of these systems are also examined. Students consider a variety of permitted and prohibited substances and methods used to enhance performance of the cardiorespiratory system. They also explore the ethical and sociocultural considerations of using permitted and prohibited performance-enhancing substances and methods.

### Assessment Tasks

A written report analysing participation in at least 4 physical activities that demonstrates the integration of theoretical knowledge and practical application of how the musculoskeletal and cardiorespiratory systems work together.

Additionally, at least one other task for the assessment of each of Outcomes 1 and 2.

## Unit 2: Physical activity, sport, exercise and society

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

### Outcome 1: How do physical activity, sport and exercise contribute to healthy lifestyles?

On completion of this unit, the student should be able to collect and analyse data related to individual and population levels of participation in physical activity and sedentary behaviour and conduct an FMA to create, undertake and evaluate a personalised plan that promotes adherence to the relevant physical activity and sedentary behaviour guidelines.

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

On completion of this unit, the student should be able to explain a range of intrapersonal and interpersonal contemporary issues that influence access to, and inclusion, participation and performance in, physical activity and sport at the local, national and global levels.

### Assessment Tasks

Assessment tasks are chosen from:

a written plan and a reflective folio demonstrating participation in a program designed to either increase physical activity levels and/or reduce sedentary behaviour based on the physical activity and sedentary behaviour guidelines for an individual or a selected group.

Suitable tasks for assessment of Outcome 2 may be selected from the following:

- a visual presentation such as a graphic organiser, concept/mind map, annotated poster, presentation file
- a multimedia presentation, including two or more data types (for example, text, still and moving images, sound) and involving some form of interaction or simulation
- an oral presentation
- a written report.



### Unit 3: Movement skills and energy for physical activity

This unit introduces students to principles used to analyse human movement from a biophysical perspective. Students use a variety of tools and coaching 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 correctly applying these principles can lead to improved performance outcomes.

#### Outcome 1: How are movement skills improved?

On completion of this unit, the student should be able to analyse primary data collected from participation in physical activity, sport and exercise to develop and refine movement skills from an individual and coaching perspective, by applying biomechanical and skill-acquisition principles.

#### Outcome 2: How does the body produce energy?

On completion of this unit, the student should be able to use data collected in practical activities to analyse how the major body and energy systems work together to enable movements to occur; explain the factors causing fatigue; and recommend suitable recovery strategies.

#### Assessment Tasks

Structured questions that draw on primary data which analyses a movement skill using biomechanical and skill acquisition principles.

A laboratory report based on primary data collected during participation in a practical activity, which analyses the acute responses to exercise, energy system characteristics, energy system interplay, fatigue and recovery. A response in one or more of the following forms, which focus on energy system interplay, fatigue and/or recovery.

- School-assessed Coursework for Unit 3 will contribute 20 per cent to the study score.
- School-assessed Coursework for Unit 4 will contribute 30 per cent to the study score.
- The examination will contribute 50 per cent to the study score.

### Unit 4: Training to improve performance

In this unit, students' participation and involvement in physical activity will form the foundations of understanding how to improve performance from a physiological perspective. Students analyse movement skills and fitness requirements and apply relevant training principles and methods to improve performance at various levels (individual, club and elite).

#### Outcome 1: What are the foundations of an effective training program?

On completion of this unit, the student should be able to undertake an activity analysis to justify the physiological requirements of an activity that informs an appropriate assessment of fitness.

#### Outcome 2: How is training implemented effectively to improve fitness?

On completion of this unit, the student should be able to participate in a variety of training methods; design and evaluate training programs; and explain performance improvements that occur due to chronic adaptations, depending on the type of training undertaken.

#### Outcome 3: Integrated movement experiences

On completion of this unit, the student should be able to integrate theory and practice that enables them to analyse the interrelationships between skill acquisition, biomechanics, energy production and training, and the impacts these have on performance.

#### Assessment Tasks

- A written report analysing data from an activity analysis to determine the relevant physiological requirements in a selected activity including justification of the selection of appropriate tests to assess fitness.
- A case study that draws on experiences from participation in at least 5 training sessions to design a personalised 6-week training program
- A response in one or more of the following formats, which links chronic adaptations of the cardiovascular, respiratory and muscular systems to training methods and improved performance:
  - a case study analysis
  - a data analysis
- An extended-response question drawing on personal experiences from a chosen practical activity recorded in the reflective folio, that analyses the interrelationships between skill acquisition, biomechanics, energy production and training program theoretical knowledge for their impacts on participation and/or performance. An emphasis should be placed on using a suitable tool, such as a concept or mind map, to plan a response.

# VCE: PHYSICS

## Unit 1: How is energy useful to society

In this unit students examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain energy. Models used to understand light, thermal energy, radioactivity, nuclear processes and electricity are explored. Students apply these physics ideas to contemporary societal issues: communication, climate change and global warming, medical treatment, electrical home safety and Australian energy needs.

### Outcome 1: How are light and heat explained?

On completion of this unit the student should be able to model, investigate and evaluate the wave-like nature of light, thermal energy and the emission and absorption of light by matter.

### Outcome 2: How is energy from the nucleus utilised?

On completion of this unit the student should be able to explain, apply and evaluate nuclear radiation, radioactive decay and nuclear energy.

### Outcome 3: How can electricity be used to transfer energy?

On completion of this unit the student should be able to investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, and describe the safe and effective use of electricity by individuals and the community.

## Unit 2: How does physics help us to understand the 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.

### Outcome 1: How is motion understood?

On completion of this unit the student should be able to investigate, analyse, mathematically model and apply force, energy and motion.

### Outcome 2: How does physics inform contemporary issues and applications in society?

Eighteen options are available for selection in Area of Study 2. Each option is based on a different observation of the physical world. One option is to be selected by the student from the following:

### Outcome 3: How do physicists investigate questions?

On completion of this unit the student should be able to draw an evidence-based conclusion from primary data generated from a student-adapted or student-designed scientific investigation related to a selected physics question.

## Assessment Tasks – for Units 1 and 2

Assessment tasks for this unit may be selected from:

- a report of a laboratory or fieldwork activity including the generation of primary data
- reflective annotations related to one or more practical activities from a logbook
- an analysis and evaluation of generated primary and/or collated secondary data
- a critique of an experimental design, process or apparatus
- a modelling or simulation activity
- a report of the design, building, testing and evaluation of a device
- an explanation of a selected physics device, design or innovation
- a physics-referenced response to an issue or innovation
- a report of a selected physics phenomenon
- a media analysis/response
- an infographic
- problem-solving involving physics concepts and/or skills
- a report of an application of physics concepts to a real-world context
- an analysis, including calculations, of physics concepts applied to real-world contexts
- comparison and evaluation of two solutions to a problem, two explanations of a physics phenomenon or concept, or two methods and/or findings from practical activities
- a scientific poster.



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

In this unit students use Newton's laws to investigate motion in one and two dimensions. They explore the concept of the field as a model used by physicists to explain observations of motion of objects not in apparent contact. Students compare and contrast three fundamental fields – gravitational, magnetic and electric – and how they relate to one another. They consider the importance of the field to the motion of particles within the field. Students examine the production of electricity and its delivery to homes. They explore fields in relation to the transmission of electricity over large distances and in the design and operation of particle accelerators.

#### Outcome 1: How do physicists explain motion in two dimensions?

On completion of this unit the student should be able to investigate motion and related energy transformations experimentally and analyse motion using Newton's laws of motion in one and two dimensions.

#### Outcome 2: How do things move without contact?

On completion of this unit the student should be able to analyse gravitational, electric and magnetic fields, and apply these to explain the operation of motors and particle accelerators, and the orbits of satellites.

#### Outcome 3: How are fields used in electricity generation?

On completion of this unit the student should be able to analyse and evaluate an electricity generation and distribution system.

#### Assessment Tasks

For Outcomes 1, 2 and 3

For each outcome, one task selected from:

- application of physics concepts to explain a model, theory, device, design or innovation
- analysis and evaluation of primary and/or secondary data, including data plotting, identified assumptions or data limitations, and conclusions
- problem-solving, applying physics concepts and skills to real-world contexts
- comparison and evaluation of two solutions to a problem, two explanations of a physics phenomenon or concept, or two methods and/or findings from practical activities.

### Unit 4: How have creative ideas and investigation revolutionised thinking in physics?

In this unit, students explore some monumental changes in thinking in Physics that have changed the course of how physicists understand and investigate the Universe. They examine the limitations of the wave model in describing light behaviour and use a particle model to better explain some observations of light. Matter, that was once explained using a particle model, is re-imagined using a wave model. Students are challenged to think beyond how they experience the physical world of their everyday lives to thinking from a new perspective, as they imagine the relativistic world of length contraction and time dilation when motion approaches the speed of light. They are invited to wonder about how Einstein's revolutionary thinking allowed the development of modern-day devices such as the GPS.

#### Outcome 2: How is scientific inquiry used to investigate fields, motion or light?

On completion of this unit the student should be able to design and conduct a scientific investigation related to fields, motion or light, and present an aim, methodology and method, results, discussion and a conclusion in a scientific poster.

#### Assessment Tasks

School-assessed Coursework for Unit 4 will contribute 20 per cent to the study score.

For Outcome 1

One task selected from:

- application of physics concepts to explain a model, theory, device, design or innovation
- analysis and evaluation of primary and/or secondary data, including data plotting, identified assumptions or data limitations, and conclusions
- problem-solving, applying physics concepts and skills to real-world contexts
- comparison and evaluation of two solutions to a problem, two explanations of a physics phenomenon or concept, or two methods and/or findings from practical activities.

For Outcome 2

Communication of the design, analysis and findings of a student-designed and student-conducted scientific investigation through a structured scientific poster and logbook entries.

# VCE: PSYCHOLOGY

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

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

### Area of Study 1: What influences psychological development?

On completion of this unit the student should be able to identify the varying influences of nature and nurture on a person's psychological development and explain particular factors that may lead to typical or atypical psychological development.

### Area of Study 2: How does the brain function?

On completion of this unit the student should be able to describe how understanding of brain structure and function has changed over time, explain how different areas of the brain coordinate different functions, and explain how brain plasticity and brain damage can change psychological functioning.

### Area of Study 3: Student-directed research investigation

On completion of this unit the student should be able to investigate and communicate a substantiated response to a question related to brain function and/or development, including reference to at least two contemporary psychological studies and/or research techniques.

In this area of study students apply and extend their knowledge and skills developed in Areas of Study 1 and/or 2 to investigate a question related to brain function and/or psychological development.

Topics may be selected from

- Biopsychology
- Brain and the use of technology
- Cognition
- Psychological development
- Mental health and disorder

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

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

### Outcome 1 & Area of Study 1 - What influences a person's perception of the world?

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

### Outcome 2 & Area of Study 2 - How are people influenced to behave in different ways?

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

### Outcome 3 & Area of Study 3: Student-directed practical investigation

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

### Unit 3: How does experience affect behaviour and mental processes?

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

#### Outcome 1: How does the nervous system enable psychological functioning?

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

#### Outcome 2: How do people learn and remember?

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

#### Assessment Tasks

School-assessed Coursework for Unit 3 will contribute 20 per cent to the study score, which is divided evenly between the two outcomes.

Assessment tasks may include:

- annotations of practical activities from a practical logbook
- a visual presentation
- media analysis/response
- a test
- analysis of data including generalisations and conclusions
- a flow chart
- a reflective blog/learning journal related to selected
- activities or in response to an issue

### 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. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder.

#### Outcome 1: How do levels of consciousness affect mental processes and behaviour?

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

#### Outcome 2: What influences mental wellbeing?

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

#### Outcome 3: Practical investigation

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

#### Assessment Tasks

School-assessed Coursework for Unit 4 will contribute 30 per cent to the study score, which is divided evenly between the three outcomes.

Assessment tasks may include:

- comparison of different states of consciousness
- media analysis/response
- a response to a set of structured questions
- a reflective learning journal/blog related to

A student practical investigation related to mental processes and psychological functioning is undertaken in either Area of Study.

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination that will contribute 50 per cent to the study score.

# VCE: SYSTEMS ENGINEERING

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## Unit 1: Mechanical systems

This unit focuses on the engineering concepts that underpin the design and manufacture of mechanical systems. Students explore the fundamental physics governing machines and their operation in order to investigate, design and begin production of an independent mechanical system. The focus is on mechanics however students are encouraged to make design choices that will allow them to implement electro technological components in Unit 2.

### Outcome 1: Fundamentals of mechanical system design

On completion of this unit students should be able to describe and apply basic engineering concepts and principles and use components to design and plan a mechanical system using the systems engineering process.

### Outcome 2: Producing and evaluating mechanical systems

On completion of this unit the student should be able to produce, test, diagnose and evaluate a mechanical system using the systems engineering process.

### Assessment Tasks

Documentation of the Systems Engineering Process in one or more of:

- Multimedia presentation
- Poster
- Report
- Production work
- Practical demonstrations
- Test

## Unit 2: Introduction to electrotechnology systems

In this unit students study fundamental electrotechnology engineering principles. Students investigate electronic components relevant to various engineering disciplines and use this knowledge to design and build electronic control systems relevant to their chosen project. Key skills in the manufacture of electronic circuits and programming microcontrollers are taught and assessed.

### Outcome 1: Fundamentals of electrotechnology system design

On completion of this unit the student should be able to investigate, represent, describe and use basic electro technological and basic control engineering concepts, principles and components, and design and plan an electro technological system using the systems engineering process.

### Outcome 2: Producing and evaluating electrotechnology systems

On completion of this unit the student should be able to make, test and evaluate an electrotechnology system, using selected relevant aspects of the Systems Engineering Process

### Assessment Tasks

Documentation of the Systems Engineering Process in one or more of:

- Folio
- Report
- Production work
- Practical demonstrations
- Test
- Oral presentation

### Unit 3: Integrated and controlled systems

In this unit students study the engineering principles relevant to the design and operation of mechanical and electronic systems. Applying their knowledge, students design and plan an operational system that includes interconnected mechanical and electronic systems. The production emphasizes innovation, design, testing and evaluation with students taking responsibility for managing their project. Students investigate the energy demands of modern society and examine changes to renewable and non-renewable energy sources.

#### Outcome 1: Controlled and integrated systems engineering design

On completion of this unit the student should be able to investigate, analyse and apply concepts and principles, and use components to design, plan and commence production of an integrated and controlled mechanical and electro technological system using the systems engineering process.

#### Outcome 2: Clean energy technologies

On completion of this unit the student should be able to discuss the advantages and disadvantages of renewable and non-renewable energy sources, and analyse and evaluate the technology used to harness, generate and store non-renewable and renewable energy.

#### Assessment Tasks

School-assessed task contributes 50 per cent to the final assessment.

School-assessed Coursework for Unit 3 will contribute 10 per cent to the study score and may include:

- Short written reports
- Multimedia report
- Case Study
- Oral Presentation

### Unit 4: Systems control

In this unit students complete the production work and test and evaluate the integrated controlled

system they designed in Unit 3. Students investigate new and emerging technologies, consider reasons for their development and analyse their impacts.

#### Outcome 1: Producing, testing and evaluating integrated technological systems

On completion of this unit the student should be able to finalise production, test and diagnose a mechanical and electro technological integrated and controlled system using the systems engineering process, and manage, document and evaluate the system and the process, as well as their use of it.

#### Outcome 2: New and emerging technologies

On completion of this unit the student should be able to evaluate a range of new or emerging systems engineering technologies and analyse the likely impacts of a selected technology.

#### Assessment Tasks

School-assessed Coursework for Unit 4 will contribute 10 per cent, and may include:

- Media Analysis
- Case Study
- Oral Presentation

# VCE: VISUAL COMMUNICATION DESIGN

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## Unit 1: Finding, reframing and resolving design problems

In this unit students are introduced to the practices and processes used by designers to identify, reframe and resolve human-centred design problems. They learn how design can improve life and living for people, communities and societies, and how understandings of good design have changed over time. Students learn the value of human-centred research methods, working collaboratively to discover design problems and understand the perspectives of stakeholders. They draw on these new insights to determine communication needs and prepare design criteria in the form of a brief.

### Outcome 1: Reframing design problems

In this area of study, students learn that designers not only deliver design solutions, but also find and reframe problems that can be complex, misunderstood or ill-defined. They draw on conceptions of 'good design' and apply research methods to identify human-centred design problems, before preparing a brief defining a communication need. This process asks students to engage with the Discover and Define phase of the VCD design process and includes both divergent and convergent thinking strategies.

### Outcome 2: Solving communication design problems

In this area of study, students draw on conceptions of good design and their understanding of human-centred design problems when developing visual language for a brand or business. They learn that visual language serves as part of a larger strategy to increase engagement, influence behaviour and reposition the brand or business among audiences or users. It can include but is not limited to a visual identity applied to various outcomes and collateral, a signature colour palette, graphic icons and typography.

### Outcome 3: Design's influence and influences on design

Through a case study approach, students explore how visual communications have been influenced by social and cultural factors and past and contemporary visual communication practices. Students consider the works of designers in terms of their visual language and the use of materials, methods, media, design elements, design principles and presentation formats.

### Assessment Tasks

- a report or presentation exploring conceptions of good design
- a presentation documenting human-centred research methods and findings relating to a design problem
- a written brief identifying a communication need.
- a folio of work demonstrating the Develop and Deliver stages of the VCD design process to create visual language for a business or brand
- presentation of design concepts for a critique

## Unit 2: Design contexts and connections

Unit 2 builds on understandings of visual communication practices developed in Unit 1. Students draw on conceptions of good design, human-centred research methods and influential design factors as they revisit the VCD design process, applying the model in its entirety. Practical tasks across the unit focus on the design of environments and interactive experiences. Students adopt the practices of design specialists working in fields such as architecture, landscape architecture and interior design, while discovering the role of the interactive designer in the realm of user-experience (UX). Methods, media and materials are explored together with the design elements and principles, as students develop spaces and interfaces that respond to both contextual factors and user needs.

### Outcome 1: Design, place and time

In this area of study, students examine the relationships between design, place and time, and learn about the influence of context when designing environments in which to live, work and play. Students analyse how design examples from architecture, interior, exhibition or landscape design reflect and respond to their surrounding context, while considering how designers draw inspiration from other times and places

### Outcome 2: Cultural ownership and design

In this area of study, students explore the designer's ethical and legal responsibilities when drawing on knowledge and designs belonging to Indigenous communities from Australia or abroad. They learn how to adopt culturally appropriate design practices, including protocols for the creation and commercial use of Indigenous knowledge such as those published in the Australian Indigenous Design Charter. In particular, students develop a deep appreciation for the histories, practices and foundational contributions of Aboriginal and Torres Strait Islander peoples to Australian design identity, while learning about respectful and appropriate representations of Aboriginal and Torres Strait Islander culture in design.

### Outcome 3: Designing interactive experiences

In this area of study, students examine the role of visual communication in shaping positive interactive experiences, and in catering for the diverse needs of users when interacting with devices, systems or services. They explore how interaction designers contribute to larger user-experience (UX) projects, focusing on the design of visual interfaces rather than their underlying functionality. They adopt inclusive practices and principles during the design of a user interface for a digital site or device, prioritising accessibility and usability. In doing so, students synthesise key understandings from previous outcomes: good design, human-centred research methods, design's influence and the influences on design, and the significance of place and time.

### Assessment Tasks

- Folio of Technical Drawings in Context
- Folio of Type and Image Tasks
- Design Process Folio



### Unit 3: Visual communication in design practice

In this unit students explore and experience the ways in which designers work, while also analysing the work that they design. Through a study of contemporary designers practising in one or more fields of design practice, students gain deep insights into the processes used to design messages, objects, environments and/or interactive experiences. They compare the contexts in which designers work, together with their relationships, responsibilities and the role of visual language when communicating and resolving design ideas. Students also identify the obligations and factors that influence the changing nature of professional design practice, while developing their own practical skills in relevant visual communication practices.

#### Outcome 1: Professional design practice

In this area of study, students investigate how and where designers work, identifying the role of visual communication in professional design practice. Contemporary designers working in one or more fields of design practice are selected for study. Students compare the contexts in which these designers work, their applications of a design process, and the ways in which they use visual language to communicate ideas and concepts, and present design solutions. Students explore how designers collaborate with both stakeholders and specialists to shape and resolve design problems. They also identify the impact of ethical and legal obligations, including issues of ownership and intellectual property, and the extent to which contemporary designers adopt sustainable and circular design practices. In doing so, students learn how contemporary design practices differ from those in the past and how they may change in the future, identifying the influence of technological, economic, cultural, environmental and social factors.

#### Outcome 2: Design analysis

In this area of study, students learn how visual language is used to effectively communicate ideas and information to audiences or users. Students analyse the aesthetic decisions made by designers when producing messages, objects, environments or interactive experiences. They compare two or more design examples, considering how the design elements and principles are used in combination with media, methods and materials to address perceived communication needs. Drawing on conceptions of good design, students describe, analyse and evaluate how aesthetic decisions reflect the purposes, contexts and audiences or users of the selected design examples. They also consider the influence of technological, economic, cultural, social or environmental factors on the selected design examples.

#### Outcome 3: Design process: defining problems and developing ideas

In this area of study, students explore the Discover, Define and Develop phases of the VCD design process, and apply understandings of good design when addressing a selected design problem.

### Unit 4: Delivering design solutions

In this unit students continue to explore the VCD design process, resolving design concepts and presenting solutions for two distinct communication needs. Ideas developed in Unit 3, Outcome 3 are evaluated, selected, refined and shared with others for further review. An iterative cycle is undertaken as students rework ideas, revisit research and review design criteria defined in the brief. Manual and digital methods, media and materials are explored together with design elements and principles, and concepts tested using models, mock-ups or low-fidelity prototypes.

#### Outcome 1: Design process: refining and resolving design concepts

In this area of study, students reflect critically on feedback received in Unit 3, Outcome 3 as they evaluate, select and evolve design ideas into concepts for further refinement and testing. In doing so, students explore the Deliver phase of the VCD design process.

#### Outcome 2: Presenting design solutions

In this area of study, students present design solutions for each of the communication needs addressed in Area of Study 1. They choose how best to use visual language to communicate solutions to stakeholders, considering aesthetic impact through applications of design elements and principles. Students select materials, methods and media appropriate for the presentation of final design solutions that are distinct from one another in purpose and presentation format, and that address design criteria specified in the brief.

### Assessment Tasks

#### Unit 3 Area of Study 1 and 2

These assessment tasks contribute 20% to the final assessment.

- A comparative case study of designers in selected design field(s) presented in one of the following formats:
- a written report
- an annotated visual report
- a response presented in a digital format, such as an online presentation or interactive website.
- Two practical design exercises documenting emerging skills in selected field(s) of practice.

A comparative analysis of design examples presented in one of the following formats:

- a written report
- an annotated visual report
- a response presented in a digital format, such as an online presentation or interactive website

#### Unit 3 Area of Study 3 and Unit 4

The school-assessed Task contributes 50 per cent to the study score.

The student's level of achievement in Unit 3 Outcome 3 and in Unit 4 Outcomes 1 and 2 will be assessed through a School-assessed Task.

The examination will contribute 30 per cent to the study score.



# VCE MUSIC

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## Unit 1: Organisation of Music

In this unit students explore and develop their understanding of how music is organised. By performing, creating, analysing and responding to music works that exhibit different approaches, students explore and develop their understanding of the possibilities of musical organisation.

They prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding on their chosen instrument/sound source. At least two works should be associated with their study of approaches to music organisation.

They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.

They develop knowledge of music language concepts as they analyse and respond to a range of music, becoming familiar with the ways music creators treat elements of music and concepts and use compositional devices to create works that communicate their ideas.

### Assessment Tasks

Performances of at least two works, including at least one ensemble/group work

A discussion of the challenges presented by these works which may be presented as:

- oral
- multimedia
- written
- aural, oral, written and practical tasks such as:
- a folio of exercises
- responses to structured questions
- a workbook of class activities

Composition and/or improvisation exercises and accompanying discussion that demonstrate an understanding of the organisation of music which may be presented as:

- oral
- multimedia
- written.

## Unit 2: Effect in Music

In this unit, students focus on the way music can be used to create an intended effect. By performing, analysing and responding to music works/examples that create different effects, students explore and develop their understanding of the possibilities of how effect can be created. Through creating their own music, they reflect this exploration and understanding.

Students prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding using their chosen instrument/sound source. They should perform at least one work to convey a specified effect and demonstrate this in performance.

They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music and the processes they have studied.

As they analyse and respond to a wide range of music, they become familiar with the ways music creators treat elements and concepts of music and use compositional devices to create works that communicate their ideas. They continue to develop their understanding of common musical language concepts by identifying, recreating and notating these concepts.

### Assessment Tasks

Performances of at least two works, including at least one ensemble/group work

A discussion of the challenges presented by these works which may be presented as:

- oral
- multimedia
- written
- aural, oral, written and practical tasks such as:
- a folio of exercises
- responses to structured questions
- a workbook of class activities

Composition and/or improvisation exercises and accompanying discussion that demonstrate an understanding of the organisation of music which may be presented as:

- oral
- multimedia
- written.
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# VCE VOCATIONAL MAJOR

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The VCE Vocational Major is a vocational and applied learning program that sits within the VCE. Four subjects make up the core of a VCE VM program. These are Literacy, Numeracy, Work Related Skills and Personal Development Skills. The subject descriptions for each of these studies begin on the next page.

The VCE Vocational Major takes what is called an 'Applied Learning' approach. Applied learning involves students engaging in relevant and authentic learning experiences. It is a method of learning where theoretical information comes to life for students in a real-world context that relates directly to their own future, is within their own control and is within an environment where they feel safe and respected. Students' knowledge grows and expands as they take action to learn, reflect on that action and plan how to do it better next time.

Students who choose the VCE VM are more likely to be interested in going on to training at TAFE, doing an apprenticeship, or getting a job after completing Year 12. The VCE VM has the flexibility to provide each student with several options, which can be personalised to meet their needs. It is essential that programs are discussed with the VM Team Leader.

Students who start in the VCE VM and then decide they would like to complete their VCE, are able to transfer between certificates. Any changes in pathway should be discussed with Careers Manager and Team Leaders.

## **SATISFACTORY COMPLETION OF VCE VM**

To successfully complete the VCE VM there are several requirements that need to be met.

Like VCE, students must successfully finish at least 16 units, to attain the VCE VM this must include:

- 3 VCE VM Literacy or VCE English units (including a Unit 3–4 sequence)
- 2 VCE VM Numeracy or VCE Mathematics units
- 2 other Unit 3-4 sequences
- 2 VCE VM Work Related Skills units
- 2 VCE VM Personal Development Skills units, and
- 2 VET credits at Certificate II level or above (180 hours)

Further information about the VCE VM program can be found here:

<https://www.vcaa.vic.edu.au/curriculum/vce/Pages/AboutVCEVocationalMajor.aspx>

# VCE VM: LITERACY

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## Unit 1

### **Outcome 1: Literacy for personal use**

On completion of this unit the student should be able to demonstrate understanding of how text types are constructed for different purposes, audiences and contexts through a range of written, digital, oral and visual responses.

### **Outcome 2: Understanding and creating digital texts**

On completion of this unit the student should be able to apply an understanding of the conventions of literacy and digital communication by responding to and creating a range of digital content, suitable for a community, workplace or vocational context.

## Unit 3

### **Outcome 1: Accessing and understanding informational, organisational and procedural texts**

On completion of this unit the student should be able to demonstrate the ability to locate, read and understand the purpose, audience and content presented in a variety of informational, organisational and procedural texts through application of knowledge to real-life documents.

### **Outcome 2: Creating and responding to organisational, informational or procedural texts**

On completion of this unit the student should be able to create organisational, informational and procedural texts that reflect a specific workplace or vocational experience.

## Unit 2

### **Outcome 1: Understanding issues and voices**

On completion of this unit the student should be able to explain the purpose, audience and main ideas of diverse arguments presented in different text types by creating a range of annotations, written, oral and multimedia responses that reflect learning.

### **Outcome 2: Responding to opinions**

On completion of this unit the student should be able to interpret the values and opinions of others and present in oral form points of view supported by evidence.

## Unit 4

### **Outcome 1: Understanding and engaging with literacy for advocacy**

On completion of this unit the student should be able to illustrate understanding of the use of language in advocacy by producing a range of written, visual and multimodal texts for the promotion of self, a product or a chosen community group.

### **Outcome 2: Speaking to advise or advocate**

On completion of this unit the student should be able to negotiate the topic of choice for, and complete, an oral presentation that showcases reflections and evaluations of student learning.

Option 1: Literacy for civic participation

Students deliver an informative or instructional presentation on an area of civic participation that is of personal interest.

Option 2: Literacy for everyday personal contexts

Students deliver an informative or instructional presentation on an area of personal management that is of interest.

# VCE VM: NUMERACY

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## Unit 1

### Area of Study 1: Number

In this area of study students will develop number sense through meaningful application of numeracy practices to a range of contexts where whole numbers, fractions, decimals and percentages are used. Students will select the appropriate method or approach required and communicate their ideas. They should be at ease with performing straightforward calculations both mentally, manually and using software tools and devices.

### Area of Study 2: Shape

In this area of study students will learn to recognise, describe and name common two- and three-dimensional shapes. They will classify, manipulate, represent and construct common and familiar shapes in diagrammatical and concrete forms. They will also become familiar with common characteristics and properties used in classifying shapes.

### Area of Study 3: Quantity and measures

In this area of study students will develop an understanding of routine and familiar metric quantities and their units of measurement applied to single- and multi-step measurement tasks. They will conduct estimations of measurements, undertake routine measurements, perform measurement calculations, and convert units within the metric system with the embedded use of different technologies.

### Area of Study 4: Relationships

In this area of study students will recognise, understand and represent simple patterns of relationship and change in mathematical terms where it exists in common and familiar contexts and applications. They should be able to recognise when change is occurring, be able to identify common and simple mathematical relationships and variables and apply the most appropriate process or processes to determine the results of change.

## Unit 2

### Area of Study 5: Dimension and direction

In this area of study students will develop an understanding of space, direction and location in relation to common landmarks and key compass directions. They will give and follow directions to locations based on digital and printed maps and diagrams. The study of dimension also includes common and routine angles with degrees and an awareness of the one-, two- and three-dimensions of space.

### Area of Study 6: Data

Data can be found in everyday life, workplaces and society. In this area of study, students will collect, represent and undertake common analyses of data to look for patterns in data and derive meaning from data sets located within familiar and routine contexts. Data should be examined for comparison and analysis. Students should draw conclusions from the data and be confident in describing general patterns and trends.

### Area of Study 7: Uncertainty

In this area of study students will explore the basic concepts and everyday language of chance. They will make mathematical predictions about the likelihood of common and familiar events occurring or not occurring. They will also consider conclusions from familiar known events or data and make very simple inferences.

### Area of Study 8: Systematics

In this area of study students will understand the inputs and outputs of technology that can be used in everyday lives for the purposes of planning, collecting, sorting or categorising common and familiar quantitative or mathematical data and information. Students will choose a number of inputs of familiar data, compare the outputs and results, and understand the representations and any summary information derived from the technology.

## Unit 3

### Area of Study 1: Number

In this area of study students undertake single- and multi-step operations and tasks applied to a range of numbers, including positive and negative numbers, fractions, decimals and percentages and numbers expressed using familiar power notations. Students should be confident in selecting the appropriate method or approach required and communicating their ideas. They should be at ease with performing calculations both manually and using software tools and devices.

### Area of Study 2: Shape

In this area of study students learn to recognise and name a range of two-dimensional shapes and three-dimensional objects. They classify, manipulate, represent and construct a range of simple and compound shapes in diagrammatical and concrete forms. Students also become familiar with the different characteristics and properties used in classifying shapes.

### Area of Study 3: Quantity and measures

In this area of study students develop an understanding of metric measurements and their units of measurement applied to multi-step measurement tasks including working with commonly used non-metric measurements and their units of measure. Students will conduct estimations of measurements, perform a range of measurement calculations, and undertake conversions with the embedded use of different

### Area of Study 4: Relationships

In this area of study students recognise, understand and represent relationship and change in more formal mathematical terms, where it exists in relevant real-life contexts and applications. Students should understand when change is occurring and be able to identify and use formal mathematical relationships, variables, and mathematical processes to determine the results of change.

## Unit 4

### Area of Study 5: Dimension and direction

In this area of study students develop an understanding of the use of space, direction and location in relation to landmarks and compass directions. Students should be able to accurately give and follow complex directions to multiple locations based on digital and printed maps and diagrams. The study of dimension also includes angles with degrees and spatial awareness.

### Area of Study 6: Data

Data can be found in everyday life, workplaces and society. In this area of study, students collect, represent and undertake different analyses of data to discover patterns in data, undertake summary statistics, and derive meaning from data located within relevant but possibly unfamiliar or non-routine contexts. Data should be examined for comparison and analysis. Students should draw conclusions from the data and their analysis and be confident to represent, describe and reflect on any patterns, outcomes and trends.

### Area of Study 7: Uncertainty

In this area of study students use concepts of randomness, chance and probability. Students should be able to make mathematical predictions about the likelihood of events occurring or not occurring. They should be able to consider and make conclusions about likelihood based on the data and make straightforward inferences. Students should be familiar with the concept of risk and apply the idea of uncertainty to risk.

### Area of Study 8: Systematics

In this area of study students develop an understanding of inputs and outputs of technology, including emerging technologies, that can be used for the purposes of planning, collecting, sorting or categorising a range of quantitative or mathematical data and information. Students should be confident in choosing multiple inputs of data, compare the outputs and results, and analyse, review and make decisions and conclusions based on the representations and any summary information derived from the technology.

## VCE VM: PERSONAL DEVELOPMENT SKILLS

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## **Unit 1: Healthy Individuals**

This unit focuses on the development of personal identity and individual pathways to optimal health and wellbeing. It begins with concepts of personal identity and the range of factors that contribute to an individual's perception of self and individual health and wellbeing. Students will use these findings to enhance an understanding of community cohesion, community engagement and how sense of identity may affect outcomes in different contexts. Students will investigate the elements of emotional intelligence and begin to develop an awareness of interrelationships between communities and the health and wellbeing of individuals.

### **Area of Study 1: Personal identity and emotional intelligence**

In this area of study, students will be introduced to the concepts of personal identity and emotional intelligences in differing contexts. Students will explore the elements of emotional intelligence (self-awareness, self-regulation, motivation, empathy and social skills), and develop and apply strategies relating to personal identity and emotional intelligence.

### **Area of Study 2: Community health and wellbeing**

In this area of study, students will explore concepts of health and wellbeing for individuals and groups, the factors that affect wellbeing and the characteristics of inclusive and cohesive communities. They will investigate activities and support services that aim to improve individual and group wellbeing within the community. Students will explore the requirements for undertaking activities or voluntary work within the community. They will understand and apply the key elements involved in designing, implementing and evaluating a purposeful activity that aims to achieve a clear objective.

### **Area of Study 3: Promoting a healthy life**

In this area of study, students will investigate key advancements in technology and the impact of technology on individuals and society. They will explore how technology is used to facilitate health promotion programs and understand the importance of using strategies to assess the reliability, validity and accuracy of health and wellbeing-related information.

## **Unit 2: Connecting with community**

This unit focuses on the benefits of community participation and how people can work together effectively to achieve a shared goal. It begins with definitions of community and different types of communities at a local, national and global level. Students will look at the relationships between active citizenship, empathy and connection to culture, and individual health and wellbeing. They will investigate the barriers and enablers to problem solving within the community.

### **Area of Study 1: What is community?**

In this area of study, students will explore the concept of community at a local, national and global level. They will understand the characteristics that influence how communities are formed, different groups within community, factors that influence groups, and also consider the role of citizenship. Students investigate community participation and recognise that there are a range of ways to participate in community life.

### **Area of Study 2: Community cohesion**

In this area of study, students will examine issues affecting local, national and global communities, both in the current context and in anticipation of future challenges, to understand differing perspectives and the impact on community cohesion. Students will explore the enablers and barriers to problem solving and strategies to foster community cohesion.

### **Area of Study 3: Engaging and supporting community**

In this area of study, students will consider the concept of community engagement and recognise the benefits and challenges of community engagement to address a range of issues. They will investigate the key features of effective community engagement to address issues and implement initiatives.



### **Unit 3: Leadership and teamwork**

This unit considers the role of interpersonal skills and social awareness in different settings and contexts. Students will examine leadership qualities and the characteristics of effective leaders and how these qualities can be applied to the achievement of goals within personal and community contexts. They will explore key components of effective teamwork and reflect on how to lead and contribute within a team context through a collaborative problem-solving activity. Students will evaluate individual contribution as well as the overall effectiveness of the team.

#### **Area of Study 1: Social awareness and interpersonal skills**

In this area of study, students will examine the characteristics of social awareness and a range of interpersonal skills to facilitate respectful interactions with others. They will investigate the contexts and settings in which people demonstrate social awareness and apply interpersonal skills (both in everyday life and when using digital technologies), and the processes people use to research a range of issues. Students will focus on qualities of leadership and how these qualities can be applied to achieving goals within personal and community contexts. Students will examine the characteristics of effective leaders and reflect on how leadership qualities and styles can be applied in a range of contexts. Implicit to this unit is that leadership begins with the, develops to leadership of others and then to communities.

#### **Area of Study 2: Effective leadership**

In this area of study, students will investigate the concept of leadership and the qualities of effective, ethical leaders. They will look at contexts in which people become leaders, a range of leadership styles, and the ethics and expectations of leaders in a democratic society. Students will consider how effective leaders foster innovation and creativity to solve problems and achieve goals.

#### **Area of Study 3: Effective teamwork**

In this area of study, students will examine leadership and collaboration within teams. They will demonstrate the characteristics and attributes of effective team leaders and team members and reflect on personal contribution and leadership potential as they participate in a team or group activity. Students will evaluate the effectiveness of teamwork and explore the steps involved when putting a solution into action.

### **Unit 4: Community project**

This unit focuses on student participation in an extended project relating to a community issue. Students will identify environmental, cultural, economic and social issues affecting the community and select one for an extended community project. They will look at past approaches to the selected issue in Australia and elsewhere, consider how they will research information, and formulate an objective to achieve. Students will reflect on how community awareness of a selected issue can be improved. Students will engage in a process of planning, implementing and evaluating a response to a selected community issue. They will conduct research, analyse findings and make decisions on how to present work. Students will consider the key elements (such as emotional intelligence and effective team practices) and considerations (such as safety and ethics) when implementing a community project. Students will present project to an appropriate audience of peers or community members and evaluate the effectiveness of chosen response to the issue.

#### **Area of Study 1: Planning a community project**

In this area of study, students will complete an extended community project that addresses an environmental, cultural, economic or social issue. They will conduct research to identify a range of relevant issues in the community and justify the selection of a focus for the project. Students will seek to understand the issue's significance to the community, develop a project focus, and investigate previous or current responses to the area of concern. They will explore opportunities to build awareness of the chosen issue in the community.

#### **Area of Study 2: Implementing a community project**

In this area of study, students will implement a detailed plan for the selected community project and consider the key elements and key considerations when implementing a plan of action through to completion. Students will consider the possible health, safety and ethical risks of a project, document evidence and make decisions on how findings will be organised, analysed and presented.

#### **Area of Study 3: Evaluating a community project**

In this area of study, students will evaluate the outcomes of the completed community project. They will become familiar with strategies to effectively communicate reflections and findings and engage with audiences. Students will determine a suitable audience to present findings, identify and practise appropriate presentation skills, and make decisions about how a community project will be evaluated.

## **VCE VM: WORK RELATED SKILLS**



## **Unit 1: Careers and learning for the future**

This unit recognises the importance of sourcing reliable information relating to future education and employment prospects to engage in effective pathway planning and decision-making. Students will investigate information relating to future employment, including entry-level pathways, emerging industries, and growth industries and trends, and evaluate the impact of pursuing employment in different industries. Students will reflect on this research in the context of their individual skills, capabilities and education and/or employment goals. They will develop and apply strategies to communicate their findings.

### **Area of Study 1: Future careers**

In this area of study students will evaluate information relating to employment. They will consider the reliability and credibility of information sources and the scope of labour market information available, including skills shortages and industry growth areas, emerging industries and current and future trends. Students will apply strategies to improve planning and decision-making related to gaining employment. They will develop research skills and collate evidence and artefacts relating to their future employment prospects.

### **Area of Study 2: Presentation of career and education goals**

In this area of study students will consolidate their knowledge and understanding of future careers and their personal aspirations, skills and capabilities. Students will develop strategies for conducting research and presenting their research findings, seek feedback and refine their goals through self-reflection.

## **Unit 2: Workplace skills and capabilities**

As the nature of work changes over time, so do the skills and capabilities needed for success. Fundamental to achieving personal goals relating to future education and employment is the ability to recognise and develop individual skills and capabilities that are valued in a chosen pathway. In this unit, students will consider the distinction between essential employability skills, specialist and technical work skills and personal capabilities, and understand the importance of training and development to support the attainment and transferability of skills. Students will collect evidence and artefacts relating to their personal skills and capabilities and promote them through resumes, cover letters and interview preparation.

### **Area of Study 1: Skills and capabilities for employment and further education**

In this area of study students will consider the changing nature of work and the impact this has on future career pathways. They will distinguish between transferable skills that are valued across industries and specialist and technical work skills required for specific industries. They will be able to recognise how personal capabilities contribute to future success and demonstrate their own skills and capabilities through artefacts and evidence.

### **Area of Study 2: Transferable skills and capabilities**

In this area of study students will recognise the relationship between transferable and employability skills and capabilities. They will investigate the role of ongoing education, training and development for essential and specialist skills, and how these skills can be applied across different jobs and industries. Students will apply strategies to promote their unique skills and capabilities through writing job applications and participating in mock interviews.

### **Unit 3: Industrial relations, workplace environment and practice**

This unit focuses on the core elements of a healthy, collaborative, inclusive and harmonious workplace and is separated into three main areas:

- wellbeing, culture and the employee-employer relationship
- workplace relations, and
- communication and collaboration.

Students will learn how to maintain positive working relationships with colleagues and employers, understanding the characteristics of a positive workplace culture and its relationship to business success. They will investigate key areas relating to workplace relations including methods for determining pay and conditions, workplace bullying, workplace discrimination, workplace harassment and dispute resolution. Students will discover how teamwork and communication skills contribute to healthy, collegiate and productive workplaces.

#### **Area of Study 1: Workplace wellbeing and personal accountability**

In this area of study students will be introduced to the features and characteristics of a healthy, collaborative and harmonious workplace. They will examine the concept of culture and consider the characteristics of work-life balance. Students will analyse the interconnection between employee and employer expectations and understand the importance of diversity and inclusion in the workplace. They will apply their understanding of workplace wellbeing to simulated workplace scenarios and real-life case studies.

#### **Area of Study 2: Workplace responsibilities and rights**

In this area of study students will explore workplace relations, including the National Employment Standards and methods of determining pay and conditions. They will consider the characteristics and legal consequences of workplace bullying, workplace discrimination and workplace harassment, and gain an overview of the common legal issues experienced in the workplace. Students will examine processes to address and resolve workplace disputes.

#### **Area of Study 3: Communication and collaboration**

In this area of study students will apply effective and efficient workplace communication strategies. They will consider their role and the role of teams in the workplace. Students will also investigate techniques for developing and fostering professional, formal and informal networks and the role of digital and electronic collaboration and communication.

### **Unit 4: Portfolio preparation and presentation**

Portfolios are a practical and tangible way for a person to communicate relevant skills, experiences and capabilities to education providers and future employers. In this unit students will develop and apply their knowledge and skills relating to portfolios, including the features and characteristics of a high-quality physical and/or digital portfolio. The unit culminates in the formal presentation of a completed portfolio in a panel style interview and an evaluation of the end product.

#### **Area of Study 1: Portfolio development**

In this area of study students will explore the purpose of a portfolio and consider the intended audiences and uses of portfolios in different contexts. They will discuss and compare the features and uses of physical and digital portfolios and examine the characteristics of a high-quality portfolio. Students will understand how to prepare a portfolio proposal and how to plan the development of a portfolio.

#### **Area of Study 2: Portfolio presentation**

In this area of study, students will apply their knowledge of portfolios by engaging in the process of developing and formally presenting their completed portfolio in a panel style interview. Students will use a range of verbal, written and practical strategies to communicate their skills and knowledge, including visual appeal, and varied and appropriate content. Students will evaluate their portfolio using a range of mechanisms including self-assessment, feedback and comparison with criteria.

# YEAR 10 UNIT DESCRIPTIONS

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The following unit descriptions are organised into Learning Areas and outline the Units that students may study in Year 10.

## LEARNING AREAS

### English:

- English Core
- English Literature

### The Arts:

- Art
- Ceramics
- Drama
- Media Arts
- Music
- Photomedia
- Visual Communication Design

### Health & Physical Education

- Health and Human Movement
- Active and Healthy Lifestyles

### Humanities

- History: Conflict and Change
- Money, Markets and the Law
- Sociology

### Languages

- Japanese

### Mathematics:

- Core Mathematics
- Advanced Mathematics

### Science

- Science: Genetics, Motion and Chemical Bonds
- Science: Evolution, Chemical Reactions and the Universe

### Technology

- Digital Technology
- Food Technology
- Metal Technology
- Wood Technology
- Systems Engineering

### Vocational Pathways

- Certificate II in Workplace Skills

# YEAR 10: ENGLISH

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## CORE: ENGLISH

Students study a course designed to develop their skills and knowledge in the three key areas of reading, writing and speaking and listening. Year 10 English provides students with the opportunity to engage with a range of ideas and develop their critical and creative thinking skills.

### Reading Activities:

Students will study a range of different text types and genres. As well as the study of themes, characters and issues in texts, students will become more familiar with the features and techniques used in different types of texts including film texts. Students will also develop their ability to understand and evaluate persuasive language by completing activities focusing on critical thinking and through the study of media texts.

### Writing Activities:

Students will experiment with a range of writing styles including descriptive, reflective, imaginative, instructional, analytical and persuasive. Work related pieces will also form part of the Writing Folio. Students will continue crafting their writing and developing awareness of audience and purpose. They also will continue to develop their proof-reading and editing skills.

### Speaking and Listening Activities:

Students will work individually and in groups to share their ideas different topics and issues. Emphasis will be on style and tone of delivery and oral work will demonstrate evidence of planning, research and organisation. Students will engage in class discussions and present speeches about a range of topics.

### Subject length:

Year

### Assessment:

- Written Tasks
- Assignments
- Exam
- Oral Presentation Tasks

## ENGLISH LITERATURE

Students in literature study a range of genres such as poetry, drama, novel, film and short story, and they will analyse the social historical and cultural concepts of these texts. Students are required to read extensively, and they will be asked to critically analyse literary texts. There will also be opportunities for students to write creatively. Students are assessed in regard to reading, writing, speaking and listening skills and upon key assessment tasks.

### Subject length:

Semester

### Assessment:

- Written Tasks
- Assignments
- Exam

# YEAR 10: THE ARTS

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## ART

Students will explore and develop a range of skills and techniques in different media. They will examine the way art is used to communicate ideas and meaning across different cultures and traditions. Students will study artists as inspiration to develop their own art works.

### Subject length:

Semester

### Assessment:

- Folio
- Practical
- Exam

## CERAMICS

Ceramic techniques and skills will be extended. Decorative surface techniques will be researched and refined. Students will also learn sculptural techniques, including slab construction and coil techniques.

### Subject length:

Semester

### Assessment:

- Folio
- Practical
- Exam

## DRAMA

Students will be involved in the study of historical periods of Drama from the modern era (1880 to present). They will continue to develop an analytical approach when responding to different dramatic forms. Students will explore themes and develop skills and ideas, which encourage them to make and present excerpts from plays, monologues, mimes and other forms of dramatic performance. Students will be expected to work individually, in pairs and in small and large groups in a performance environment.

### Subject length:

Semester

### Assessment:

- Folio
- Performance
- Exam

## Media Arts

Students will explore and analyse how media texts are constructed to communicate ideas and emotions, focusing on the film medium. Students will apply the knowledge and skills they develop to produce film sequences and presentations using digital technologies.

### Subject length:

Semester

### Assessment:

- Video essays
- Short films and/or film sequences
- Written responses

## Music

Year 10 Music offers students a comprehensive exploration of solo and group instrumental skills. Students delve into various musical styles and traditions, cultivating a diverse repertoire and honing genre-specific techniques on their instruments. Central to the course is the development of instrumental or vocal proficiency alongside stagecraft skills, focusing on individual expression and interpretation.

Students refine technical skills through practice and performance, alongside deepening their understanding of music theory and analysis. Collaboration is emphasised through ensemble work, fostering teamwork and social learning through music. The course encourages critical engagement with music's cultural and historical contexts, enhancing and broadening students' appreciation and understanding.

Students delve into melody, harmony, rhythm, and structure, embracing both traditional and contemporary composition methods. Utilising acoustic instruments, digital audio workstations (DAWs) and software tools, they compose, arrange, and produce original music, experimenting with sampling, synthesis, and sound design.

Collaboration and feedback are integral, with students participating in workshops to refine their compositions. Through peer critique, they develop communication and problem-solving skills.

By course completion, students possess a diverse portfolio of compositions and proficiency in production techniques. They have honed creativity, critical thinking, and technological literacy, preparing them for further study in music composition, production, or related fields, and fostering a lasting passion for musical expression and innovation. Students possess refined musical skills, confidence, and creativity. They are equipped for further study in music or to simply enjoy lifelong musical participation.

### Assessment:

- Ensemble and/ or Solo Performances
- Music Theory and Aural skills quizzes
- End of semester exam

## PHOTOMEDIA

This unit involves the exploration of a range of materials and techniques within Photography, strengthening the development of a personal style in the making of artworks. Students are encouraged to develop personal responses to themes explored. The relationship between art styles and culture is examined. Students are encouraged to develop a critical awareness of their own and other artists works and to consider issues of presentation.

### Subject length:

Semester

### Assessment:

- Folio
- Practical
- Exam

## VISUAL COMMUNICATION DESIGN

This unit involves the development and application of creative and technical skills. Students will produce a creative folio that is based on a series of design briefs. Students will also complete a folio of conventional graphics involving the use of paraline and orthogonal drawing systems. A folio of computer-generated work will be produced using the programs Photoshop and Illustrator.

### **Subject length:**

Semester

### **Assessment:**

- Folio
- Practical
- Exam

## YEAR 10: HEALTH AND PHYSICAL EDUCATION

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Students participate in a range of Health and Physical Education activities.

### **HEALTH AND HUMAN MOVEMENT**

This unit aims to further broaden student experiences in team and individual activities including a specialised unit on invasion games and net & wall sports.

Students will also explore topics including Body Systems (musculoskeletal), biomechanics and youth related health issues that provide background information related to the VCE HHD and PE study designs.

### **Subject length:**

Semester

### **ACTIVE AND HEALTHY LIFESTYLES**

This unit aims to further broaden student experiences with; striking and fielding sports and invasion games, team based and individual activities. Improving personal fitness levels will be a major focus of the unit with students completing and designing a training program. Students will also explore topics including Body Systems (cardiorespiratory) and initiatives to promote youth health and wellbeing. These topics will provide background information related to the VCE HHD and PE study designs.

### **Subject length:**

Semester

Students may choose to study one or both of the Health and PE subjects.



# YEAR 10: LANGUAGES OTHER THAN ENGLISH

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## JAPANESE

Studying a language other than English contributes to the universal purposes of schooling and to the development of skills in thinking and reflection. Learners are provided with tools to understand the language, culture and humanity. In this way, language learning contributes to the development of inter-culturally aware citizens, of increasing importance at a time of rapid and deep globalisation.

Students compare and contrast aspects of life in the Japanese speaking communities with those in Australia and other countries and identify similarities and differences. Students interact to exchange information and opinions on topics related to the world of adolescence including daily routines, leisure, family and relationships, school and study, careers and issues of general interest to young people.

Students will consider the audience, purpose and appropriate language for a range of listening, speaking, reading and writing tasks. Students will be required to read short, modified texts related to a topic, silently and aloud with fluency. They apply knowledge of characters and punctuation in new contexts and extend their range of familiar characters. They employ strategies for broadening their repertoire of script, grammatical structures and vocabulary from reading materials. Students will also contribute to discussions about the general concept of culture and the relation of cultures to each other, including the effects of migration and travel.

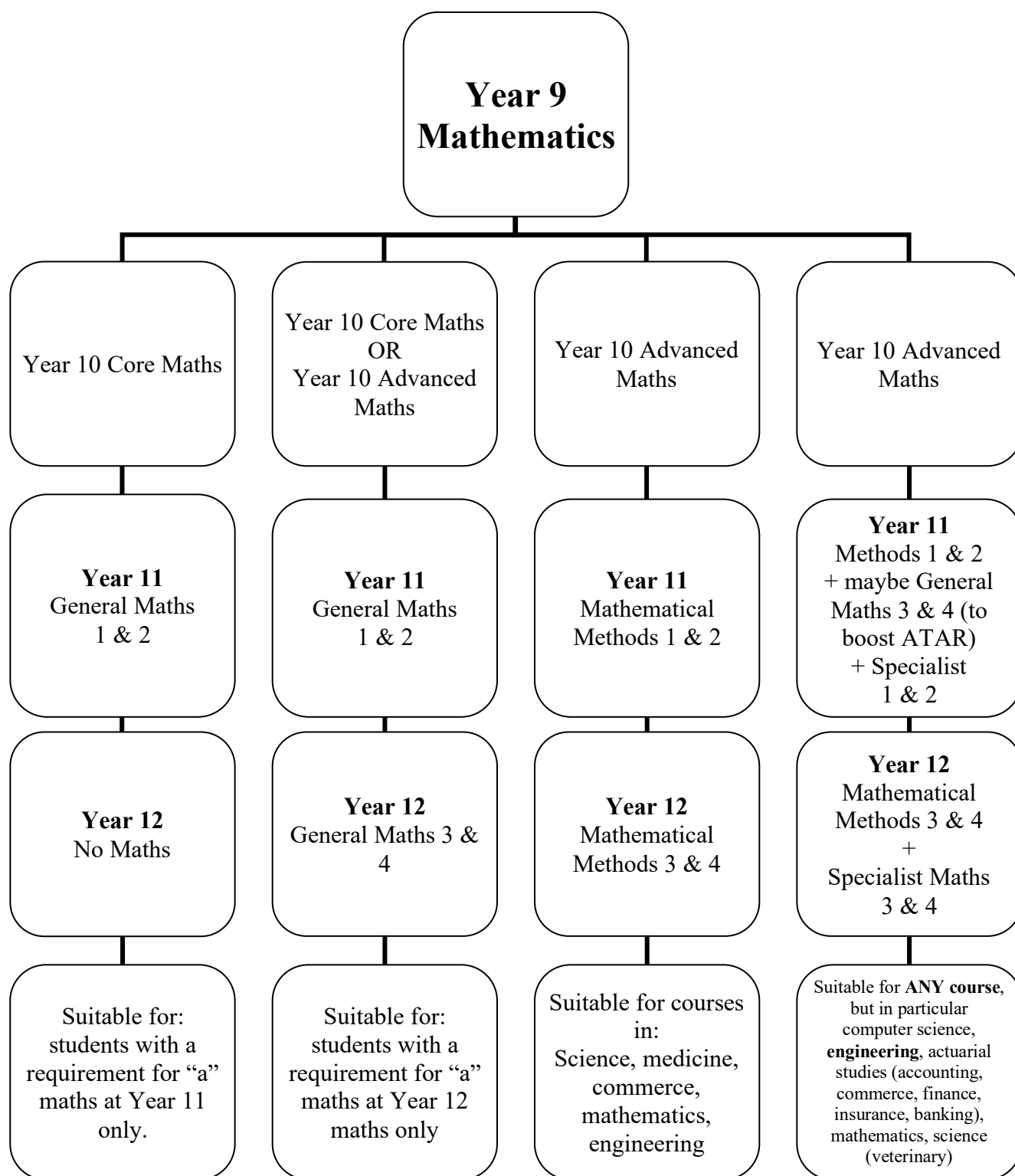
### **Subject length:**

Full year

### **Assessment:**

- Written Tasks
- Practical Tasks
- Exam

## YEAR 10: MATHEMATICS



## MATHEMATICS CORE

This unit is for students who have completed Year 9 mathematics and is designed to help prepare students for Year 11 General Mathematics and subsequently Year 12 General Mathematics. It will cover a range of topics including area and volume, expanding and factorising quadratics, linear relations, trigonometry, probability and statistics, functions and geometry. Topics will also include range of problem-solving questions done using mathematical modelling.

### **Subject length:**

Full Year

### **Assessment:**

- Topic Assignments
- Problem Solving Tasks
- Formative Assessments
- Chapter Tests
- Exam

## 10 ADVANCED MATHEMATICS

This unit is for students who have completed Year 9 mathematics and is designed to help prepare students for Year 11 General Mathematics or Maths Methods (CAS) and subsequently Year 12 General Mathematics and/or Maths Methods. In addition to the topics covered in Mathematics (above), additional content is covered in the studies of functions, algebra, calculus, statistics and trigonometry. Topics will also include range of problem-solving questions done using mathematical modelling.

### **Subject length:**

Full Year

### **Assessment:**

- Topic Assignments
- Problem Solving Tasks
- Formative Assessments
- Chapter Tests
- Exam

# YEAR 10: HUMANITIES

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## SOCIOLOGY

Sociology seeks to educate students on the concepts of society, community and identity. Students will discuss and develop an awareness of how social development, life and collaboration can influence change within, but also cause severe consequences for societies. The three main topics covered are the idea of community, identity and integration, historical tension, conflict & reconciliation in a community and modern geo-political concepts of community, and the interrelationships of global societies.

### Subject length:

Semester

### Assessment:

- Written Tasks
- Assignments
- Exam

## HISTORY: CONFLICT AND CHANGE

History is a disciplined process of investigation into the past that develops students' curiosity and imagination. Awareness of history is an essential characteristic of any society, and historical knowledge is fundamental to understanding ourselves and others. It promotes the understanding of societies, events, movements and developments that have shaped humanity from earliest times. It helps students appreciate how the world and its people have changed, as well as the significant continuities that exist to the present day. History, as a discipline, has its own methods and procedures, based on evidence derived from remains of the past. It is interpretative by nature, promotes debate and encourages thinking about human values, including present and future challenges. The study of history also provides opportunities to develop transferable skills of critical and creative thinking, such as the ability to explore questions, imagine possibilities and construct arguments.

Units of study will focus on rising global conflicts, the impact and legacy of the Holocaust and the trends of globalisation, human rights, and individual freedoms following 1945. Australian history is taught within this world history approach. This equips students for the world in which they live and enhances students' appreciation of Australian history. Students appreciate Australia's distinctive path of social, economic and political development, and Australia's position in the Asia-Pacific region, and our global relationships. This knowledge and understanding are essential for informed and active participation in Australia's diverse society.

### Subject length:

Semester

### Assessment:

- Written Tasks
- Assignments
- Source Analysis
- Oral presentation tasks
- Exam

## **MONEY, MARKETS AND THE LAW**

This unit aims to provide students with a sound understanding of legal, economic and business concepts. Students will gain a knowledge and understanding of legal, political, business and economic institutions and enable them to actively participate in society. This unit will cover the following topics which include the law and you, personal finance, the smart consumer, economic issues, Australia in a global economy, work and career planning. Students will be engaged in a simulation with the Australian Stock Market game and there will be an excursion to the Magistrates Court. This unit would be a good general interest subject for students and would provide a good basis for the VCE units Legal Studies, Accounting, Business Management and Economics.

### **Subject length:**

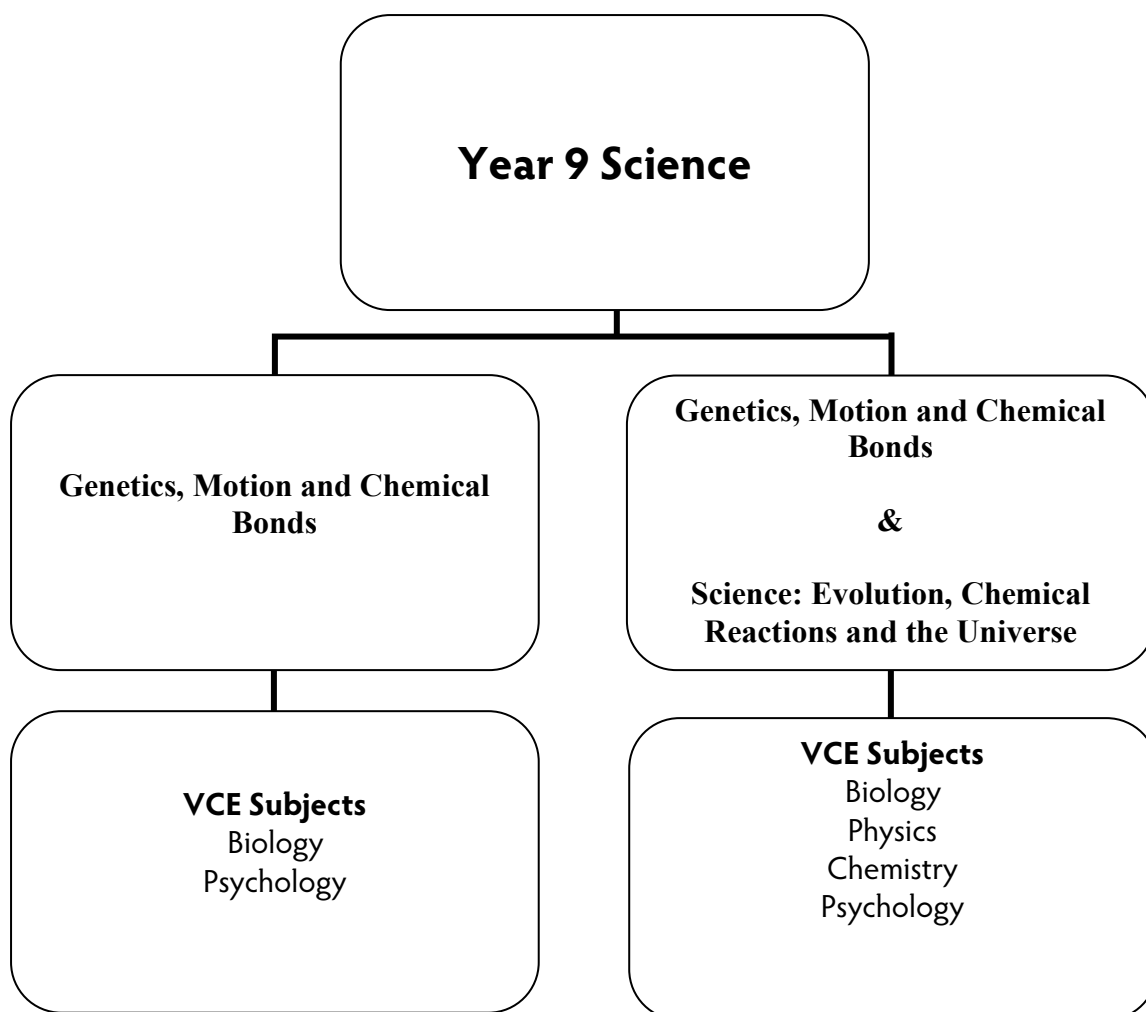
Semester

### **Assessment:**

- Written Tasks
- Assignments
- Exam

## YEAR 10: SCIENCE

At year 10 there are two Science electives. It is strongly recommended that if you wish to study Science in VCE that do both electives.



### SCIENCE – GENETICS, MOTION AND CHEMICAL BONDS

Students look at the role of DNA and genes in cell division and genetic inheritance and how this is used in modern forensic science. Students investigate the chemical behavior of elements, their compounds and their atomic structures using the periodic table. Students learn to give both qualitative and quantitative explanations of the relationships between distance, speed, acceleration, mass and force to predict and explain motion.

#### Subject length:

Semester

#### Assessment:

- Tests
- Written Tasks
- Assignments
- Practical Investigations
- Exam

## SCIENCE – EVOLUTION, CHEMICAL REACTIONS AND THE UNIVERSE

Students learn to apply geological timescales to explain natural selection and evolution. They learn to use atomic symbols and balance equations to summarise chemical reactions. They investigate the Big Bang theory and features of the universe including galaxies, stars and solar systems.

### **Subject length:**

Semester

### **Assessment:**

- Tests
- Written Tasks
- Assignments
- Practical Investigations
- Exam



# YEAR 10: TECHNOLOGY

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## DIGITAL TECHNOLOGY

This unit focusses on using digital tools to create solutions to real-world problems. It includes collecting, validating and manipulating data. Students explore how databases use this data and how it can be presented. Pseudocode and SQL are used to show how data can be accessed. Students also investigate the implications of AI, privacy and Copyright. They develop hardware and/or software solutions based on real-life scenarios using the Design Process.

### Subject length:

Semester

### Assessment:

- Database tasks
- Digital solution and Design Process folio
- Exam

## FOOD TECHNOLOGY

In this unit students explore the factors influencing food choices and how these affect the planning and processes involved in producing food for consumption by others. Students will investigate safe food handling techniques, ethical considerations in food production and food sustainability with a focus on the design process. Specifically, students will study:

- *Food Safety* – Safe food handling. Food legislation and protection in Australia.
- *Food Sustainability* – This focuses upon the impact of food production on the environment including ethical considerations such as fair trade and animal welfare. Students investigate the use of packaging and the environmental impact of food waste and will implement the design process in order to develop a solution to the waste problem.
- *Cultural Influences on Food choices* – Students explore the history of Australian cuisine and how the effect of globalisation, industrialisation, immigration patterns and changing lifestyle factors has impacted upon our food choices. Students will prepare some traditional foods reflecting the traditional cuisine of Europe, America and Asia. Students will design practical activities, using a variety of production methods and equipment, incorporating foods from these traditional cuisines.
- *Nutrition and Health* - Investigates nutrients, food models and changing needs throughout the lifespan.
- *Food Science* – This looks at the function of ingredients in food production, the science involved in baking in order to choose appropriate ingredients for a recipe.

### Subject length:

Semester

### Assessment:

- Practical Tasks
- Written Tasks
- Exam

## METAL TECHNOLOGY

This unit focuses on development of students' skills in managing and manipulating materials and resources using a range of tools, equipment and machines to make functional products. It requires the student to be autonomous problem-solvers, as individuals and as members of a team. Students combine an understanding of design, functionality, aesthetics and industrial practices with practical skills. They use tools, equipment, materials safely and creatively to make quality products.

### Subject length:

Semester

### Assessment:

- Practical
- Folio – Written Tasks
- Exam

## SYSTEMS ENGINEERING

Focuses on using fundamental mechanical and electronic engineering principles to design and construction a medium sized robotic project. Students use 3D modelling, 3D printing, laser cutting, soldering and programming in the creation of their robot and document their progress in an online record. At the conclusion of the subject student robots compete in a series of challenges.

### Subject length:

Semester

### Assessment:

- Practical Task
- Online development record
- Exam

## WOOD TECHNOLOGY

Students build on their skills and knowledge in this subject by designing and constructing a piece of furniture, from a range of options provided by the teacher.

They use and continue to hone their skills in the designing stage and the use of tools, both hand-tools and power tools.

In readiness for VCE they complete a design brief, outlining the context of the problem and the constraints and considerations. They complete rough sketches, technical drawings and a cutting list before they begin production. They also learn how to effectively evaluate their product to grade its success.

They are introduced to the Product Design Process as a method for producing their work. They learn how to apply Dowel Pin, Biscuit and Housing Joints to complete their product. They can use the Jig saw, the Circular saw and the router to help finish their product.

The second project is a self-directed one. Students research and submit a design brief and, if approved, are able to make a product of their own choosing. This product is entirely up to them, within reason, and a great opportunity to demonstrate their skills and knowledge of woodworking.

### Subject length:

Semester

### Assessment:

- Practical
- Folio – Written Tasks
- Exam

# YEAR 10: Vocational Pathways

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## **BSB20120 Certificate II in Workplace Skills**

The Certificate II level program prepares students for entry-level positions across a diverse range of business services settings and can help to open the door to a vast array of non-technical employment opportunities. It can also lead to further study in either technical or non-technical vocations and aims to develop the most common and transferable skills and knowledge required of almost any workplace. This certificate can be counted towards 2 units in the VCE and VCE VM and meets the VCE VM requirement of 180 hours of VET studies.

Students complete all the core and elective units below over one year in order to attain their Certificate II in Workplace Skills.

### **Core units**

BSBPEF202 Plan and apply time management

BSBWH5211 Contribute to health and safety of self and others

BSBCMM211 Apply communication skills

BSBOPS201 Work effectively in business environments

BSBSUS211 Participate in sustainable work practices

### **Elective units**

BSBPEF101 Plan and prepare for work readiness

BSBTEC101 Operate digital devices

BSBTEC203 Research using the internet

BSBTEC202 Use digital technologies to communicate in a work environment

BSBCRT201 Develop and apply thinking and problem-solving skills