



# Years 11 & 12

**2024**  
Course Guide  
Warragul



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## Welcome

The following guide is designed to aid you with your subject selection choices in both Years 11 and 12. All students have different pathways through school and each route has its own rewards and challenges. Choose course that you will both enjoy and achieve in, and try to formulate your selections as part of your long term plan.

We encourage you to read through the subject descriptions carefully and base your choices on the interests and future goals that you may have.

There is no easy 'short cut' through VCE and often the best method to cope with rigours of work is to select a program that is both achievable and balanced. Starting many courses at a higher level requires a student to have prior subject knowledge, often referred to as a 'prerequisite'. It is important that students are aware of the prerequisites and expectations for all Senior School courses.

As part of the subject selection process a team of experienced Senior School staff will be available for individual advice and counselling. The school also runs subject selection sessions that both students and parents/guardians can attend. It is also important that parents/guardians and students are aware of university and vocational expectations and prerequisites as these also shape the courses that a student selects.

Good luck with your selections and study program in 2024.



**Ms Laura Butterworth**  
Head of Secondary



**Ms Bethany Thearle**  
Head of Year 11



**Ms Caitlin Powell**  
Head of Year 12



**Ms Sarah Luck**  
Head of Careers



## Selecting Units 3 and 4 in Year 12

In Year 12, students have one compulsory subject – English. This requirement can be met by taking either English, English Language or English Literature. All subjects can be taken concurrently and the compulsory one that will be counted in an ATAR will be the one in which the highest mark was scored. At St Paul's the program that students take in Year 12 includes four other Unit 3 and 4 sequences. Under strict conditions some students have also been permitted to complete a Unit 3 and 4 subject in Year 11. This will also count towards their ATAR. Studies must be taken as pairs – Unit 3 and 4. Up to six sequences can be counted for an ATAR score and they do not have to be taken in the one year. **St Paul's policy is that students undertake five subjects during Year 12.**

A completed VETDSS course can be counted as part of the VCE. Depending on the particular VETDSS course it can either count as part of the primary four subjects (English and the next three highest scoring Unit 3/4 studies) or as a fifth or sixth subject. Ms Sarah Luck (Head of Careers) can give students more information on this matter.

Selecting the best course may not be an easy decision. Many students at this level have not yet finalised their ideas about which career they wish to pursue. However, most students from St Paul's aspire to complete their VCE and then continue further studies at a tertiary level.

**In selecting subjects, students should bear in mind the following points:**

- Select studies based on Unit 1 and 2 studies undertaken in Year 11
- Select studies/units in which you are interested in
- Select studies/units in which you can perform at your best and that are also relevant to your chosen career aspirations
- Keep clearly in mind the prerequisite studies/units required for various tertiary courses.

Some students may be considering subjects based on scaling. The Scaling Report is available for students to check but they are encouraged to consider the importance of the four points above when selecting subjects. Scaling does not work in a student's favour if they are not able to perform in that subject to the best of their ability or are unhappy in that subject. It is also important to note that in subjects that may be scaled down, scaling will have a lesser impact if the student is able to achieve a score over 40. **A student is better off in a subject that they like and in which they can do well.**

### Choosing Folio Subjects

Folio subjects in the Visual Arts – Art Creative Practice, Design and Technology and Visual Communication and Design – require substantial, sustained practical work from students and their major assessment tasks (SATS – School Assessed Tasks) are often due at similar times. Whilst we encourage students to take multiple Arts subjects if they wish to prepare for tertiary interviews we caution them in taking on too many. For this reason, students who wish to undertake more than two of these folio subjects in Unit 3 and 4 must obtain written permission from the Head of Visual Arts. This process may involve looking at the student's results in the same or similar subjects in Year 11.



## Scaling

### Why are VCE results scaled?

VCE results are scaled because individual study scores are not an absolute measurement of overall performance. On behalf of tertiary institutions, VTAC combines study scores to form an aggregate (total) which is then converted into a rank known as the 'ATAR' (Australian Tertiary Admission Rank).

Before study scores can be fairly added together they have to be compared and adjusted. This is because students take very different combinations of VCE studies, and VTAC can only legitimately add study scores together if the strength of competition in each study is about the same.

For example, it is unfair to compare the best and fairest of an individual football team with the best and fairest in the national competition. Scaling overcomes this difficulty and ensures that each study contributes equally to the ATAR (that is an ATAR subject score of 25 in English is equivalent to an ATAR subject score of 25 in Psychology or an ATAR subject score of 25 in Chemistry).

### How is scaling carried out?

Study scores are adjusted (and the strength of competition in a study is judged) by looking at the total performance of students taking that study. For example, the performance of students taking Chemistry is compared with (and adjusted against) the total performance of all Chemistry students in all their studies. This comparison is carried out for each VCE study and VCE VETiS program for which there is a study score. There are no pre-determined outcomes, and in the first instance, all studies including Mathematics and Languages other than English (Languages) are treated identically.

The process is very stable and as a result there is very little difference from year to year in terms of adjusted (scaled) ATAR subject scores.

### What happens as a result of scaling?

As a result of scaling, some scores in some studies are adjusted up, some down, and some remain about the same – this is a reflection of the overall strength of the group taking each study. Studies are scaled up only when the overall performance is high. Studies are scaled down only when the overall performance is low.

Remember: if competition is high within a study – you can expect to receive a lower VCAA study score – scaling by VTAC ensures this study is adjusted up. If competition is low within a study – you can expect to receive a higher VCAA study score – scaling by VTAC ensures this study is adjusted down. Across all studies, your ATAR subject scores can therefore be expected to be more uniform than your VCAA study scores. The 2023 Scaling Report is available from the VTAC website, the Careers Office or from the Director of Studies.



## Unit 3 & 4 Studies Available to Year 12

Please note that subjects run based on student numbers and staffing. Admission to Unit 3 and 4 subjects is based, in some instances, on the successful completion of Unit 1 and 2 in a study at Year 10 or 11. For example, it would be inadvisable to attempt to undertake Unit 3 and 4 Physics or Chemistry if these subjects had not been successfully completed at Unit 1 and 2 level. Course counsellors will provide further advice in this regard.

- Accounting
- Art Creative Practice\*
- Biology
- Business Management
- Chemistry
- English
- English as an Additional Language
- English Language
- English Literature
- Environmental Studies
- Food Studies\*
- French
- Health and Human Development
- History: Revolutions
- IT: Software and Development\*
- Japanese
- Legal Studies
- Maths General
- Maths Methods
- Maths Specialist
- Music Repertoire Performance\*
- Philosophy\*
- Physical Education
- Physics
- Product Design and Technology: Hard Materials\*
- Product Design and Technology: Soft Materials\*
- Psychology
- Theatre Studies\*
- Visual Communication and Design\*.

\* This subject requires minimum numbers to proceed.



## Year 12, 2024 Subject Selection Form

All students are required to **complete their subject selections online**, following the instructions emailed to students. The following is a draft form. It is to be completed and brought, along with your Career Planning Form, to subject counselling interviews. They are then to be attached and returned with a signed online 'preferences receipt' to your Head of Year by **3:10pm Friday 11 August 2023**.

Name:

Mentor Group:

**In 2024, every student is expected to attempt ten VCE units made up of five Unit 3 and 4 sequences, including at least one English study. Students should select their units in order of preference by completing the table below.**

Since subject blocking and lack of numbers mean some units are unavailable, students should select seven Unit 3 and 4 sequences **in order of preference**.

I will be completing the VETDSS Course:

(I have discussed this with Ms Luck)

I am interested in enrolling in the University Enhancement Subject for:

(I have discussed this with Ms Luck and my letter addressing the criteria for selection is attached to this application.)

Preference	Unit Name
1	English, English Language, OR Literature ( <b>please circle</b> )
2	
3	
4	
5	
6*	
7*	
	Chapel
	Private Study

\* To be used if any of the earlier preferences are unavailable.

In 2023 I completed the Unit 3 and 4 subject:

The type of career/course I would like to study is:

The prerequisites for this type of course (either at University or at TAFE) are:

Bring this form to your interview on **Monday 7 August 2023**. Final deadline for submission is **3:10pm Friday 11 August 2023**.

Student Signature:

Parent/Guardian Signature:

Subject Counsellor to Initial (7/8/23)





## Year 11 Subject Selection

Each Year 11 student is expected to attempt six VCE studies, including at least one English study. A Unit 3 and 4 study may also be one of the six studies selected. Students should finalise their study preferences by completing the tables on the following page. Remember that some studies may not be possible due to blocking arrangements or a lack of numbers.

### Units 1 and 2 subjects offered to Year 11 students in 2024

The following subjects are taken as Unit 1 and 2 sequences only. Please note that subjects run based on student numbers and staffing.

- Accounting
- Art Creative Practice
- Biology
- Business Management
- Chemistry
- English
- English Language
- English Literature
- Environmental Studies
- Food Studies
- French
- Health and Human Development
- History
- IT: Computing
- Japanese
- Legal Studies
- Maths General
- Maths Methods
- Maths Specialist
- Music
- Philosophy
- Physical Education
- Physics
- Product Design and Technology: Hard Materials
- Product Design and Technology: Soft Materials
- Psychology
- Theatre Studies
- VETDSS: Certificate III in Sport and Recreation (Units 1 and 2)
- Visual Communication and Design.



## Selecting Year 11 Units

In Year 11 at St Paul's, students will take:

- English or English Language or English Literature (VCE requirement)
- Ethics
- Five VCE sequences of their own choice (this may include an application for a Unit 3/4 sequence).

Selecting the best course for an individual student may not be an easy decision. Many students at this level have not yet finalised their ideas about the career they wish to pursue. However, most students from St Paul's aspire to complete their VCE and then continue further studies at tertiary level or seek employment. In selecting subjects, student should bear in mind the following points:

- Select studies/units in which you are interested
- Select studies/units in which you can perform at your best and that are also relevant to your likely career aspirations
- Select studies/units that give as much freedom as possible to change your mind: keep as many options open as possible
- Keep in mind the prerequisite studies/units required for various tertiary courses.

Other information:

- Studying Unit 3 and 4 subjects in Year 11
- Checking tertiary prerequisites
- Scaling.

### Units 1 and 2 Subject Recommended Standards

Subject	Recommended Standards
Chemistry	'B' in Science at Year 10, particularly Chemistry
English Language	'B' average in Year 10 English
English Literature	'B' average in Year 10 English or concurrent study of Year 11 English
Language: French/Japanese	A pass in Year 10 French/Japanese
Maths: General	A pass in either Year 10 Maths
Maths: Methods	At least a 'C+' in Year 10 Maths A
Maths: Specialist	Must be paired with Unit 1 and 2 Methods
Music	Year 9 or 10 Music OR strong participation in co-curricular Music
Physics	'B' in Science at Year 10, particularly in Physics
VETDSS: Certificate III in Sport and Recreation	'B' average overall



## Studying Units 3 & 4 in Year 11

Some Year 11 students will be able to study one Unit 3 and 4 subject as part of their Year 11 program. These students will be carefully chosen, as this is a most demanding undertaking. To be considered, they must have met the minimum requirements of entry.

Any student wishing to be considered for this program must fulfil all of the following criteria:

- Have achieved a B average or better for at least five subjects at the end of Semester 1 and have met the individual prerequisites of each subject (if required)
- Have demonstrated excellent organisational skills and ability to manage a heavy workload
- Have demonstrated excellence in their chosen Unit 3 and 4 subject area (or if this subject is not available as a Year 10 subject, then in a similar subject).

Students who wish to apply to study two Year 12 subjects in Year 11 must show that they would be disadvantaged by being denied this opportunity in line with the above policy.

Selection will be made during the second semester, but the offer will be withdrawn if a student's performance falls below these minimum requirements during that semester. The final decision on enrolment will depend on numbers, as Year 12 students will always have priority in the class.

**Dependent on timetable restrictions and student suitability,** Unit 3 and 4 studies available to Year 11 students in 2023 are:

Subject	Recommended Standards
Biology	Units 1 and 2 Biology B+ or better
Health and Human Development	Units 1 and 2 Health and HD in Year 10 with a 'A' average for SACs
Legal Studies	'B' or above in Unit 1 and 2 in Year 10
Business Management	'B' or above in Unit 1 and 2 in Year 10
Maths General	Must be simultaneously taking Units 1 and 2 Methods and have a 'A' or better in Year 10 Maths A
Psychology	'B' or above in all Year 10 subjects, but 'A' in Year 10 Science

**Students who wish to apply for entry into a Unit 3 and 4 course should attach a letter to their subject selection form.** This letter should outline their reasons for such a request and give details of their academic performance, which would provide evidence of readiness for this enhanced study.

The applications will be considered by the Curriculum Leadership Team. Decisions will be tentative until Semester 2 results are in and Year 12 classes are finalised.



## Year 11, 2024 Subject Selection Form

All students are required to complete their subject selections online, following the instructions emailed to students. The following is a draft from. It is to be completed and brought, along with your Career Planning Form, to subject counselling interviews. It is then to be attached and returned with a signed online 'preferences receipt' to your Head of Year by 3:10pm on **Friday 11 August 2023**.

Name:

Mentor Group:

To select the appropriate units, choose from the subjects in the Course Guide and enter the choices in order of preference into the table below. NB – Make sure you have nominated six subjects (plus two reserves) on this table. Each line indicates a year long subject. **Do not include Year 12 subject applications in your preferences.** If your Year 12 subject application is unsuccessful you will be offered that subject in Unit 1/2.

I would like to apply to study this Unit 3/4 subject  
(I have attached my letter of application with this form)

This request cannot be finalised until courses are approved and all requirements fulfilled.

I would like to complete the VETDSS Course  
(I have discussed this with Ms Luck)

Preference Number	Subject Name
	English OR English Language OR Literature ( <b>please circle</b> )
1	
2	
3	
4	
5	
6	
7*	
8*	
Compulsory	Unit 2 Religion and Society – Ethics (compulsory)

\* To be used if any of the earlier preferences are unavailable.

Bring this form to your interview on **Tuesday 8 August (Warragul)** and **Wednesday 9 August (Traralgon)**. Final deadline for submission is **3:10pm Friday 11 August 2023**. Late returns mean that your choices are not included in the first round which may affect your chances of receiving the subject you want.

Student Signature:

Parent/Guardian Signature:

Subject Counsellor to Initial





## VCE Information

### VCE and Year 10 Information Evening

The VCE and Year 10 Information Evening is on Monday 31 July 2023 and is an excellent opportunity for you to find out about subjects and options for 2024. The School will be open from 7:00pm until 9:00pm and all faculties will have staff in attendance to answer your questions and provide you with information. Tours for students from our Traralgon Campus and new families will run from 6pm.

An information session will be held at the Warragul Campus in the Year 9 Building for the following year levels:

Year 10 (2024) – 7:00pm

Year 11 (2024) – 7:40pm

Year 12 (2024) – 8:15pm

At this session, details of the program will be discussed together with an explanation of the selection process.

The process of choosing subjects is a very important one as the School bases its subjects offering for the following year on the students' subject choices. Changes can be made at a later date, but there may not be a class or indeed room in a class at that point. Thus, these choices should be taken seriously and considerable investigation and thought given to them. All parents are strongly encouraged to come with their child to this evening and to take advantage of the opportunity to access information easily and rapidly to assist with these important decisions.

### Course Guidance

At the start of Term 3 students should also be speaking to subject teachers and heads of Faculty about specific questions related to the subjects that they are considering. Ms Luck, Head of Careers, is also available for individual interviews, as is the Head of School.

Following the VCE and Year 10 Information Evening on Monday 31 July every student will be involved in a Course Guidance session regarding the choice they have made. This will occur on Monday 7 August for Year 11 into Year 12 students and Tuesday 8 August for Year 10 into 11 Warragul students. Course counselling for Traralgon Year 10 into Year 11 students will occur on Wednesday 9 August at Traralgon. Parents/Guardians are welcome to attend the session allocated to their son or daughter if they wish to be a part of this process. The form must be brought to the interview on the day of attendance.

**Choices cannot be accepted without a parent or guardian's signature.** Online selections are to be made and all forms are to be handed in by the dates noted on the forms.

During the Course Guidance session, senior staff will check each student's subject choices. This is to ensure that the subjects chosen are appropriate for their proposed Year 11 and Year 12 program. Ms Luck, Head of Careers, will be available to students on that day, and on other days, by appointment.



## Requirements for Satisfactory Completion of VCE

To be awarded the VCE you have to satisfactorily complete a total of no fewer than 16 units that must include:

- At least 3 units from the English group\*, with at least one unit at Unit 3 or 4 level.
- Three sequences of Units 3 and 4 studies, other than the English group, including VCE VETDSS Unit 3 and 4 sequences

\*The English group consists of:

- English Units 1 to 4
- English (EAL) Units 3 and 4
- English Language Units 1 to 4
- Literature Units 1 to 4.

No more than two units at Units 1 and 2 may count towards the English requirement. Students may not obtain credit for both English Units 3 and 4 and English (EAL) Units 3 and 4.

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

Acceleration into VCE studies in Years 10 and 11 or University Enhancement Studies require careful consideration.

Acceptance into these programs will be based upon:

- Standard of work in the previous year
- Timetable implications and availability, due to numbers of applications
- Relevance for individual programs and course and career planning

Consolidation and extension, rather than acceleration, is generally most appropriate for most students.

### Satisfactory Completion of VCE Units

- Units 1 and 2 can be completed as single units, but this is not recommended
- Units 3 and 4 need to be taken as a sequence in the one year.

### Learning Outcomes

Each VCE unit includes a set of two to four outcomes. The award of satisfactory completion of a unit is based on a decision that the student has demonstrated achievement of the outcomes. The achievement will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for that unit. Satisfactory completion of units is determined by the school, in accordance with the VCAA's requirements, i.e.

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

### Assessment of Units 1 and 2

- These assessments will be school based.

### Assessment of Units 3 and 4

For each study, student level of achievement for Units 3 and 4 sequences will continue to be assessed using school-based assessment and external examinations.

- The GAT (general Achievement Test) will be undertaken by all Unit 3 and 4 students.
- There will be examinations in all VCE studies in November
- Performance and Oral examinations for some studies will be held in October. Timetable arrangements for these will be distributed by VCAA throughout the year



## Prerequisite Subjects

### Prerequisite Subjects Required for Entry into Tertiary Institutions

If students do not complete the prerequisite units for a particular course they will not be considered for that course. It is very important that students check on the prerequisites of any possible course using the online VTAC guide. This is each student's responsibility. If students are unsure about prerequisite units for various tertiary course, they should contact the Head of Careers, Ms Luck.

Students must bring the Career Planning form supplied during Mentor Group (Ms Luck has spare copies of these) to the Course Guidance Interview.

If a student has no clear vocational ambition as yet, it is advisable to select units that keep a maximum number of options open. However, it is still important that students be interested in, and have some aptitude for, the courses chosen. It is expected that all students will attempt a total of five Unit 3 and 4 sequences in Year 12, including English/EAL, English Language and/or Literature.

## Guide to Checking Prerequisite Subjects

### Using the Relevant VTAC Publications:

#### Year 10 going into Year 11 (2024)

- Online VICTER 2025
- Online VTAC Guide.

#### Year 11 going into Year 12 (2024)

- Online VICTER 2025
- Online VTAC Guide.

Reference copies are also available in the Careers Office, or can be downloaded from the VTAC website.

### For University Study

- Using the index of major studies on VTAC VICTER, look up the career/subject area you would like to follow in the future. This will list all universities which offer the subject, and what they call the particular career/subject.
- Look up the entries for each of the universities on VTAC VICTER and check the PREREQUISITES ENTRY FOR EACH.
- Also check for potentially useful subjects in the MIDDLE BAND.
- Double check in the VICTER and Tertiary Entry newspaper supplement that is relevant to you, to find out whether there are any changes planned for the year when you will start university study.

### For TAFE Study

- Using the index of major studies on VTAC, look up the career/subject area you would like to follow in the future. This will list all TAFE institutions which offer the subject, and what they call the particular career/subject.
- Look up the entries for each of the TAFE institutions in the VTAC Guide and check the ENTRY REQUIREMENTS FOR EACH.

### For Apprenticeships and Traineeships

- Check with apprenticeship providers for information about the area in which you are interested.



## Vocational Education Training in Schools

The following VCE/VETDSS programs are being offered. At the end of the two-year course VETDSS students receive a Certificate II or III and may receive credit for VCE Units 1–4.

On completion of the VCE recognised course students will receive either a ATAR contribution (10% average of Primary 4 subjects), or a study score if the course has a VCE examination.

VETDSS courses are generally administered by an outside Registered Training Organisation (RTO) that are independent of the school. It is important to understand the following implications when selecting a VETDSS course:

- Students can only study a VETDSS subject at Year 10 and 11. Year 12 students cannot enrol in a VETDSS subject, however some exceptions are made for a student to complete the second year of their course
- An enrolment fee is charged by the RTO for each student. This is an extra cost and not part of the normal school fees. **Extra costs may also be incurred for equipment and materials.** There may be limited Government funding available for some courses
- Students are absent from school for 1 day each week (Wednesday or Friday). Students must however complete all academic and extra curricula requirements missed on the day
- Students/parents are responsible for the transport to and from the RTO venues. Venues are at TAFE Gippsland – Morwell, Yallourn and Warragul; Apprenticeship Group Australia (AGC), Warragul; Lowanna Secondary College, Moe; Community College Gippsland, Warragul Campus; National Centre for Equine Studies, Chisholm Institute and Baw Skills Centre Warragul
- All courses involve both theory and practical components and a satisfactory standard must be achieved in both areas to be competent in the VETDSS course
- Students may be required to attend an interview/orientation day at the RTO in December prior to their enrolment.

NB: When subject selects are completed, Ms Luck will meet with all students who have selected a VETDSS course.

### The school offers VETDSS subjects in two ways:

#### 1. Internal delivery as part of the normal timetable

- Certificate III in Sport and Recreation (Units 1 and 2) and Certificate III Sport and Recreation (Units 3 and 4). Offered at Years 10 and 11, but permission may be granted for students to complete in Year 12.

Details can be found in the relevant section of the Course Guide for each year level and need to be read carefully before making your choice.

#### 2. External delivery by an RTO

These are only offered if numbers are sufficient and this decision is at the discretion of the RTO.

**Please note: VETDSS courses are an additional cost to School fees.** Costs will be confirmed once a VETDSS application is received.

### Contribution to ATAR/Scored VET VCE Courses

Certificate contributions towards ATAR score at VCE providing students have completed both years of the Certificate, completed the required Units of Competency of Unit 3 and 4 and undertaken the exam are as follows:

#### Eligible VCE VET programs with exam for a Study Score:

- Business – Certificate III in Business BSB30115
- Community Services – Certificate III in Community Services CHC32015
- Screen and Media – Certificate III in Screen and Media CUA31015
- Dance – Certificate II in Dance CUA20113
- Engineering – Certificate II in Engineering Studies 22470VIC
- Equine Studies – Certificate II in Equine Studies 22246VIC





- Furnishing – Certificate II in Furniture Making MSF20516
- Health – Certificate III in Allied Health HLT33015
- Hospitality – Certificate II in Hospitality SIT20316
- Information, Design and Technology – Certificate III in Information, Digital Media and Technology ICT30118
- Integrated Technologies – Certificate II in Integrated Technologies 22289VIC
- Laboratory Skills – Certificate III in Laboratory Skills MSL30118
- Music Industry (Music Performance or Sound Design) – Certificate III in Music Industry – Sound Production CUA30915
- Sport and Recreation – Certificate III in Sport and Recreation SIS30115

All other VET courses do not have an exam as part of the certificate, and count only as a block credit.

Year 11 Selection only available to students who have completed Units 1 and 2 (1st year of certificate) in Year 10 or by negotiation with the School in some circumstances.

**Unscored VCE option examples:**

Animal Studies – Certificate II in Animal Studies ACM20117

Automotive – Certificate II in Automotive Vocational Preparation AUR20716

Beauty – Certificate II Retail Cosmetics SHB20116

Bricklaying – Certificate II in Building and Construction (Bricklaying) 22338VIC

Carpentry – Certificate II in Building and Construction (Carpentry) 22338VIC

Civil Construction – Certificate II in Civil Construction RII20715

Hairdressing – Certificate II Salon Assistant SHB20216

Horticulture – Certificate II Horticulture AHC20416

Hospitality – Certificate II in Hospitality SIT 20361

Painting & Decorating – Certificate II in Building and Construction (Painting and Decorating) 22338VIC.



## Useful Links

The material in the course guides (and contained in the link below) is an extract from material produced by the Victorian Curriculum and Assessment Authority. Some sections may have been abridged and/or modified. Students should consult the Victorian Curriculum Assessment Authority homepage, and the VCE study guides for comprehensive course details. This material is copyright and cannot be reproduced in any form without the written permission of the Victorian Curriculum and Assessment Authority.

- [www.vtac.edu.au](http://www.vtac.edu.au)
- [www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Pages/vce-study-designs.aspx](http://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Pages/vce-study-designs.aspx)
- [www.vtac.edu.au/files/pdf/reports/scaling\\_report\\_19.pdf](http://www.vtac.edu.au/files/pdf/reports/scaling_report_19.pdf)
- [www.vtac.edu.au/files/pdf/publications/VTAC\\_ATAR\\_Scaling\\_Guide\\_2021.pdf](http://www.vtac.edu.au/files/pdf/publications/VTAC_ATAR_Scaling_Guide_2021.pdf)
- <http://www.myfuture.edu.au/>
- <http://www.australianapprenticeships.gov.au/>
- <http://www.jobsearch.gov.au/>
- <http://www.jobsearch.gov.au/joboutlook/>
- <https://vacc.com.au/Employment-Training/JobFinder>
- <http://www.jobseeker.com.au/> Provides a listing of vacancies from several websites
- <http://www.alljobs.com.au/> Provides a listing of vacancies from several websites.
- <https://www.megt.com.au/> Apply for an apprenticeship or hire an apprentice with MEGT Group Training.
- <http://www.mycareer.com.au/> Job listings of available apprenticeships and employers can advertise.
- <http://www.seek.com.au/> Seek provide a search function for apprenticeships and employers can advertise.
- <http://www.jobsearch.gov.au/> Search Australian Job boards for vacancies all over Australia.
- <http://www.careerone.com.au/> Job listing for apprenticeships and qualified under Automotive.
- <http://www.careeronline.com.au/> Resume help, job hunting tips, job links, positions vacant and more...
- <http://www.careerjet.com.au/> Career Jet - Employers can post a vacancy. Apprentices can post a resume on the site.
- <http://www.jobsjobsjobs.com.au/> Employers can advertise and applicants can search for apprenticeships.
- <http://www.defencejobs.gov.au/> Apprenticeships. Select Army, Navy, or Air Force, then cursor down to apprenticeships.
- <https://vacc.com.au/Employment-Training/JobFinder> For employers or apprentices to find or advertise a job.
- <http://employment.gov.au/> Australian Government Website
- <http://www.gtav.com.au/> Group Training - Employers hire apprentices. Apprentices apply to the group training companies.
- <http://www.myfuture.edu.au/> Help to decide on a career path.
- <http://www.aajobpathways.com.au/> For apprentices - pathways, websites and apprenticeship information.
- [http://fairwork.gov.au/employment/young-workers/pages/default\\_](http://fairwork.gov.au/employment/young-workers/pages/default_) Apprentices and employees. The Young Worker Toolkit helps you find information about your responsibilities and where you stand at work. It covers a lot of information for you regarding work rights.



## **Accounting (Units 1-4)**

### **Course Description**

Accounting is the process of recording, reporting, analysing and interpreting financial data and information which is then communicated to internal and external users of the information. It plays an integral role in the successful operation and management of a small business.

VCE Accounting focuses on the financial recording, reporting and decision-making processes of a small business. Students will study both theoretical and practical aspects of accounting. Financial data and information will be collected, recorded and reported using both manual and information and communications technology (ICT) methods.

### **Additional Information**

Any student wishing to do Units 3 and 4 Accounting should be aware that Units 1 and 2 Accounting are a required prerequisite.

### **Units of Study**

- Units 1: Role of Accounting in business
- Unit 2: Accounting and decision making for a Trading Business
- Unit 3: Financial accounting for a Trading Business
- Unit 4: Recording, reporting, budgeting and decision-making



## Accounting – Unit 1

### Course Description

This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the process of gathering, recording, reporting and analysing financial data and information used by internal and external users.

### Areas of Study

#### The Role of Accounting

- Forms of business ownership, including sole trader, partnership and companies
- Reasons for establishing a small business
- Factors that lead to the success or failure of small business
- The role of professionals
- Internal and external sources of finance
- Ethical considerations

#### Recording Financial Data and Reporting Accounting Information for a Service Business

- Accounting assumptions and qualitative characteristic
- Definition of accounting elements
- Source documents
- Cash and credit journals
- Accounting reports

## Accounting – Unit 2

### Course Description

This unit focuses on accounting for a single activity sole trader. Using the accrual approach, students use a single entry recording system for the recording and reporting of cash and credit transactions for inventory.

### Areas of Study

#### Accounting for Inventory

- Characteristics of trading business
- Assumptions and qualitative characteristics
- Source documents and journals
- Inventory cards using FIFO and identified cost
- Accounting reports
- Management strategies
- Ethical considerations.

#### Accounting for and managing accounts receivable and accounts payable

- Indicators measuring performance
- Use of journals
- Transactions for recording
- Ethical considerations

#### Accounting for and managing non-current assets

- Documents used
- Depreciation
- Asset management.



## Accounting – Unit 3

### Course Description

This unit focuses on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Students are introduced to the double entry system of recording using the accrual basis of accounting, the perpetual method of inventory recording with FIFO and identified cost methods.

### Areas of Study

#### Recording and Analysing Financial Data

- Accounting assumptions and qualitative characteristics
- Elements of financial reports
- The two-fold effect of transactions on the accounting equation
- Business documents for trading businesses
- Inventory recording using FIFO and Identified Cost
- GST Clearing Account
- General Journal.

#### Preparing and Interpreting Accounting Reports

- Balancing and closing entries
- Classified reports
- Cash v profit
- General Journal and General Ledger entries
- Ethical considerations.

## Accounting – Unit 4

### Course Description

This unit provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process.

### Areas of Study

#### Extension of Recording and Reporting

- The accounting system as developed in Unit 3
- Source and business documents as seen in Unit 3
- Balance day adjustments
- Purchase of non-current depreciable assets on credit and depreciation
- Disposal of depreciable assets
- Recording of transactions and reporting.

#### Financial Planning and Decision-Making

- Budgeted Accounting reports: Cash Flow Statements, Income Statement and Balance Sheet
- Variance reports for cash and profit
- Strategies to improve performance
- Ethical considerations
- Financial and non-financial indicators.



## **Business Management (Units 1-4)**

### **Course Description**

VCE Business Management follows the process from the initial idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure the continued success of a business.

A range of management theories are considered and compared with management in practice through contemporary case studies drawn from the past four years. Students learn to propose and evaluate alternative strategies in response to contemporary challenges in establishing and operating a business.

### **Units of Study**

- Unit 1: Planning a Business
- Unit 2: Establishing a Business
- Unit 3: Managing a Business
- Unit 4: Transforming a Business



## Business Management – Unit 1

### Course Description

In this unit students explore the factors affecting ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

### Areas of Study

#### The Business Idea

- Sources of business opportunity such as innovation and entrepreneurship
- The personal motivation behind starting a business
- The importance of goal setting in business
- The characteristics of successful business managers and business entrepreneurs.

#### The Internal Environment and Planning

- Business resource needs and the factors affecting their choice: natural, labour and capital resources
- Business locations and the factors affecting choice of location
- Sources of finance available to establish a business and the factors affecting the choice
- Ethical and corporate social responsibilities of a business.

#### The External Environment and Planning

- An overview of key legal and government regulations affecting businesses in the planning stage
- Societal attitudes and behaviour such as values, beliefs and trends
- Economic conditions
- Technological issues such as how the market may change in the future and developments in technology.

## Business Management – Unit 2

### Course Description

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.

### Areas of Study

#### Legal Requirements and Financial Considerations

- An overview of legal requirements for establishing a business
- The importance of establishing bank accounts, financial control systems and record-keeping strategies
- The importance of choosing appropriate suppliers
- The need for policies and procedures to achieve compliance with legal requirements and establish business routines.

#### Marketing a Business

- The relationships between marketing, establishing a customer base and business objectives
- External (macro and operating) and internal environment factors affecting the establishment of a customer base and brand identity
- Market research practices such as data collection techniques, analysis and interpretation
- Target market attributes such as market dimensions, segments, consumer trends and behaviour.



#### Staffing a Business

- The relationship between the performance of staff and achieving business objectives
- Identification of the staffing needs of the business such as the knowledge, skills and ideas staff can contribute to the business
- The effects that developments in technology may have on staffing needs
- Job analysis and its relationship to job design and related documentation, job descriptions and job specifications.

## Business Management – Unit 3

### Course Description

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, corporate social responsibility and the relationship between each of these.

### Areas of Study

#### Business Foundations

- Types of businesses
- Business objectives including to make a profit, to increase market share, to fulfil a market and/or social need and to meet shareholder expectations
- Characteristics of stakeholders of businesses
- The areas of management
- Management styles.

#### Human Resource Management

- The relationship between managing employees and business objectives
- Key principles of motivational theories: Hierarchy of Needs, Goal Setting Theory and the Four Drive Theory
- Motivation strategies including performance related pay, career advancement, investment in training, support and sanction

#### Operations Management

- The relationship between operations management and business objectives
- Key elements of an operations system: inputs, processes and outputs
- Characteristics of operations management within both manufacturing and service businesses
- Strategies to improve the efficiency and effectiveness of operations.

## Business Management – Unit 4

### Course Description

In this unit 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.





## **Areas of Study**

### **Reviewing Performance – the Need for Change**

- The concept of business change
- Key performance indicators as sources of data to analyse the performance of businesses
- Key principles of the Force Field Analysis Theory
- Driving forces for change in business.

### **Implementing Change**

- The importance of leadership in change management
- Management strategies to respond to key performance indicators
- Management strategies to seek new business opportunities both domestically and globally
- An overview of the principles of the Learning Organisation
- High and low-risk strategies to overcome employee resistance
- Key principles of the Three Step Change Model.



## History (Units 1-4)

### Course Description

History is the practice of understanding and making meaning of the past. It is also the study of the problems of establishing and representing that meaning. Students learn about their historical past, their shared history and the people, ideas and events that have created present societies and cultures.

This study builds a framework within which students can develop an understanding of the issues of their own time and place. It seeks to extend students' cultural, economic, social and political understanding while developing analytical skills and imagination.

Historical understanding is communicated through written, oral and visual forms. The analysis of written documentary evidence such as letters, diaries, court proceedings and government records has long been the foundation of the study. Visual evidence, however, often pre-dates written material: for example, rock art, mosaics, and scrolls. More recently, film and television documentaries have taken historical events as their subject matter and presented interpretations of these events. It is therefore important in the study of history for students to develop the skills necessary to analyse visual, oral and written records.

Contemporary society is itself a historical construct. The study of history draws links between contemporary society and its history in terms of its social and political institutions, and language. An understanding of the link between accounts of the past and the values and interests of the time in which the accounts were produced is also a feature of the study of history.

### Units of Study

- Unit 1: 20th Century History
- Unit 2: 20th Century History
- Unit 3: Revolution
- Unit 4: Revolution



## History – Unit 1: Change and Conflict

### Course Description

In this unit students investigate the nature of social, political, economic and cultural change in the later part of the 19th century and the first half of the 20th century. Students explore the significant events, ideas, individuals and movements that shaped the social, political, economic and technological conditions and developments that have defined the modern world.

### Areas of Study

#### Ideology and Conflict (AOS1)

- Geopolitical changes in Europe resulting from WWI and the Treaty of Versailles
- Social and economic circumstances in America in the 1920's and 1930's
- Means by which Hitler and the Nazi party established their ideals throughout Germany
- Why and how the Nazi ideals led to World War II.

#### Social and Cultural Change (AOS2)

- Changes in the American way of life – 1920's – 1930's
- The development of new industry and prosperity, and the popularisation of speculation in the Roaring 20's
- The influence of the 1929 stock market crash on The Great Depression
- Analysis of Nazi propaganda
- Analysis of anti-Nazi protest art.

## History – Unit 2: The Changing World Order

### Course Description

In this unit students investigate the nature and impact of the Cold War and challenges and changes to social, 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.

### Areas of Study

#### Causes, Course and Consequences of the Cold War (AOS1)

- The causes of the Cold War, such as ideological differences and Superpower foreign policy
- The significant features and consequences of the peace conferences at Yalta and Potsdam, and the tensions between Truman and Stalin over the treatment of Germany
- The significant features and tensions of the Cold War, such as the Soviet–American relationship and the development of alliances
- Proxy wars and conflicts that reflected the consequences of tensions and divisions of the Cold War.

#### Challenge and Change (AOS2)

- A study of the groups which challenged existing structures of social, political and/or economic power such as the anti-war activists
- Reasons for the challenge
- How the groups expressed their views via art, film, music, demonstrations and literature in the 1960's and 1970's
- Reactions and responses to the challenge such as violence, demonstrations and withdrawal from Vietnam
- The challenge terrorism presents to existing international structures and agreements
- Factors which contributed to the rise of terrorism
- The way in which America and its supporters responded to September 11.



## History – Unit 3 & 4

### Course Description

This course studies two major revolutions: Russia, 1917, and China, 1949. In each case, this unit considers the way in which individual leaders of small groups used new or radical ideologies to provoke revolution and oust existing governments. It also considers the way in which these revolutionaries governed and the ramifications of revolution for ordinary citizens.

### Areas of Study

#### Causes of the Revolution

The periods for this area of study are:

- Unit 3: Russia 1896 – October 1917
- Unit 4: China 1912 – 1 October 1949.

#### Consequences of the Revolution

The periods for this area of study are:

- Unit 3: Russia November 1917 – 1927
- Unit 4: China 1949 – 1976.

## History – Unit 3

### Course Description

This unit examines the causes and consequences of Revolution in Russia.

#### Causes of the Revolution (in Russia)

- How Tsar Nicholas II failed ordinary Russians
- How Lenin navigated a February Revolution not of his making to replace it with the October Revolution.

#### Consequences of the Revolution (in Russia)

- Lenin's decisions once in power
- The consequences of Lenin's Communist Russia for ordinary Russian citizens.

## History – Unit 4

### Course Description

This unit examines the causes and consequences of Revolution in China.

#### Causes of the Revolution (in China)

- How Mao Zedong educated, militarized and ultimately deployed peasants to take power in China
- Opposition to Mao Zedong.

#### Consequences of the Revolution (in China)

- Mao's decisions once in power
- The consequences of Mao's Communist China for ordinary Chinese citizens.



## Legal Studies (Units 1-4)

### Course Description

VCE Legal Studies examines the institutions and principles which are essential to Australia's legal system. Students develop an understanding of the rule of law, law makers, legal institutions, the relationship between the people and the Australian Constitution, rights protection in Australia, and the Victorian justice system. Through applying knowledge of legal concepts and principles to a range of actual and/or hypothetical scenarios, students develop their ability to use legal reasoning to argue a case for or against a party in a civil or criminal matter. They develop an appreciation of the ability of people to actively seek to influence changes in both law and analyse the extent to which our legal institutions are effective, and whether the Victorian justice system achieves the principles of justice. For the purpose of this study, the principles of justice are fairness (fair legal processes are in place, and all parties receive a fair hearing); equality (all people treated equally before the law, with an equal opportunity to present their case); and access (understanding of legal rights and ability to pursue their case).

The study enables students to become active and informed citizens by providing them with valuable insights into their relationship with the law and the legal system. They develop knowledge and skills that enhance their confidence and ability to access and participate in the legal system. Students come to appreciate how legal systems and processes aim to achieve social cohesion, and how they themselves can create positive changes to laws and the legal system. VCE Legal Studies equips students with the ability to research and analyse legal information and apply legal reasoning and decision-making skills, and fosters critical thinking to solve legal problems. Further study in the legal field can lead to a broad range of career opportunities such as lawyer, paralegal, legal secretary and careers in the courtroom.

### Units of Study

- Unit 1: The presumption of innocence
- Unit 2: Wrongs and rights
- Unit 3: Rights and justice
- Unit 4: The people, the law and reform



## Legal Studies – Unit 1: The presumption of innocence

### Course Description

Criminal law aims 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 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 and the existence of a court hierarchy in Victoria.

### Areas of Study

#### Legal Foundations

This area of study provides students with foundational knowledge of laws and the Australian legal system. Students explore the role of individuals, laws and the legal system. Students consider the characteristics of an effective law, and sources and types of law. They examine the relationship between parliament and the courts, and the reasons for a court hierarchy in Victoria, and develop an appreciation of the principles of justice.

#### Proving Guilt

The presumption of innocence is the fundamental principle of criminal law and provides a guarantee that an accused is presumed innocent until proven guilty beyond reasonable doubt. In this area of study students develop an understanding of key concepts in criminal law. For each offence, students consider scenarios in which an accused has been charged with the offence, use legal reasoning to determine possible culpability and explain the impact of the offence on individuals and society.

#### Sanctions

The criminal justice system determines the guilt or otherwise of an accused, and imposes sanctions on a guilty person. In this area of study students investigate key concepts in the determination of a criminal case, including the institutions that enforce criminal law, and the purposes and types of sanctions and approaches to sentencing.

## Legal Studies – Unit 2: Wrongs and rights

### Course Description

Civil law aims to protect the rights of individuals. When rights are infringed, a dispute may arise requiring resolution, and remedies may be awarded. Students explore different areas of civil law, and the methods and institutions that may be used to resolve a civil dispute and provide remedies. 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.

### Areas of Study

#### Civil Liability

Civil law aims to protect the rights of individuals, groups and organisations and provide opportunities for a wronged party to seek redress for a breach. In this area of study, students develop an understanding of key concepts in civil law and investigate two areas of civil law in detail. Possible areas of include negligence, defamation, nuisance, trespass and contracts.

#### Remedies

Remedies may be available to a wronged party where there has been a breach of civil law. In this area of study students develop an appreciation of key concepts in the resolution of a civil case, including the methods used and institutions available to resolve disputes, and the purposes and types of remedies.



## Rights

The protection of rights is fundamental to a democratic society. Rights are protected in Australia through the Australian Constitution, the Victorian Charter of Human Rights and Responsibilities and through common law and statute law such as through statutes relating to racial discrimination, sex discrimination and equal opportunity. Students investigate one human right issue in Australia as an in-depth study.

## Legal Studies – Unit 3: Rights and Justice

### Course Description

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

### Areas of Study

#### The Victorian criminal justice system

The Victorian criminal justice system is used to determine whether an accused person is guilty beyond reasonable doubt of an offence for which they are charged, and to impose sanctions where guilt has been found or pleaded. The system involves a range of institutions for which they are charged, and to impose sanctions where guilt has been found or pleaded. The system involves a range of institutions including courts (the Magistrates' Court, County Court and Supreme Court) and others available to assist an accused. In this area of study students explore the criminal justice system, its range of personnel and institutions and the various means it uses to determine a criminal case. Students investigate the rights of the accused and of victims, and explore the purposes and types of sanctions and sentencing considerations. Students consider factors that affect the ability of the criminal justice system to achieve the principles of justice.

#### The Victorian civil justice system

The Victorian civil justice system aims to restore a wronged party to the position they were originally in before the breach of civil law occurred. The system involves a range of institutions to resolve a civil dispute, including courts (the Magistrates' Court, County Court and Supreme Court), complaints bodies and tribunals. In this area of study students consider the factors relevant to commencing a civil claim, examine the institutions and methods used to resolve a civil dispute and explore the purposes and types of remedies. Students consider factors that affect the ability of the civil justice system to achieve the principles of justice.

## Legal Studies – Unit 4: The people, the law and reform

### Course Description

The study of Australia's laws and legal system involves an understanding of institutions that make and reform our laws, and the relationship between the Australian people, the Australian Constitution and law-making bodies. In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments and protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationships between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing law reform.



## **Areas of Study**

### **The people and the law makers**

The Australian Constitution establishes Australia's parliament system and provides mechanisms to ensure that parliament does not make laws beyond its powers. In this area of study students examine the relationship between the Australian people and the Australian Constitution and the ways in which the Australian Constitution acts as a check on parliament in law-making. They explore the relationship between parliament and courts in the law making and consider the capacity of both institutions to make law.

### **The people and reform**

Laws should reflect the needs of society, but they can become outdated. Individuals and groups can actively participate to influence change to laws, and law reform bodies (including the Victorian Law Reform Commission, parliamentary committees, and Royal Commissions) can investigate and make recommendations for change. Laws can be changed by parliament and the courts, while constitutional reform requires a referendum.





## Philosophy (Units 1-4)

### Course Description

The word philosophy translates to love of wisdom. Philosophy grapples with some truly big questions, such as: Is time travel possible? Do human beings have free will? Can we know anything with certainty? What motivates our moral actions? How can we live ethically? What are rights and are humans the only beings to have them? What is the mind? Do we persist over time despite undergoing considerable change? What is the 'good life' for a human being? What role might technology play in facilitating or undermining a good life? In seeking answers to these questions, this course considers the viewpoints and arguments of some of the greatest thinkers throughout history such as Plato, Aristotle, Rene Descartes, David Lewis, Peter Singer, Jogn Locke, Meredith Michaels, David Hume, Friedrich Nietzsche, Susan Wolf, and more. The course covers the four main areas of philosophy including Metaphysics (the nature of reality); Epistemology (theories of knowledge); Ethics; and Logic and Reasoning.

Philosophy is an engaging, intellectually stimulating subject that nurtures curiosity, problem-solving skills, and open-mindedness. Students are introduced to methods of philosophical inquiry, analysis, evaluation, and critical comparison, and develop an appreciation for a range of relevant contemporary debates. Philosophy involves explicitly developing the habits of clarifying concepts, analysing problems, and constructing reasoned and coherent world view. Indeed, the key knowledge and skills fostered by philosophy complement courses across the VCE, and provides excellent preparation for future careers, whether in law, business, science, medicine and biotechnology, psychology, computer science, or the humanities.

### Units of Study

- Unit 1: Existence, Knowledge and Reasoning
- Unit 2: Questions of Value
- Unit 3: Minds, Bodies and Persons
- Unit 4: The Good Life



## Philosophy – Unit 1

### Course Description

What is the nature of time? Could we ever resolve the paradoxes of time travel? Are we truly free? Could we be living in a dream or a simulated reality like *The Matrix* and not know it? These are some of the questions that have not only challenged human beings throughout the ages, but underpin ongoing endeavours in areas as diverse as physics, the law, and the humanities. This unit engages students with fundamental philosophical questions through active, guided investigation and critical discussion of two key areas of philosophy: metaphysics and epistemology. As students learn to think philosophically, appropriate examples of philosophical viewpoints and arguments, both contemporary and historical, are used to support, stimulate, and enhance their thinking about central concepts and problems. Students also investigate relevant contemporary debates in applied metaphysics and epistemology.

### Areas of Study

#### Metaphysics

- On Time: What is the nature of time? Can there be a coherent time travel story? Can we resolve the paradoxes of time travel?
- On Free Will and Determinism: Can we ever be free if there are causes for all our actions? If our actions are not truly free, can we be held morally responsible for those actions?

#### Epistemology

- On Knowledge: What is knowledge? What is the difference between knowledge and mere belief? Is certainty necessary for knowledge? What are the sources of our knowledge and how reliable are these sources?
- On the Possibility of A Priori Knowledge: Is it possible to attain knowledge purely through the senses? Is reason superior to experience in giving us knowledge of the world? Could we be living in a simulated reality *The Matrix* and not know it?

#### Introduction to Philosophical Inquiry

- Techniques of critical thinking
- Introduction to formal and informal logic.



## Philosophy – Unit 2

### Course Description

What should I do? What is right? Is pure altruism possible or are all of our actions essentially motivated by self-interest? What is the basis and justification for rights? Do only human beings have rights, or do other kinds of living things also have rights? What are the limits of our freedom? Should freedom always be protected? This unit invites students to consider questions in relation to different categories of value judgement within the realms of ethics and morality. Students also explore ways in which philosophical viewpoints and arguments in value theory can inform various – and often highly controversial – contemporary debates.

### Areas of Study

#### Ethics and Moral Philosophy

- On Moral Psychology: Is pure altruism possible or are all of our actions essentially motivated by self-interest? Should our own pleasure-seeking be our primary motivation when making ethical decisions? Is moral behaviour only found in human beings?
- On Right and Wrong: What are the major theoretical frameworks philosophers have offered concerning what makes an action morally right? Are actions wrong to the extent that they maximise pleasure or minimise suffering? Does the motive or character of the person performing the action matter to the morality of that action?

#### Further Problems in Value Theory

- On Liberty and Anarchy: Is freedom a fundamental human right? What are the limits of our freedom? What are the threats to freedom and in the modern world and to what extent should freedom be protected?
- On Rights and Justice: What is the basis and justification for rights? Do only human beings have rights, or do other kinds of living things also have rights? How are conflicts between rights to be resolved?

#### Techniques of Philosophical Inquiry

- The roles of reasoning and argument, imagination, emotion, and experience in philosophical thinking
- Introduction to key terminology in philosophical reasoning.



## Philosophy – Unit 3

### Course Description

This unit considers basic questions regarding the mind and the self through two key questions: Are human beings more than their physical bodies? And (2) Is there a basis for the belief that an individual remains the same person over time? Students critically compare the viewpoints and arguments put forward in various philosophical sources to their own views on these questions and apply these viewpoints to relevant contemporary debates.

### Areas of Study

#### Minds and Bodies

The central concern of philosophy of mind is to explain the relationship between the body and the mind. The difficulty in advancing such an explanation stems from the fact that bodies and minds appear to be very different types of entities. The experience of reading for example, does not obviously feel straightforwardly like neurons firing in a brain. Some philosophers argue that such apparent differences indicate that the two are, in reality, fundamentally independent entities, whereas others argue that the mind is just a part of the physical body, but then must reconcile the apparent differences. Students examine the views of those who argue that the mind is nothing more than the body, as well as those that believe there is more to the human mind than just the body, and consider whether the two can exist independently of each other. Moreover, students examine a range of contemporary scientific developments that may have a bearing on the debate, alongside a deep engagement with the implications the various views they consider for a range of intriguing contemporary debates.

#### Personal Identity

Many philosophers have explored the question of the persistence of the self over time. They have attempted to identify the basis on which we might say, for example, that an individual is one and the same person at 80 as they were at 8 years old. Self, in this sense, is a contested term that refers to what is most essential about ourselves as a particular entity distinguished from others. Students explore selected positions on personal identity and the arguments for and against them. In doing so, students consider the implications of views on personal identity for personal responsibility and concern for future happiness. Students also apply these views to a broad range of thought experiments and to analyses of contemporary debates, such as those involving human enhancement technologies.



## Philosophy – Unit 4

### Course Description

This unit considers the crucial question of what it is for a human to live well. What does an understanding of human nature tell us about what it is to live well? The role of happiness in a life well lived? Is morality central to a good life? How does our social context impact on our conception of a good life? Students explore a range of philosophical texts that have had a significant impact on Western ideas concerning the good life, critically compare the viewpoints expressed in each, and use their understanding to inform a reasoned response to relevant contemporary debates.

### Areas of Study

#### Conceptions of the Good Life

In this area of study, students are exposed to philosophical concepts, debates, and perspectives on the nature of the good life through a study of philosophical texts from both ancient and contemporary sources. As they reflect on the implications of accepting the views and arguments presented by these thinkers, they develop their own critical responses to the authors' viewpoints and arguments.

#### Living the Good Life in the Twenty First Century

Drawing from their own research and a range of philosophical sources – including those from the previous Area of Study – students develop and justify responses to debates on technological development (e.g. human enhancement technologies, artificial intelligence and entertainment technologies) in relation to the good life. They outline arguments made in a variety of sources and critically respond to them. They explore the interplay between the changing conditions of contemporary life and our ability to live a good life, considering how the strength of the interplay is dependent not only on the nature of developments in contemporary life, but also on the conception of the good life.



## Religion and Society (Unit 2)

### Course Description

How well do we know what is good? How do we make decisions in situations where it is unclear what is good or not good? Do we accept what society defines as good? Do we do what feels right? Or do we rely on a definition of what is good from a spirituality, religious tradition or religious denomination? What are the principles that guide decision making? Ethics is concerned with discovering the perspectives that guide practical moral judgement. Studying ethics involves identifying the arguments and analysing the reasoning, and any other influences, behind these perspectives and moral judgements. An important influence on ethical perspective is the method of ethical decision-making, made up of concepts, principles and theories.

In this unit, students study in detail various methods of ethical decision-making in at least two religious traditions and their related philosophical traditions. They explore ethical issues in societies where multiple worldviews coexist, in the light of these investigations.

### Areas of Study

#### Ethical decision-making and moral judgement

In this area of study students are introduced to the nature of ethical decision-making in societies where multiple worldviews coexist. Ethical decision-making involves the selection of methods that have guiding concepts, principles and theories. Students explore concepts that underpin ethical decision-making and influences on practical moral judgment.

#### Religion and ethics

In this area of study students explore religious ethical perspectives and other influences on the formation of moral judgements of at least two spiritualities, religious traditions and/or religious denominations, in societies where multiple worldviews coexist.

#### Ethical issues in society

In this area of study students build on the knowledge explored in Areas of Study 1 and 2. Focusing on two or more ethical issues, students apply this knowledge to an examination of debates about ethical issues conducted in the public arena of societies in which multiple religious and non-religious worldviews coexist.

#### Some key skills

- Examine the aspects of religion related to ethical decision-making processes in spiritualities, religious traditions or religious denominations, other than ethics
- Examine the debates about ethical issues in societies where multiple worldviews coexist
- Examine the ethical perspectives and moral judgements presented in the arguments by those participating in the debates
- Evaluate the ethical decision-making methods involved in the debate process, and their strengths and weaknesses
- Evaluate the influence of various participants' contributions to the debates.



## Texts and Traditions (Units 1-4)

### Course Description

The study of VCE Texts and Traditions equips students to come to a deeper understanding of the relationship between religious traditions and the written texts, which have grown from and shaped those traditions. Examining the texts on which religious traditions are founded enables students to gain a good understanding about the basis of those traditions. These texts become a touchstone to the tradition as it develops and responds to changing circumstances. Many religious traditions have a special relationship with a set of written texts, often referred to as scriptures. Through this study, students are taught to understand that these written texts have particular authority for the tradition and may act as an important reference and foundation for the tradition's social organisation, rituals, values, beliefs and behaviour, both historically and in the world today. Students study texts in their original social, cultural, religious, political and historical settings, as well as investigate the impact such texts have had throughout history and are having on the world today. Different methods of interpretation are taken into account throughout this study. Students also investigate the texts as pieces of literature and consider how others have been inspired by the interpretation of such writings. The study of VCE Texts and Traditions encourages independent and critical thinking in students that will assist them in work and study, and in fields that require critical thinking about, and research, analysis and interpretation of, written text.

### Units of Study

- Unit 3: Texts and the Early Tradition
- Unit 4: Texts and their Teachings



## Texts and Traditions – Unit 3: The Early Tradition

### Course Description

The texts of a particular religious tradition are foundational in that they recount, for example, specific events, narratives, laws, prophetic pronouncements and teachings that describe the beginnings and initial development of a religious tradition. In this unit students explore the society and culture from which the tradition being studied was formed. They seek an understanding of the historical background that lent shape and content to the texts themselves. Students develop an understanding of how the chosen set text is a response to particular social, cultural, religious, political and historical ends and events. They explore the formation of the text itself, the intended audience of that text, and the message or teaching found within the text.

At St Paul's we have chosen to study the Gospel of Luke as our set text.

### Areas of Study

- The background of the tradition
- Thematic and literary background to the set text
- Interpreting texts

## Texts and Traditions – Unit 4: Their Teachings

### Course Description

In this unit students continue to apply exegetical methods to the passages for special study begun in Unit 3, but to greater depth. Some texts are regarded as essential for the continuation of a tradition because they function as a means of communicating teachings or understandings about the relationship between the human and the transcendent. These understandings are often expressed through ideas, beliefs or themes in the particular texts. Some of the themes contained in the foundational texts have been reinterpreted at different times by the tradition. In this unit students study a significant idea, belief or theme contained in the set text, and consider the interpretation of the text in the light of the idea, belief or theme.

### Areas of Study

- Interpreting texts
- Religious themes and their teaching purpose
- Themes in the later tradition and the later use of scripture





## **English / EAL (English as an Additional Language)(Units 1-4)**

### **Course Description**

Effective participation in Australian society depends on an ability to understand the various uses of the English language and to employ them effectively for a range of purposes. This study aims to enable all students to develop their critical understanding and control of the English language so that they can use it in a wide range of situations, ranging from the personal and informal to more public occasions, and to develop a level of competence adequate for the demands of post-school employment, further education, and participation in a democratic society.

### **Units of Study**

- Unit 1: English
- Unit 2: English
- Unit 3: English/EAL
- Unit 4: English/EAL



## English / EAL – Unit 1

### Course Description

In this unit, students read and respond to texts, making personal connections. Students explore the vocabulary, text structures, language features and ideas in a text. Students employ and experiment with the qualities of effective writing in their own work.

### Areas of Study

#### Reading and exploring texts

- Engage in reading and viewing texts with a focus on personal connections in the story
- Discuss and clarify the ideas and values presented by authors through their evocations of character, setting and plot
- Develop and strengthen inferential reading and viewing skills
- Understand and appreciate the role of vocabulary, text structures and language features in creating story and meaning
- Contemplate the way a text can present and reflect human experiences
- Share their experience of the world, and make connections with key ideas, concerns and tensions presented in a text
- Explore the cultural, social and historical values embedded in the text, drawing parallels with their own observations of the world.

#### Crafting texts

- Engage with and develop an understanding of effective and cohesive writing
- Apply, extend and challenge their understanding and use of imaginative, persuasive and informative texts
- Read and engage imaginatively and critically with mentor texts that model effective writing
- Employ and experiment with the qualities of effective writing in their own work, engaging with and expanding on ideas drawn from mentor texts to extend their creativity, fluency and range
- Build a varied vocabulary, and apply standard and/or non-standard conventions of language, including syntax and spelling, as appropriate.

## English / EAL – Unit 2

### Course Description

In this unit, students explore and analyse how the vocabulary, text structures, language features and ideas in a text construct meaning. They analyse arguments presented and the use of persuasive language in texts and create their own texts intended to position audiences.

### Areas of Study

#### Reading and exploring texts

- Develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing
- Engage with the ideas, concerns and tensions in a text, recognising ways of vocabulary, text structures, language features and conventions of a text work together to create meaning
- Examine the ways readers understand text, recognising ways considering its historical context, and social and cultural values
- Explore the text through the prism of their own cultural knowledge, experiences and understanding of the world, and extend their observations into analytical and abstract explorations
- Develop their analytical writing about a text, applying appropriate metalanguage and integrating evidence.



### Exploring argument

- Consider the ways arguments are developed and delivered in many forms of media
- Read, view and listen to a range of texts that attempt to position an intended audience in a particular context.
- Explore the structures of texts, including contention, sequence of arguments, use of supporting evidence and persuasive strategies
- Examine the language and visuals employed by the author, and offer analysis of the intended effect on the audience
- Apply their knowledge of argument to create a point of view text for oral presentation.

## English / EAL – Unit 3

### Course Description

In this unit students read and respond to literary texts analytically. They create texts for a variety of different purposes and audiences.

### Areas of Study

#### Reading and Responding to Texts

- Apply reading and viewing strategies to critically engage with a text
- Analyse the ways authors construct meaning through vocabulary, text structures, language features and conventions, and the presentation of ideas
- Understand and explore the historical context, and the social and cultural values of a text
- Plan, construct and edit analytical writing that develops and sustains ideas about texts
- Listen to and discuss ideas, concerns and values presented in a text, informed by selected vocabulary, text structures and language features and how they make meaning (EAL students).

#### Creating Texts

- Students work with mentor texts to inspire their own creative processes, to generate ideas for their writing, and as models for effective writing
- Experiment with adaptation and individual creation, and demonstrate insight into ideas and effective writing strategies in their texts
- Reflect on the deliberate choices they have made through their writing processes in their commentaries.

## English / EAL – Unit 4

### Course Description

In this unit students read and respond to literary texts analytically. They analyse arguments and the use of persuasive language in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

### Areas of Study

#### Reading and Responding to Texts

- Discuss and analyse the ways authors construct meaning in a text through the presentation of ideas, concerns and conflicts, and the use of vocabulary, text structures and language features.



- Engage with the dynamics of a text and explore the explicit and implicit ideas and values presented in a text
- Recognise and explain the ways the historical context, and social and cultural values can affect a reader, and analyse how these social and cultural values are presented.

#### **Analysing Argument**

- Analyse the use of argument and language, and visuals in texts that debate a contemporary and significant national or international issue
- Explore and analyse the structures and features of argument presented in audio and/or audio visual texts, and consider the unique structures and features that enhance argument in these contexts.
- Apply their understanding of the use of argument and language to create a point of view text for oral presentation.



## English Literature (Units 1-4)

### Course Description

The study of literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations and those of others.

The study is based on the premise that meaning is derived from the relationships between the text, the context in which it was produced and the experience of life and literature the reader brings to the texts. Accordingly, the study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form.

The study of literature encourages independent and critical thinking in students' analytical and creative responses to texts, which will assist students in the workforce and in future academic study.

### Units of Study

- Unit 1: English Literature
- Unit 2: English Literature
- Unit 3: English Literature
- Unit 4: English Literature.



## English Literature – Unit 1

### Course Description

In this unit students focus on the ways the interactions between text and reader creates meaning. Students' analyses of the features and conventions of texts help them develop responses to a range of literary forms and styles. They develop an awareness of how the views and values that readers hold may influence the reading of a text. Students explore literary movements and genres.

### Areas of Study

#### Reading Practices

- Developing critical responses by examining the patterns of language and imagery used in literary texts
- Discussing how the features and conventions contribute to meaning
- Understanding how the student's own ideas and contexts influence their readings of texts
- Exploring, interpreting and reflecting on different ideas and values represented in literature.

#### Exploration of literary movements and genres

- Exploring the concerns, ideas, style and conventions common to a distinctive type of literature seen in literary movements or genres
- Exploring texts from the selected movement or genre, identifying and examining attributes, patterns and similarities that locate each text within that grouping
- Engaging with the ideas and concerns shared by the texts through language, settings, narrative structures and characterization
- Experimenting with the assumptions and representations embedded in the texts.

## English Literature – Unit 2

### Course Description

In this unit students examine representations of culture and identity, looking closely at the texts and voices of Aboriginal and Torres Strait Islander peoples. They deepen their examination of the ways of their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. They engage in close reading of texts and create analytical responses that are evidence-based.

### Areas of Study

#### Voices of Country

- Exploring the voices, perspectives and knowledge of Aboriginal and Torres Strait Islander authors and creators
- Considering the interconnectedness of place, culture and identity through the experiences, texts and voices of Aboriginal and Torres Strait Islander peoples, including connections to Country, the impact of colonisation and its ongoing consequences, and issues of reconciliation and reclamation
- Examining representations of culture and identity in Aboriginal and Torres Strait Islander peoples' texts and the ways in which these texts present voices and perspectives that explore and challenge assumptions and stereotypes arising from colonisation.

#### The text in its context

- Reflecting on representations of a specific time period and/or culture within a text
- Exploring the text to understand its point of view and what it reflects or comments on
- Identifying the language and the representations in the text that reflect the specific time period and/or culture, its ideas and concepts
- Developing an understanding that contextual meaning is already implicit or explicitly inscribed in a text and that textual details and structures can be scrutinised to illustrate its significance
- Developing the ability to analyse language closely, recognising that words have historical and cultural import.



## English Literature – Unit 3

### Course Description

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.

### Areas of Study

#### Adaptations and Transformations

- Understanding the way forms of text are significant in the making of meaning
- Analysing conventions used in a particular form of text; for example, the use of imagery and rhythm in a poem, the use of setting, plot and narrative voice in a novel, the use of dialogue and stage direction in a play, and the use of images and sound in film
- Interpreting the differences in meaning conveyed when a text is adapted or transformed.

#### Developing Interpretations

- Developing interpretations of a set text, analysing how ideas, views and values are presented in a text, and the ways these are endorsed, challenged and/or marginalised through literary forms, features and language
- Exploring a supplementary reading that can enrich, challenge and/or contest the ideas and the views, values and assumptions of the set text to further enhance the students' understanding
- Developing a second interpretation of the same text, reflecting an enhanced appreciation and understanding of the text. Applying this understanding to key moments from the text, supporting their work with considered textual evidence.

## English Literature – Unit 4

### Course Description

In this unit students respond creatively to a text and comment critically on both the original text and the creative response. Students also analyse literary forms, features and language to present a coherent view of a whole text.

### Areas of Study

#### Creative responses to texts

- Focusing on the imaginative techniques used for creating and recreating a literary work
- Understanding how the meaning of texts can change as context and form change, in order to construct a creative transformation of a text
- Learning how authors develop representations of people and places, and how they develop an understanding of language, voice, form and structure
- Drawing inferences from the original text in order to create an original piece of writing. In their adaption of the tone and the style of the original text, students develop an understanding of the views and values explored
- Reflecting critically on the literary form, features and language of a text.

#### Close analysis of texts

- Focusing on a detailed scrutiny of the language, style, concerns and constructions of texts
- Closely analysing textual details to examine the ways specific passages in text contribute to an overall understanding of the whole context
- Considering literary forms, features and language, and the views and values of the text
- Writing expressively to develop a close analysis, using detailed references to the text.



## English Language (Units 1-4)

### Course Description

VCE English Language explores the ways in which language is used by individuals and groups and reflects our thinking and values. Learning about language helps us to understand ourselves, the groups with which we identify, and the society we inhabit.

English Language builds on students' previous learning about the conventions and codes used by speakers and writers of English. Informed by the discipline of linguistics, it provides students with metalinguistic tools to understand and analyse language use and change. Students studying English Language understand that uses and interpretations of language are nuanced and complex. Students come to understand how people use spoken and written English to communicate, to think and innovate, to construct identities, to display attitudes and assumptions, and to create and disrupt social cohesion.

The study of English Language enables students to understand the structures, features and discourses of written and spoken texts. It promotes systematic and objective analysis of language in use.

### Units of Study

- Unit 1: Language and communication
- Unit 2: Language change
- Unit 3: Language variation and social purpose
- Unit 4: Language variation and identity.





## English Language – Unit 1

### Course Description

The focus of this unit is on the fact that language is an essential aspect of human behaviour and it is the means by which individuals relate to the world, to each other, and to communities of which they are members. In this unit, students consider the way language is organised so that its users have the means to make sense of their experiences and to interact with others. Students explore the various functions of language and the nature of language as a highly elaborate system of signs. The relationship between speech and writing as the dominant modes of language and the impact of situational and cultural contexts on language choices are also considered. Students investigate children's ability to acquire language, and the stages of language acquisition across a range of subsystems.

### Areas of Study

#### The nature and functions of language

- Human language's status as a complex system of conventions, and how it differs from the communication behaviour of other species
- The structure (or 'subsystems') of which language is composed
- The distinctive features of spoken and written modes of language
- The notion of register: a variety of language used to match a particular context
- How language features can be explained in terms of both the text's functions, as well as its cultural and situational context.

#### Language acquisition

- The way that children acquire their first language
- How language development occurs in each of the subsystems of language
- The technical vocabulary required to assess a child's level of progress in language acquisition
- The differences between first and second language acquisition
- Some influential theories which have been developed to explain how language acquisition occurs.

## English Language – Unit 2

### Course Description

In this unit, students focus on language change. Languages are dynamic and change is an inevitable and continuous process. Students consider factors contributing to change over time in the English language and factors contributing to the spread of English. They explore texts from the past, and contemporary texts considering how all subsystems of the language system are affected – phonetics and phonology, morphology and lexicology, syntax, discourse and semantics. Attitudes to language change vary considerably and these are also considered.

In addition to developing an understanding of how English has been transformed over the centuries, students explore the various possibilities for the future of English. They consider how the global spread of English has led to a diversification of the language, and to English now being used by more people as an additional or a foreign language than as a first language. Contact between English and other languages has led to the development of geographical and ethnic varieties, but has also hastened the decline of indigenous languages. Students consider the cultural repercussions of the spread of English.



## Areas of Study

### English Across Time

- The development of English, from its prehistoric origins in 'Proto-Indo-European', through the stages of Old, Middle and Modern English in the British Isles, and finally to the emergence of Australian English as a distinct national variety
- The way that the development of English has occurred across the subsystems
- The process of codification and the development of the notion of a standard language variety
- How contemporary society responds to language change, in particular the frequent debates that occur between those of prescriptivist and descriptivist attitudes.

### Englishes in Contact

- How English has emerged as a world language and the notion of a lingua franca
- The varieties of English that exist around the world, including national and regional dialects, pidgins and creoles
- The way that language can form world views, as well as express and enshrine distinctive cultures and identities
- Current and past efforts to reclaim and protect threatened languages and language varieties
- The development of Australian Englishes, including Aboriginal Australian Englishes.

## English Language – Unit 3

### Course Description

In this unit students investigate English Language in the Australian social setting, along a continuum of informal and formal registers. They consider language as a means of societal interaction, understanding that through written and spoken texts we communicate information, ideas, attitudes, prejudices and ideological stances.

## Areas of Study

### Informality

- The role of Standard and non-Standard English in creating formal and informal texts
- Common functions and contexts associated with informal texts
- The use of informal language in:
  - Encouraging intimacy, solidarity and equality
  - Maintaining and challenging positive face needs
  - Promoting linguistic innovation
  - Supporting in-group membership
- Metalinguage to discuss informal languages in texts.

### Formality

- The features and functions of formal writing and formal speech as represented in a range of texts from literature and the public domain
- The role of discourse features and lexical choice in creating textual cohesion in formal spoken and written texts
- The use of formal language for various social purposes, including:
  - Maintaining and challenging positive and negative face needs
  - Reinforcing social distance and authority
  - Establishing expertise
  - Promoting social harmony, negotiating social taboos and building rapport
  - Clarifying, manipulating or obfuscating.



## English Language – Unit 4

### Course Description

In this unit students focus on the role of language in establishing and challenging different identities. Many varieties of English exist in contemporary Australian society, including national, regional, cultural and social variations. Standard Australian English is the variety that is granted prestige in contemporary Australian society and it has a role in establishing national identity. However, non-Standard varieties also play a role in constructing users' social and cultural identities. Students examine both print and digital texts to consider the ways different identities are constructed. Such historical and contemporary texts include, but should not be limited to, extracts from novels, films or television programs, poetry, letters and emails, transcripts of spoken interaction, songs, advertisements, speeches and bureaucratic or official documents.

### Areas of Study

#### Language Variation in Australian Society

- The role of Standard and non-Standard English in Australian Society
- Ways in which a variety of Australian identities can be reflected in a range of texts
- Characteristics of Australian English in contrast to Englishes from other continents, in phonological, lexical, prosodic and/or grammatical patterns
- How Australian English varies according to geographic, social and cultural factors
- The role of language in constructing national identity
- Metalanguage to discuss varieties of Australian English.

#### Individual and Group Identities

- Social and personal variation in language according to factors such as age, gender, occupation, interests, aspiration and education
- Features of language that contribute to a sense of individual identity and group membership
- The ways in which people draw on their linguistic repertoire to gain power and prestige, including exploiting overt and covert norms
- The relationship between social attitudes and language choices
- Metalanguage to discuss representations of identity in texts.



## Languages: French (Units 1-4)

### Course Description

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

The study of a specific language exposes students to different experiences and perspectives at a personal level. It encourages students to be open to different ways of thinking, acting and interacting in the world, even beyond the language being studied and their own language. A broad range of social, economic and vocational opportunities result from study in a second language. Students are able to engage with French-speaking communities in Australia and internationally in a variety of endeavours.

### Units of Study

- Units 1 & 2: French
- Units 3 & 4: French



## French – Units 1 & 2

### Course Description

In Units 1 and 2, students develop an understanding of the language and culture/s of French-speaking communities through the study of various themes and topics. Students access, share and analyse useful information on the subtopic through French and consolidate and extend vocabulary, grammar and language skills. Cultural products or practices are used to demonstrate how culture and perspectives vary between communities. Students apply acquired knowledge of French culture and language to new contexts. Students reflect on the interplay between language and culture, and its impact on meaning, understanding and the individual's language use in specific contexts and for specific audiences.

### Areas of Study

VCE language study is underpinned by the concepts of communicating and understanding languages and cultures. There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning each specific language while the interpersonal, interpretive and presentational contexts define the ways in which students use the language they are studying. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

There are three prescribed themes for study:

- The Individual
- The French-speaking communities
- The world around us.

In each unit, the learning program will include topics from more than one theme and at least one topic and subtopic for each area of study. The prescribed topics area:

- Personal identity and lifestyles
- Relationships
- Aspirations, education and careers
- The francophone world
- Historical perspectives
- French cultural perspectives
- Global and contemporary society
- Communication and media
- Technology and science.

Students come into contact with a wide variety of texts when undertaking VCE French and practice listening, speaking, reading, writing and viewing skills through texts of all types. Students are expected to produce different styles of writing. Writing styles include: personal, imaginative, persuasive and evaluative. There is no prescribed vocabulary list for VCE French. Students are expected to be familiar with a range of vocabulary or idioms relevant to the themes and topics.



## French – Units 3 & 4

### Course Description

In Units 3 and 4, students investigate the way French speakers interpret and express ideas, and negotiate and persuade in French through the study of three or more subtopics from the prescribed themes and topics. Students consider the influence of language and culture in shaping meaning and reflect on the practices, products and perspectives of the cultures of French-speaking communities. They reflect on how knowledge of French and French-speaking communities can be applied in a range of contexts and endeavours, such as further study, travel, business or community involvement. They consider how knowledge of more than one culture can influence the ways individuals relate to each other and function in the world.

### Areas of Study

VCE language study is underpinned by the concepts of communicating and understanding languages and cultures. There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning each specific language while the interpersonal, interpretive and presentational contexts define the ways in which students use the language they are studying. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

There are three prescribed themes for study:

- The Individual
- The French-speaking communities
- The world around us.

In each unit, the learning program will include topics from more than one theme and at least one topic and subtopic for each area of study. The prescribed topics area:

- Personal identity and lifestyles
- Relationships
- Aspirations, education and careers
- The francophone world
- Historical perspectives
- French cultural perspectives
- Global and contemporary society
- Communication and media
- Technology and science.

Students come into contact with a wide variety of texts when undertaking VCE French and practice listening, speaking, reading, writing and viewing skills through texts of all types. Students are expected to produce different styles of writing. Writing styles include: personal, imaginative, persuasive and evaluative. There is no prescribed vocabulary list for VCE French. Students are expected to be familiar with a range of vocabulary or idioms relevant to the themes and topics.



## Languages: Japanese (Units 1-4)

### Course Description

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

The study of a specific language exposes students to different experiences and perspectives at a personal level. It encourages students to be open to different ways of thinking, acting and interacting in the world, even beyond the language being studied and their own language. A broad range of social, economic and vocational opportunities result from study in a second language. Students are able to engage with Japanese-speaking communities in Australia and internationally in a variety of endeavours.

Students may wish to study Japanese as an academic subject for educational purposes or link this study to other areas of interest. Pathways for further study of Japanese are available at a number of tertiary institutions.

### Units of Study

- Units 1 & 2: Japanese
- Units 3 & 4: Japanese.



## Japanese – Units 1 & 2

### Course Description

In Units 1 and 2 students develop an understanding of the language and culture/s of Japanese-speaking communities through the study of various themes and topics. Students access, share and analyse useful information on the subtopic through Japanese and consolidate and extend vocabulary, grammar and language skills. Cultural products or practices are used to demonstrate how culture and perspectives vary between communities. Students apply acquired knowledge of Japanese culture and language to new contexts. Students reflect on the interplay between language and culture, and its impact on meaning, understanding and the individual's language use in specific contexts and for specific audiences.

### Areas of Study

VCE language study is underpinned by the concepts of communicating and understanding languages and cultures. There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning each specific language while the interpersonal, interpretive and presentational contexts define the ways in which students use the language they are studying. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

Units 1–2 Japanese will include the study of topics chosen from the prescribed VCAA list. These topics include:

### Themes, topics and subtopics

#### The Individual

- Personal identity and lifestyles
- Relationships – family, friends, school and social relationships
- Aspirations, education and careers – experiences of schooling, casual work, employment opportunities.

#### The Japanese-Speaking Communities

- The Japanese-speaking communities – arts, traditional, contemporary culture, festivals and celebrations
- Significant people – famous people in selected fields
- Living in a Japanese community/visiting Japan – living in Japan.

#### The World Around Us

- Global, contemporary society – caring for the environment, changes in family life
- Communication, Media – internet, social media, advertisements
- The influence of technology – innovations in technology, impact of technological change.

### Text Types (examples)

- Article, letter, diary entry and/or email.

#### Report

- Story and/or speech.

#### Writing Styles

- Personal, informative, persuasive, evaluative and/or imaginative.





## Japanese – Units 3 & 4

### Course Description

In Unit 3 students investigate the way Japanese speakers interpret and express ideas, and negotiate and persuade in Japanese through the study of various themes and topics. Students interpret information, inform others, and reflect upon and develop persuasive arguments. They access and share useful information on the subtopics through Japanese, and consolidate and extend vocabulary, grammar knowledge and language skills. Students consider the influence of language and culture in shaping meaning and reflect on the practices, products and perspectives of the cultures of Japanese-speaking communities.

In Unit 4 students continue to build on their knowledge of Japanese-speaking communities, considering cultural perspectives and language and explaining personal observations. Students consolidate and extend vocabulary, grammar knowledge and language skills to investigate the topics through Japanese. Students identify and reflect on cultural products or practices that provide insights into Japanese-speaking communities. Students reflect on the ways individuals relate to each other and function in the world.

### Areas of Study

Units 3 – 4 Japanese will include the study of topics chosen from the prescribed VCAA list. These topics include:

#### Themes, topics and subtopics

##### The Individual

- Personal identity and lifestyles
- Relationships – family, friends, school and social relationships
- Aspirations, education and careers – experiences of schooling, casual work, employment opportunities.

##### The Japanese-Speaking Communities

- The Japanese-speaking communities – arts, traditional, contemporary culture, festivals and celebrations
- Significant people – famous people in selected fields
- Living in a Japanese community/visiting Japan – living in Japan.

##### The World Around Us

- Global, contemporary society – caring for the environment, changes in family life
- Communication, Media – internet, social media, advertisements
- The influence of technology – innovations in technology, impact of technological change.

#### Text Types (examples)

- Article, letter, diary entry and/or email.

##### Report

- Story and/or speech.

##### Writing Styles

- Personal, informative, persuasive, evaluative and/or imaginative.



## **Food Studies (Units 1-4)**

### **Course Description**

Australia has a varied and abundant food supply which influences individual food selection and affects the health and wellbeing of consumer's daily lives. Students explore food from a wide range of theoretical and practical perspectives. They study past and present patterns of eating, Australian and global food production systems and the physical and social functions and roles of food. They research economic, environmental and ethical dimensions of food and critically evaluate marketing messages and new trends.

Throughout the four Units, students will develop the abilities to make informed, sustainable and healthy food choices which will foster a broad awareness and prompt resilient solutions as consumers and advocates of food.

### **Units of Study**

- Unit 1: Food origins
- Unit 2: Food makers
- Unit 3: Food in daily life
- Unit 4: Food issues, challenges and futures



## Food Studies – Unit 1

### Course Description

This Unit will allow students to develop an understanding of food from a historical and cultural perspective. Students will investigate the origins and roles of food through time and across the world, examining the influences, patterns and progression from subsistence to rural based agriculture, to urbanised living and technological influences and globalisation and trade in food commodities. A specific focus will be on Australian Indigenous food and how the Australian cuisine has changed due to the influences of European settlement, production industries and successive waves of immigration.

### Areas of Study

#### Food Around the World

- Characteristics of historical and cultural food collection
- Factors facilitating and challenging the development of agriculture, horticulture and pastoral food systems
- Feeding human populations
- Development of food production and food culture
- Patterns of global food production and growth in food commodities
- Impact of industrialisation, technology and globalisation on food availability, production and consumption.

#### Food in Australia

- Characteristics and challenges of Indigenous Australian food production and consumption
- Development of agriculture, horticulture, and pastoral food systems, and food processing industries across Australia
- Influences on Australian food tastes and eating patterns
- Characteristics and trends of Australian cuisine.

## Food Studies – Unit 2

### Course Description

This Unit will allow students to develop an understanding of food production in Australia, encompassing primary production, food processing and manufacturing, to provide a safe, high-quality food supply catering for all individuals and groups within Australia both domestically and commercially. Students design new products and adapt recipes to suit particular needs and circumstances of individuals and groups, and explore potential entrepreneurial opportunities as small-scale food producers.

### Areas of Study

#### Australia's food systems

- Current trends, issues and influences in Australian food industry sectors, and the impact on food security and sovereignty
- Primary production of food in Australia
- Characteristics of food processing and manufacturing industries in Australia
- Influences on food supply and the development of new food products
- Food governance and regulation to ensure a safe food supply.

#### Food in the Home

- Evaluation techniques of food products
- The design process and adaption of recipes and meals to suit specific requirements of individuals and groups



- Effective and sustainable planning, management and decision-making of resources in the provision of food in the home and commercially
- Entrepreneurial or commercial food opportunities
- Effects of chemical and physical properties of food, methods of cooking and heat transfer methods when preparing food.

## Food Studies – Unit 3

### Course Description

This unit allows students to investigate the many influences and impacts on food access, choices and consumption and its relationship to identity, connectedness and health; today, over time and changes needed for the future. Students develop a physiological and microbiological understanding of the role of food to nourish the body and the practices to ensure a safe food supply. They investigate the chemical and physical properties of food which occur during food preparation and the use of scientific government resources to promote good health, nutritious and sustainable eating habits and meal patterns.

### Areas of Study

#### The science of food

- Physiology and conditioning of appetite, hunger and satiety
- Physiology and microbiology of eating, the intestinal tract, digestion and the role of macro nutrients in the body
- Scientific, evidence-based government resources to assist in the prevention of related lifestyle diseases and understanding of diverse nutrient requirements
- Physiology of food allergies and intolerances
- The role of diet in influencing gut microbiota and relationship with physical and mental health.

#### Food choice, health and wellbeing

- Patterns and influences of eating in Australia, and the impact on health
- Influences on food access, food choice and healthy eating across Australia
- Marketing of food and influence on consumption and behavioural patterns of food.

## Food Studies – Unit 4

### Course Description

This unit allows students to investigate, debate and respond to global and Australian food systems and the relationship between food security, food sovereignty and food citizenship to adequately feed a rising world population. Issues relating to the environment, climate, ecology, ethics, farming practices, food security and food safety are researched. Students develop considered and accurate methodology to navigate and respond to food information and misinformation, such as food fads, trends and diets. Students develop skills in interpreting food labels and eliciting meaning of marketing terms used on food packaging and in food advertisements to become literate and confident consumers and creators of food.

### Areas of Study

#### Navigating Food Information

- Factors influencing food literacy, food knowledge and skills
- Use of research in response to contemporary food information, fads, trends and diets
- Labelling information for food consumers



- Requirements, influence and impact of food advertisements
- Use of Scientific, evidence-based government resources to assist with everyday food
- Behaviours and habits to maintain and recommended health status.

#### **Environment and Ethics**

- Challenges of adequately feeding a rising world population, and the relationship between food security, food sovereignty and food citizenship
- Environmental sustainability of food production and planetary health
- Sociocultural and ethical concerns associated with food production, consumption and demand
- Characteristics, challenges and advantages of different farming and primary food production
- Environmental effects of food processing, manufacturing, retailing and consumption in Australia.



## Health and Human Development (Units 1-4)

### Course Description

VCE Health and Human Development provides students with broad understandings of health and wellbeing that reach far beyond the individual. Students learn how important health and wellbeing is to themselves and to families, communities, nations and global society. Students explore the complex interplay of biological, sociocultural and environmental factors that support and improve health and wellbeing and those at risk. The study provides opportunities for students to view health and wellbeing, development and holistically across the life-span both in Australia and around the globe.

Students will also develop health literacy as they connect their learning to their lives, communities and world. They develop a capacity to respond to health information, advertising and other media messages, enabling them to put strategies into action to promote health and wellbeing in both personal and community contexts.

### Units of Study

- Unit 1: Understanding health and wellbeing
- Unit 2: Managing health and development
- Unit 3: Australia's health in a globalised world
- Unit 4: Health and human development in a global context



## Health and Human Development – Unit 1

### Course Description

Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health and wellbeing and the indicators used to measure and evaluate health status. With a focus on youth, students consider their own health as individuals and as a cohort. They build health literacy through interpreting and using data, through investigating the role of food, and through extended inquiry into one youth health focus area.

### Areas of Study

#### Health perspectives and influences

Students will explore multiple dimensions of health and wellbeing. Students consider the influence of age, culture, religion, gender and socioeconomic status on perceptions of and priorities relating to health and wellbeing. They look at measurable indicators of population health, and at data reflecting the health status of Australians. With a focus on youth, students enquire into reasons for variations and inequalities in health status, including sociocultural factors that contribute to variations in health behaviours.

#### Health and nutrition

Students explore food and nutrition as foundations for good health and wellbeing. Students investigate the roles and sources of major nutrients and the use of food selection models and other tools to promote healthy eating. They look at the health and wellbeing consequences of dietary imbalance, especially for youth and consider the social, cultural and political factors that influence the food practices of and food choices made by youth.

#### Youth Health and wellbeing

Students focus on the health and wellbeing of Australia's youth, and conduct independent research into a selected area of interest. Students identify major health inequalities among Australia's youth and reflect on the causes. Students interpret data and draw conclusions on how the health and wellbeing of Australia's youth can be promoted and improved.

## Health and Human Development – Unit 2

### Course Description

This unit investigates transitions in health, wellbeing and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. Students enquire into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

### Areas of Study

#### Developmental transitions

Students will focus on developmental changes in the transition from youth to adulthood and consider the characteristics of respectful, healthy relationships. They will also analyse factors that contribute to healthy development during prenatal and early childhood stages of the lifespan and explain health and wellbeing as an intergenerational concept.

#### Health care in Australia

This area of study investigates the health system in Australia. Students examine the functions of various entities that play a role in our health system, as well as the rights and responsibilities of individuals receiving care. Students research the range of health services in their communities and suggest how to improve health and wellbeing outcomes and health literacy in Australia. They explore a range of issues associated with the use of new and emerging health procedures and technologies.



## Health and Human Development – Unit 3

### Course Description

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance. It also focuses on health promotion and improvements in population health over time. Students look at various public health approaches and the interdependence of different models as they research health improvements and evaluate successful programs both globally and in Australia.

### Areas of Study

#### Understanding health and wellbeing

This area of study explores health and wellbeing and illness as complex, dynamic and subjective concepts. While the major focus is on health of Australians, this area of study also emphasises that Australian's health is not isolated from the rest of the world. Students develop their understanding of the indicators used to measure and evaluate health status and the factors that contribute to variations between population groups in Australia.

#### Promoting health and wellbeing

This area of study looks at different approaches to public health over time, with an emphasis on changes and strategies that have succeeded in improving health and wellbeing. Students examine the progression of public health in Australia since 1900, noting global changes. Students also investigate the Australian health system and its role in promoting health and wellbeing.

## Health and Human Development – Unit 4

### Course Description

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries. Students also investigate the role and effectiveness of non-government organisations and Australia's overseas aid program. Students will also focus on the Sustainable Development Goals in improving health and wellbeing.

### Areas of Study

#### Health and wellbeing in a global context

This area of study looks at similarities and differences in major burdens of disease in various countries, including Australia. Students investigate a range of factors that contribute to health inequalities and study the concepts of sustainability and human development. Students consider the global reach of product marketing and inquire into the effects of particular global trends on health and wellbeing.

#### Health and the Sustainable Development Goals

This area of study looks at action for promoting health globally. It looks at the rationale, objectives and interdependencies of the UN's Sustainable Development Goal's focusing on their promotion of health and wellbeing and human development. Students investigate the priorities and work of the WHO and evaluate Australia's aid program and the role of non-government organisations.





## Physical Education (Units 1-4)

### Course Description

Physical Education examines the biological, social and cultural influences on performance and participation in physical activity. This course is approached through both the study of, and participation in, physical activity. This approach provides the means by which theory and practice are integrated. Participation in physical activity and development of skills provide opportunities for students to reflect on factors that affect performance and participation in physical activity.

### Units of Study

#### Units 1 and 2 – Physical Education Study Design, 2017–2024

- Unit 1: The human body in motion
- Unit 2: Physical activity, sport and society

#### Unit 3 and 4 – Physical Education Study Design, 2018–2024

- Unit 3: Movement, skills and energy for physical activity
- Unit 4: Training to improve performance



## Physical Education – Unit 1

### Course Description

In this unit students explore how the musculoskeletal cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity.

Using a contemporary approach students evaluate the social, cultural and environmental influences on movement and the implications of the use of legal and illegal practices to improve performance. Strategies will also be recommended to minimise the risk of illness or injury to each system.

### Areas of Study

#### How does the musculoskeletal system work to produce movement?

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

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

In this area of study students examine the cardiovascular and respiratory systems of the human body and how the heart, blood vessels and lungs function at rest and during physical activity. Practical activities enable the students to explore these concepts, and they will also consider the ethical and performance considerations of the use of a variety of legal and illegal practices and substances specific to each system.

## Physical Education – Unit 2

### Course Description

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

### Areas of Study

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

Students will focus on the role of physical activity, sport and society in developing and promoting healthy lifestyles and participation in physical activity across the lifespan. The benefits of physical activity will be investigated as well as the potential negative physical, social, mental and emotional consequences of physical inactivity and sedentary behaviour.

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

The focus of this area of study is on a whole range of contemporary issues associated with physical activity and/or sport at the local, national and global level. A detailed investigation will be undertaken and theoretical models will be used to evaluate factors that influence participation in physical activity.



## Physical Education – Unit 3

### Course Description

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise.

Students investigate the relative contribution, characteristics and interplay of the three energy systems to performance in physical activity, sport and exercise. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

### Areas of Study

#### How are movement skills improved?

Students examine the biomechanical and skill acquisition principles that can be applied when analysing and improving movement skills used in physical activity and sport. Through coaching and involvement in a variety of practical activities, students investigate and analyse movements to develop an understanding of how the correct application of biomechanical and skill acquisition principles leads to greater efficiency and accuracy in movement skills.

#### How does the body produce energy?

Students explore the various systems and mechanisms associated with the production of energy required for human movement. They consider the cardiovascular, respiratory and muscular systems and the roles of each in supplying oxygen and energy to the working muscles. Students also consider the many factors contributing to fatigue as well as recovery strategies.

## Physical Education – Unit 4

### Course Description

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level.

Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods. Students critique the effectiveness of the implementation of training principles and methods to meet the needs of the individual, and evaluate the chronic adaptations to training from a theoretical perspective.

### Areas of Study

#### What are the foundations of an effective training program?

Students focus on the information required to form the foundation of an effective training program. They use data from an activity analysis and determine the fitness requirements of a selected physical activity. They also use data collected from participating in a series of fitness tests to inform the design of the training program.

#### How is training implemented effectively to improve fitness?

Students focus on the implementation and evaluation of training principles and methods from a practical and theoretical perspective. Students identify and consider components of an exercise training session. Students explain the chronic adaptations to the cardiovascular, respiratory and muscular systems.



## VETDSS Certificate III Sport & Recreation – SIS30115

Provider: St Paul's (auspiced by Savile)

Note: This course runs over two years. Units 1 and 2 are completed in Year 11, and Units 3 and 4 in Year 12. Students must complete both years in order to attain the Certificate III qualification.

### Certificate III in Sport and Recreation

This provides students with the skills and knowledge to work in the Sport and Recreation Industry. In Units 1 and 2, students also explore a range of topics including sport-specific activities, conducting events, outdoor recreation or fitness programs. Units 3 and 4 offers scored assessment and includes core units such as plan and conduct programs, risk assessment and knowledge of coaching foundation level participants.

### Compulsory Areas of Study in Units 1 and 2

- Organise personal work priorities and development
- Provide first aid
- Participate in workplace health and safety
- Use social media tools for collaboration and engagement
- Conduct non-instructional sport, fitness or recreation sessions
- Provide equipment for activities
- Maintain equipment for activities
- Provide quality service
- Respond to emergency situations
- Use business technology
- Organise workplace information.

### Compulsory Areas of Study in Units 3 and 4

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

**Note:** The Units 3 and 4 sequence of SIS30115 Certificate III in Sport and Recreation is not designed to stand-alone study. Students are strongly advised against undertaking the Units 3 and 4 sequence without first completing Units 1 and 2.

For further information regarding this course see the VET Co-ordinator, Ms Luck.

As this is a VETDSS subject it incurs an additional tuition fee of approximately \$560 per year (TBC).



## Mathematics (Units 1-4)

Students need to be aware of the necessity to be committed to this subject throughout their senior schooling if they intend to use it as an entry subject to further study. Students will have a mathematics subject recommended to them near the completion of each semester. This recommendation is made on the basis of what the current Mathematics teacher feels the student is capable of, in light of their observations of the student and their results over the semester.

It is unlikely that a student who fails to meet the prerequisite level will be allowed into that subject. Past experience has shown us that these grades are a very realistic assessment of future success in the various subjects.

### Course Description

Mathematics is the study of function and pattern in number, logic, space and structure. It provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and unambiguous and a means by which people can understand and manage their environment. Essential mathematical activities include abstracting, proving, applying, investigating, modelling and problem-solving.

This study is designed to provide access to worthwhile and challenging mathematical learning in a way which takes into account the interests, needs, dispositions and aspirations of a wide range of students, and introduces them to key aspects of the discipline and its applications. It is also designed to promote students' awareness of the importance of mathematics in everyday life in a technological society and globalised world, and to develop confidence and the disposition to make effective use of mathematical concepts, processes and skills in practical and theoretical contexts.

### Units of Study

- Units 1 –4: General Mathematics
- Units 1 – 4: Mathematical Methods
- Units 1 –4: Specialist Mathematics



## General Mathematics (Units 1-4)

### Unit 1

#### Course Description

General Mathematics Unit 1 caters for a range of student interests, provides preparation for the study of VCE General Mathematics at the Units 2, 3 and 4 level and contains assumed knowledge and skills for these units. The areas of study for Unit 1 of General Mathematics are 'Data analysis, probability and statistics', 'Algebra, number and structure', 'Functions, relations and graphs' and 'Discrete mathematics'. Students must have a CASIO ClassPad calculator.

#### Areas of Study

##### Data analysis, probability and statistics

- Identify, display and describe types of data
- Summarising numerical data distributions
- Five-number summary and the boxplot
- Consider and compare data distributions

##### Algebra, number and structure

- Arithmetic and geometric sequences
- First-order linear recurrence relations
- Financial mathematics

##### Functions, relations and graphs

- Linear functions and relations
- Graphs of linear functions and relations
- Modelling with linear functions
- Solving linear equations
- Simultaneous equations, their applications and solutions
- Line segment graphs
- Step graphs and their applications

##### Discrete mathematics – Matrices

- Basics of matrices
- Operations of matrices
- Applications of matrices

## General Mathematics – Unit 2

#### Course Description

General Mathematics Unit 2 caters for a range of student interests, provides preparation for the study of VCE General Mathematics at the Units 3 and 4 level and contains assumed knowledge and skills for these units. The areas of study for Unit 2 of General Mathematics are 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs' and 'Space and measurement'. Students must have a CASIO ClassPad calculator.

#### Areas of Study

##### Data analysis, probability and statistics



- Investigate relationships between two numerical variables
- Scatterplots
- Line of good fit by eye and their interpretation

#### Discrete mathematics – Graphs and networks

- Use of graphs and networks
- Modelling and solving practical problems with graphs and networks
- Euler's formula and planar graphs
- Connectedness graphs
- Weighted graphs and networks
- Shortest path
- Minimum spanning trees and greedy algorithms

#### Functions, relations and graphs

- Direct and inverse variation
- Transformations to linearity
- Modelling of non-linear data

#### Space and measurement

- Units of measurement
- Scientific notation, significant figures and rounding
- Computations with formulas for different measures
- Similarity and scale in two and three dimensions and their practical applications
- Trigonometry
- Pythagoras' theorem

## General Mathematics – Units 3 & 4

### Course Description

General Mathematics Units 3 and 4 focus on real-life application of mathematics and consist of the areas of study 'Data analysis, probability and statistics' and 'Discrete mathematics'. \*This subject is designed for students who need a study of Year 12 Mathematics but the type is not specified. Please seek tertiary course advice if you are not sure which Mathematics is required for the types of courses you are planning to study.

### Areas of Study

#### Data analysis, probability and statistics

- Investigation data distributions
- Investigating associations between two variables
- Investigating and modelling linear associations
- Investigation and modelling time series data

#### Recursion and Financial Modelling

- Depreciation of assets
- Compound interest investment and loans
- Reducing balance loans
- Annuities and Perpetuities
- Compound interest investment with periodic and equal additions to the payment



#### Matrices

- Matrix representation and its application
- Transition matrices

#### Networks and decision mathematics

- Graphs and networks
- Exploring and travelling problems
- Trees and minimum connector problems
- Flow problems
- Shortest path problems
- Matching problems
- The scheduling problem and critical path analysis.





## Mathematical Methods (Units 1-4)

### Unit 1

#### Course Description

Mathematical Methods Units 1 and 2 are designed as preparation for Mathematical Methods Units 3 and 4. Students undertaking Unit 1 will study 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'. This subject is designed for students who wish to pursue courses in the mathematics/science fields. Students are required to satisfy the prerequisites, if they wish to study this course.

For this unit of study, students must have a CASIO Classpad CAS calculator.

#### Areas of Study

##### Functions, relations and graphs

- Linear functions
- Graphs of power functions, polynomials and inverse functions
- Function theory.

##### Algebra, number and structure

- Substitution in and rearrangement of formulas
- Factorisation
- Solving quadratic equations, cubic equations and simultaneous equations
- Transformations of the plane.

##### Calculus

- Average and instantaneous rates of change
- Interpretation of graphs
- Gradients of tangents at a point on a graph of a function.

##### Data analysis, probability and statistics

- Random experiments, including simulation of random experiments
- Addition and multiplication principles for counting
- Combinations and the application of counting techniques to probability.

## Mathematical Methods – Unit 2

#### Course Description

Unit 2 is a clear progression of skills and knowledge from Unit 1. Students undertaking this course will study exponential functions, calculus, probability and matrices. This subject is designed for students who wish to pursue courses in the mathematics/science fields.

For this unit of study, students must have a CASIO Classpad CAS calculator.

#### Areas of Study

##### Functions, relations and graphs

- Radian definition, and conversion between radians and degrees
- Unit circle



- Trigonometric functions
- Graphs and relationships of circular (trigonometric) functions
- Solution of trigonometric equations over a given domain using both exact and approximate values
- Exponential graphs and solving indicial equations related to these graphs
- Logarithmic graphs and solving logarithmic equations
- Inverse relationship between exponential and logarithmic functions
- Applications of exponential functions.

#### Algebra, number and structure

- Use of inverse functions and transformations to solve equations
- Exponent law and logarithm laws
- Numerical approximation of roots of cubic polynomial functions.

#### Calculus

- First principles to find the gradient function
- Notation for derivatives
- Derivatives of simple polynomials by rule
- Product and chain rules for differentiation
- Applications of differentiation
- Anti-differentiation
- Finding areas under curves.

#### Data analysis, probability and statistics

- Probability of elementary and compound events and their representation as lists, grids, Venn diagrams, tables and tree diagrams
- The addition rule for probabilities
- Conditional probability in terms of reduced sample space
- The law of total probability for two events
- The relations for pairwise independent events
- Simulation to estimate probabilities involving selection with and without replacement.

## Mathematical Methods – Units 3 & 4

### Course Description

This course is available to those students who have successfully completed Units 1 and 2 of Mathematical Methods. This subject is designed for students who wish to pursue courses in mathematics/science fields. Students are required to satisfy the prerequisites if they wish to study this course. Students undertaking this course will study 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'.

### Areas of Study

#### Functions, relations and graphs

- Graphs of polynomial functions and their key features
- Graphs of quadratic, exponential, logarithmic, circular and power functions
- Graphs of inverse functions
- Transformations.

#### Algebra, number and structure

- Solutions of polynomial equations
- Functions and their inverses



- Composite functions
- Solutions of equations by graphical, numerical and algebraic methods
- Solutions of simultaneous linear equations.

#### Calculus

- Deducing the graph of the derivative and anti-derivative functions from the graph of a function
- Derivatives and antiderivatives of polynomial, exponential, logarithmic and circular functions
- Product, quotient and chain rules
- Applications of differentiation to curve sketching, stationary points (turning points and points of inflection), equations of tangents and normals, maximum/minimum problems, and rates of change, including numerical evaluation of derivatives
- Antidifferentiation and definite integrals and their use to find areas.

#### Data analysis, probability and statistics

- Discrete random variables
- Binomial distribution
- Continuous random variables
- Probability functions
- Normal distribution.



## Specialist Mathematics (Units 1-4)

### Unit 1

#### Course Description

Units 1 and 2 are designed for students who intend to study Specialist Mathematics Units 3 and 4. It is also recommended for students who intend to study Mathematical Methods Units 3 and 4. Students who choose these units will study Mathematical Methods Units 1 and 2 concurrently. Students are required to satisfy the prerequisites if they wish to study this course.

#### Areas of Study

##### Algebra, number and structure

##### Proof and number

- Number systems and set notation
- Introduction to principles of proof

##### Graph theory

- Undirect graphs
- Bi-partite graphs
- Trees
- Regular graphs and planar graphs

##### Logic and algorithms

- Propositions, connectives, truth values, truth tables and Karnaugh maps
- Boolean algebras
- Binary number systems

#### Areas of Study

##### Discrete mathematics

- Sequences and series
- Arithmetic and geometric sequences and their partial sums
- Infinite series

##### Combinatorics

- The inclusion-exclusion principle for the union of two sets and three sets
- Permutations and combinations and their use in solving problems involving arrangements and selections with or without repeated elements
- Derivation and application of simple combinatorial identities

##### Combinatorics

- Matrix notation, dimension and the use of matrices to represent data
- Matrix operations and algebra
- Determinants and matrix equations, and simple applications



## Specialist Mathematics – Unit 2

### Course Description

Specialist Mathematics Unit 2 is an extension of Specialist Mathematics Unit 1. Students are required to satisfy the prerequisites if they wish to study this course. Unit 2 is designed for students who intend to study Specialist Mathematics Units 3 and 4. It is also recommended for students who intend to study Mathematical Methods Units 3 and 4. Students who choose this unit will study Mathematical Methods Unit 2 concurrently.

### Areas of Study

Data Analysis, probability and statistics

Simulation, sampling and sampling distributions

- Distribution of sums of discrete random variables
- Simulation of random experiments, events and event spaces
- Sampling distributions

### Areas of Study

Space and measurement

Trigonometry

- Radian measure, arc length, sectors and segments
- The sine rule and cosine rule applied to two and three-dimensional situations, including problems involving angles between planes
- Compound and double angle formulas for sine, cosine and tangent and their identities

Transformations

- Points in the plane, coordinates and their representation as  $2 \times 1$  matrices (column vectors)
- Linear transformations of the plane

Vectors in the plane

- The representation of plane vectors as directed lines segments, magnitude and direction of a plane vector, and unit vectors
- Simple vector algebra (addition, subtraction, multiplication by a scalar, linear combination)
- Scalar (dot) product of two plane vectors, perpendicular and parallel vectors, projection of one vector onto another vector, and angle between two vectors
- Geometric proofs with vectors

### Areas of Study

Algebra, number and structure

Complex numbers

- Definition and properties of the complex numbers and the representation of complex numbers on an Argand diagram
- General solution of quadratic equations (with real coefficients) of a single variable over  $C$ , and conjugate roots
- Conversion between Cartesian and polar form of complex numbers
- Multiplication, division, and powers of complex numbers in polar form and their geometric interpretation



## Areas of Study

### Functions, relations and graphs

- Rational functions and their decompositions into partial fractions
- Graphs of simple reciprocal functions
- Graphs of the restricted circular functions and their respective inverse functions

## Specialist Mathematics – Units 3 & 4

### Course Description

Specialist Mathematics Units 3 and 4 consist of the areas of study: 'Algebra, number and structure', 'Calculus', 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs', and 'Space and measurement'. The development of course content should highlight mathematical structure, reasoning and proof and applications across a range of modelling contexts with an appropriate selection of content for each of Unit 3 and Unit 4. The selection of content for Unit 3 and Unit 4 should be constructed so that there is a balanced and progressive development of knowledge and skills with connections among the areas of study being developed as appropriate across Unit 3 and Unit 4.

Specialist Mathematics Units 3 and 4 assumes familiarity with the key knowledge and key skills from Mathematical Methods Units 1 and 2; the key knowledge and key skills from Specialist Mathematics Units 1 and 2; and concurrent study or previous completion of Mathematical Methods Units 3 and 4. Together these cover the assumed knowledge and skills for Specialist Mathematics Units 3 and 4, which are drawn on as applicable in the development of content from the areas of study and key knowledge and key skills for the outcomes.

## Areas of Study

### Discrete mathematics

- Conjecture – making a statement to be proved or disproved
- Implications, equivalences and if and only if statements (necessary and sufficient conditions)
- Natural deduction and proof techniques: direct proofs using a sequence of direct implications, proof by cases, proof by contradiction, and proof by contrapositive
- Quantifiers 'for all' and 'there exists', examples and counter-examples
- Proof by mathematical induction.

### Functions and graphs

- Rational functions and the expression of rational functions of low degree as sums of partial fractions
- Graphs of rational functions of low degree, their asymptotic behaviour, and the nature and location of stationary points and points of inflection
- Graphs of simple quotient functions, their asymptotic behaviour, and the nature and location of stationary points and points of inflection.

### Algebra, number and structure

- De Moivre's theorem, proof for integral powers, powers and roots of complex numbers in polar form, and their geometric representation and interpretation
- the  $n$ th roots of unity and other complex numbers and their location in the complex plane
- factors over  $C$ , of polynomials; and introduction to the fundamental theorem of algebra, including its application to factorisation of polynomial functions of a single variable over  $C$ , for example,  $z^3 + 1$ ,  $z^2 - i$  or  $z^3 - (2-i)z^2 + z - 2 + i$
- Solution over  $C$  of polynomial equations by completing the square, use of the quadratic factorisation and the conjugate root theorem.



### Calculus

- The relationship between the graph of a function and the graphs of its anti-derivative functions
- Derivatives of inverse circular functions
- Second derivatives and their application to the analysis of graphs of functions, including points of inflection and concavity
- Applications of chain rule to related rates of change and implicit differentiation
- Techniques of anti-differentiation and for the evaluation of definite integrals
- Application of integration, areas of regions bounded by curves, arc lengths for parametrically determined curves, surface area of solids of revolution, volumes of solids of revolution of a region about either coordinate axis.
- Formulation of differential equations from contexts in, for example, chemistry, biology and economics, in situations where rates are involved (including some differential equations whose analytic solutions are not required, but can be solved numerically using technology)
- Verification of solutions of differential equations and their representation using direction (slope) fields
- Use of velocity–time graphs to describe and analyse rectilinear motion
- Application of differentiation, anti-differentiation and solution of differential equations to rectilinear motion of a single particle.

### Space and measurement

- Addition and subtraction of vectors and their multiplication by a scalar, position vectors
- Linear dependence and independence of a set of vectors and geometric interpretation
- Magnitude of a vector, unit vector, the orthogonal unit vectors
- Resolution of a vector into rectangular components
- Scalar (dot) product of two vectors
- Vector (cross) product of two vectors in three dimensions
- Parallel and perpendicular vectors
- Vector proofs of simple geometric results, such as ‘the diagonals of a rhombus are perpendicular’, ‘the medians of a triangle are concurrent’ and ‘the angle subtended by a diameter in a circle is a right angle’.
- Vector equations and parametric equations of curves in two or three dimensions involving a parameter (and the corresponding cartesian equation in the two-dimensional case)
- Vector equation of a straight line, given the position of two points, or equivalent information, in both two and three dimensions
- Vector cross product, normal to a plane and vector, parametric and cartesian equations of a plane.
- Position vector as a function of time and sketching the corresponding path given the function, including circles, ellipses and hyperbolas in cartesian or parametric forms
- The positions of two particles each described as a vector function of time, and whether their paths cross or if the particles meet
- Differentiation and anti-differentiation of a vector function with respect to time and applying vector calculus to motion in a plane and in three dimensions.

### Data analysis, probability and statistics

- Distribution of linear combination of random variables.
- Distribution of the sample mean
- determination of confidence intervals for means
- concepts of null hypothesis,  $H^0$ , and alternative hypotheses,  $H^1$ , level of significance and  $p$ -value
- formulation of hypotheses and making a decision concerning a population mean based on:
  - a random sample from a normal population of known variance
  - a large random sample from any population
- 1-tail and 2-tail tests
- interpretation of the results of a hypothesis test in the context of the problem
- hypothesis test, relating the formulation, conduct, errors and results in terms of conditional probability.



## Music (Units 1-4)

### VCE Music – An Introduction

Music is an integral part of all cultures and societies, both contemporary and historical. The study of music develops students' understanding of artistic processes and contributes to the development of the aesthetic, cognitive, psychomotor and affective domains.

VCE Music offers students opportunities to engage in the practice of performing and studying music that is representative of diverse genres, styles and cultures.

Students develop knowledge of stylistic, aesthetic and expressive qualities and characteristics of music and develop their ability to communicate their understanding through music making; performing, arranging and/or improvising; and musicianship: aural perception, analysis and music language.

VCE Music offers students opportunities for personal development and to make an ongoing contribution to the culture of their community through participation in life-long music making.

### Course Description

Music Performance Units 1 and 2 are offered to students who have some musical experience and knowledge, usually three or more years of study on a musical instrument or voice.

Students are strongly advised to complete both of Units 1 and 2 before attempting Units 3 and 4 of Music Repertoire Performance.

### Units of Study

- Unit 1: Organisation of Music
- Unit 2: Effect in Music
- Unit 3: Music Repertoire Performance
- Unit 4: Music Repertoire Performance





## Music – Unit 1: Organisation of Music

### Course Description

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 of their chosen instrumental/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.

### Areas of Study

#### Performance

In this area of study, students focus on practical music-making and performance skills by preparing and performing solo and ensemble works, one of which should be associated with a music approach studied in Area of Study 3. They develop their individual instrumental and musicianship skills through regular practice and develop group skills through rehearsal and performance with other musicians.

They perform and demonstrate technical skills specific to an instrument or sound source of their own choosing. Students may present on a variety of instruments and/or sound sources, and also sing as part of their program.

#### Creating

In this area of study, students create a folio of brief creative responses. At least one exercise should demonstrate their understanding of musical organisation and characteristics of at least one work selected for study in Area of Study 3. They develop appropriate methods of recording and preserving their music. Students reflect on their creative organisation by documenting their approach to creating the music, and identifying and describing their use of music elements, concepts and compositional devices.

#### Analysing and responding

Students analyse the treatment of specific music elements, concepts and compositional devices in music that have been created using different approaches to musical organisation. They develop skills in identifying how music is organised and the components of this organisation. They develop skills in aural analysis and respond to a range of excerpts in different styles and traditions. They develop their auditory discrimination and memory skills through identifying, recreating and documenting music language concepts for example chords, scales, melodic and rhythmic patterns.



## Music – Unit 2: Effect in Music

### Course Description

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.

They prepare and perform ensemble and/or solo musical works to develop technical control, expression and stylistic understanding of their chosen instrumental/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.

### Areas of Study

#### Performance

In this area of study, students focus on practical music-making and performance skills by preparing and performing solo and ensemble works, one of which should be associated with a music approach studied in Area of Study 3. They develop their individual instrumental and musicianship skills through regular practice and develop group skills through rehearsal and performance with other musicians.

They perform and demonstrate technical skills specific to an instrument or sound source of their own choosing. Students may present on a variety of instruments and/or sound sources, and also sing as part of their program.

#### 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.

#### 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 style 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 ethnic patterns.

#### Note to families:

Families of students studying these units need to be aware that there may be additional costs associated with undertaking the performance assessment required by the study design. These costs are likely to include the use of an accompanist, purchasing of sheet music and appropriate maintenance of instruments. Costs vary dramatically depending on the choice of instrumental/ensemble studied or undertaken. Please contact the Director of Arts, Mr Ben Sim for a guide to anticipate costs associated with your child's instrument.



## Music – Units 3 & 4: Music Repertoire Performance

### Course Description

This study is designed for students whose musical interests are grounded in the recreation and interpretation of noted musical works, and who wish to gain and share knowledge of musical styles and performing practices. Students may present on any instrument for which there is an established repertoire of notated works. They work towards a recital program that demonstrates highly developed technical skills and stylistic refinement as both a soloist and as an ensemble member. They develop the capacity for critical evaluations of their performances and those of others, and an ability to articulate their performance decisions with music evidence and independence of thought.

The works selected for assessment must have sufficient range to convey understanding of the key knowledge and application of the key skills for Outcome 1. Music styles in this study may include (but are not limited to) early music, baroque, classical, romantic, 20th and 21st century art music styles, musical theatre, and classical musics outside the Western tradition (for example, Indian, Chinese).

### Areas of Study

#### Performance

In this area of study students present performances of musical works including at least one ensemble work. Students perform regularly in a variety of contexts. They reflect on these performances to explore and develop ways of communicating expressive intentions to an audience. They develop musicianship skills through regular individual practice, and ensemble skills through structured rehearsal with other musicians.

Across Unit 3, students select repertoire and begin preparing a recital program for external assessment in Unit 4. Students should refer to the examination specifications to make sure that the works selected allow them to best meet the requirements and conditions of this task. At least one of the presented works must be from the list of suggested/example works for their chosen instrument. The final program must also include at least one Australian work composed since 1990 and one ensemble work.

Across Unit 4, students work towards presenting their recital program for external assessment. Students should review the examination specifications to make sure that the works selected allow them to best meet examination requirements and conditions. At least one of the assessed works must be from the list of suggested/example works for their chosen instrument. The final program must also include at least one work created by an Australian composer since 1990.

#### Analysing for Performance

In this area of study, students focus on the processes of analysis and research that they undertake when preparing musical works for performance. Research materials include musical scores, sound recordings, texts, live performances and critical discussion with other musicians. As students develop their recital program, they trial a wide range of general practice techniques and instrument-specific strategies. Students evaluate the strengths and weaknesses in their performance capabilities and develop a planned approach to improvement.

Students prepare for a school-assessed dialogue with their teacher. This task should focus on approximately half of the program of works being prepared in Area of Study 1 for the performance examination.

Through discussion and performance, students demonstrate:

- A selection of practice strategies
- Technical considerations
- Expressive and interpretative considerations.

#### Responding

In this area of study, students develop their understanding of the ways elements of music, concepts and compositional devices can be interpreted and/or manipulated by other musicians. They demonstrate this knowledge through analysis of a wide variety of performances and recordings, including works created by Australian composers since 1990. They also compare the ways different musicians have interpreted the same musical work.

They develop their auditory discrimination and memory skills by responding to music examples in isolation and in context. They refine their ability to identify and transcribe short musical examples presented aurally and in notation.



## Theatre Studies (Units 1-4)

### Course Description

In VCE Theatre Studies students interpret scripts from the pre-modern era to the present day and produce theatre for audiences. Through practical and theoretical engagement with scripts they gain an insight into the origins and development of theatre and its influence on cultures and societies. Students apply dramaturgy and work in the production roles of actor, director and designer, developing an understanding and appreciation of the role and place of theatre practitioners.

Students work individually and collaboratively in various production roles to creatively and imaginatively interpret scripts and to plan, develop and present productions. They study the contexts of these scripts, as well as their language and experiment with different possibilities for interpreting scripts and apply ideas and concepts in performance to an audience, examining ways that meaning can be constructed and conveyed through performance.

Students learn about innovations in theatre and apply this knowledge to their work. Through the study of plays and theatre styles, and by working in production roles to interpret scripts, students develop knowledge and understanding of theatre, its conventions and the elements of theatre composition. Students analyse and evaluate the production of professional theatre performances and consider the relationship to their own theatre production work.

### Units of Study

- Unit 1: Pre-modern Theatre Styles and Conventions
- Unit 2: Modern Theatre Styles and Conventions
- Unit 3: Producing Theatre
- Unit 4: Presenting an Interpretation



## Theatre Studies – Unit 1

### Course Description

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

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

### Areas of Study

#### Exploring pre-modern theatre styles and conventions

In this area of study students explore play scripts from the pre-modern era of theatre, that is, works prior to the 1920s.

#### Interpreting scripts

On completion of this unit the student should be able to work creatively and imaginatively in production roles to interpret scripts from the pre-modern era.

#### Analysing a play in performance

On completion of this unit the student should be able to analyse a performance of a script.

## Theatre Studies – Unit 2

### Course Description

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

### Areas of Study

#### Exploring modern theatre styles and conventions

On completion of this unit the student should be able to identify and describe the distinguishing features of theatre styles and scripts from the modern era.

#### Interpreting scripts

On completion of this unit the student should be able to work creatively and imaginatively in production roles to interpret scripts from the modern era.

#### Analysing and evaluating a theatre production

On completion of this unit the student should be able to analyse and evaluate a theatre production.



## Theatre Studies – Unit 3

### Course Description

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

### Areas of Study

#### Staging theatre

On completion of this unit students should be able to interpret a script across the stages of the production process through creative, imaginative and collaborative work undertaken in two production roles.

#### Interpreting a script

On completion of this unit students should be able to outline concepts and ideas for a creative interpretation of excerpts from a script and explain how these could be realised in a theatre production.

#### Analysing and evaluating theatre

On completion of this unit the student should be able to analyse and evaluate the creative and imaginative interpretation of a written script in production to an audience.

## Theatre Studies – Unit 4

### Course Description

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

### Areas of Study

#### Researching and presenting theatrical possibilities

On completion of this unit the student should be able to describe and justify a creative and imaginative interpretation of a monologue and its prescribed scene.

#### Interpreting a monologue

On completion of this unit the student should be able to interpret and present a monologue and orally justify and explain their interpretive decisions.

#### Analysing and evaluating a performance

On completion of this unit the student should be able to analyse and evaluate acting, direction and design in a production.



## Science – Biology (Units 1-4)

### Course Description

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. Despite the diversity of organisms and their many adaptations for survival in various environments, all life forms share a degree of relatedness and a common origin.

VCE Biology enables students to investigate the processes involved in sustaining life at cellular, system species and ecosystem levels. In undertaking this study, students examine how life has evolved over time and understand that in the dynamic and interconnected system of life, all change has a consequence that may affect an individual, a species or the collective biodiversity of Earth. The study gives students insights into how knowledge of molecular and evolutionary concepts underpin much of contemporary biology, and the applications used by society to resolve problems and make advancements.

In VCE Biology students develop a range of inquiry skills involving practical experimentation and research, analytical skills including critical and creative thinking, and communication skills. Students use scientific and cognitive skills and understanding to analyse contemporary biology-related issues, and communicate their views from an informed position.

As well as an increased understanding of scientific processes, students develop capacities that enable them to critically assess the strengths and limitations of science, respect evidence-based conclusions and gain an awareness of the ethical, social and political contexts of scientific endeavours.

### Units of Study

- Unit 1: How do organisms regulate their functions?
- Unit 2: How does inheritance impact on diversity?
- Unit 3: How do cells maintain life?
- Unit 4: How does life change and respond to challenges?



## Biology – Unit 1

### Course Description

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.

A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation or primary data and is related to the function and/or the regulation of cells or systems. The investigation draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

### Areas of Study

- How do cells function?
- How do plant and animal systems function?
- How does scientific investigation develop understanding of how organisms regulate their functions?

## Biology – Unit 2

### Course Description

In this unit students explore reproduction and the transmission of biological information from 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.

Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including the use of reproductive cloning technologies. They study structural, physiological and behavioural adaptations that enhance an organism's survival. Students explore interdependence between species, focusing on how keystone species and top predators structure and maintain distribution, density and size of a population. They also consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding the survival of organisms in Australian ecosystems.

A student-directed research investigation into a contemporary ethical issue is to be undertaken in Area of Study 3. The investigation relates to the application of genetic knowledge, reproductive science, inheritance or adaptations and interdependencies beneficial for survival. The investigation draws on key knowledge and key science skills from Area of Study 1 and/or Area of Study 2.

### Areas of Study

- How is inheritance explained?
- How do inherited adaptations impact on diversity?
- How do humans use science to explore and communicate contemporary bioethical issues?





## Biology – Unit 3

### Course Description

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.

Students explore the structure, regulation and rate of biochemical pathways, with reference to photosynthesis and cellular respiration. They explore how the application of biotechnologies to biochemical pathways could lead to improvements in agricultural practices.

Students apply their knowledge of cellular processes through investigation of a selected case study, data analysis and/or a bioethical issue. Examples of investigation topics include, but are not limited to: discovery and development of the model of the structure of DNA; proteomic research applications; transgenic organism use in agriculture; use, research and regulation of gene technologies, including CRISPR-Cas9; outcomes and unexpected consequences of the use of enzyme inhibitors such as pesticides and drugs; research into increasing efficiency of photosynthesis or cellular respiration or impact of positions on the cellular respiration pathway.

The application of ethical scientific investigation related to cellular processes and/or responses to challenges over time is undertaken in either Unit 3 and/or 4, and is assessed in Unit 4, Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format.

### Areas of Study

- What is the role of nucleic acids and proteins in maintaining life?
- How are biochemical pathways regulated?

## Biology – Unit 4

### Course Description

In this unit students consider the continued 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.

Students consider how evolutionary biology is based on the accumulation of evidence over time. They investigate the impact of various change events on a population's gene pool and the biological consequences of changes in allele frequencies. Students examine the evidence relatedness between species and change in life forms over time using evidence from paleontology, structural morphology, molecular homology and comparative genomics. Students examine the evidence for structural trends in the human fossil record, recognising that interpretations can be contested, refined or replaced when challenged by new evidence.

Students demonstrate and apply their knowledge of how life changes and respond to challenges through investigation of a selected case study, data analysis and/or bioethical issue. Examples of investigation topics include, but are not limited to: deviant cell behaviour and links to disease; autoimmune disease; allergic reactions; development of immunotherapy strategies; use and application of bacteriophage therapy; prevention and eradication of disease; vaccinations; bioprospecting for new medical treatments; trends, patterns and evidence for evolutionary relationships; population and species changes over time in non-animal communities such as forests and microbiota; monitoring of gene pools for conservation planning; role of selective breeding programs in conservation of endangered species; or impact of new technologies on the study of evolutionary biology.



The application of ethical understanding in VCE Biology involves the consideration of approaches to bioethics and ethical concepts.

**Areas of Study**

- How do organisms respond to pathogens?
- How are species related over time?
- How is scientific inquiry used to investigate cellular processes and/or biological change?



## Science – Chemistry (Units 1-4)

### Course Description

The study of VCE Chemistry involves investigating and analysing the composition and behaviour of matter, and the chemical processes involved in producing useful materials for society in ways that minimise adverse effects on human health and the environment. Chemistry underpins the generation of energy for use in homes and industry, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes.

An important feature of undertaking a VCE science study is the opportunity for students to engage in a range of scientific investigation methodologies, to develop key science skills, and to interrogate the links between knowledge, theory and practice. Students work collaboratively as well as independently on a range of scientific investigations involving controlled experiments, fieldwork, case studies, classification and identification, modelling, simulations, literature reviews, and the development of a product, process or system. Knowledge and application of the safety considerations, including use of safety data sheets, and ethical guidelines associated with undertaking investigations is integral to the study of VCE Chemistry.

As well as increasing their understanding of scientific processes, students develop insights into how knowledge in chemistry has changed, and continues to change, in response to new evidence, discoveries and thinking. They explore the impact of chemistry on their own lives, and on society and the environment. They develop capacities that enable them to critically assess the strengths and limitations of science, respect evidence-based conclusions and gain an awareness of the ethical contexts of scientific endeavours. Students consider how science is connected to innovation in addressing contemporary chemistry-based challenges.

### Units of Study

- Unit 1: How can the diversity of materials be explained?
- Unit 2: How do chemical reactions shape the natural world?
- Unit 3: How can design and innovation help to optimise chemical processes?
- Unit 4: How are carbon-based compounds designed for purpose?



## Chemistry – Unit 1

### Course Description

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical structures and properties of a range of materials, including covalent compounds, metals, ionic compounds and polymers. They are introduced to ways that chemical quantities are measured. They consider how manufacturing innovations lead to more sustainable products being produced for society through the use of renewable raw materials and a transition from a linear economy towards a circular economy.

### Areas of Study

- How do the chemical structures of materials explain their properties and reactions?
- How are materials quantified and classified?
- How can chemical principles be applied to create a more sustainable future?

## Chemistry – Unit 2

### Course Description

Society is dependent on the work of chemists to analyse the materials and products in everyday use. In this unit students analyse and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid–base and redox reactions in society. Students conduct practical investigations involving the specific heat capacity of water, acid–base and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve.

### Areas of Study

- How do substances interact with water?
- How are chemicals measured and analysed?
- How do quantitative scientific investigations develop our understanding of chemical reactions?



## Chemistry – Unit 3

### Course Description

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.

### Areas of Study

- What are the current and future options for supplying energy?
- How can the rate and yield of chemical reactions be optimised?

## Chemistry – Unit 4

### Course Description

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.

Students conduct practical investigations related to the synthesis and analysis of organic compounds, involving reaction pathways, organic synthesis, identification of functional groups, direct redox titrations, solvent extraction and distillations.

### Areas of Study

- How are organic compounds categorised and synthesised?
- How are organic compounds analysed and used?
- How is scientific inquiry used to investigate the sustainable production of energy and/or materials?



## Science – Environmental Science (Units 1-4)

### Course Description

Environmental Science is an interdisciplinary science that explores the interactions and interconnectedness between humans and their environments and analyses the functions of both living and non-living elements that sustain Earth systems.

In VCE Environmental Science, Earth is understood as a set of four interdependent systems: the atmosphere, biosphere, hydrosphere and lithosphere. The study explores how the relationships between these systems produce environmental change over a variety of time scales. Students investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts with a focus on pollution, biodiversity, energy use and climate change.

Students examine data related to environmental monitoring over various time scales, case studies, research, models, frameworks and theories to understand how knowledge in environmental science has evolved and continues to evolve in response to new evidence and discoveries. An understanding of the complexities and diversity of environmental science leads students to appreciate the interconnectedness of the content areas both within environmental science, and across environmental science and the other sciences.

### Units of Study

- Unit 1: How are Earth's dynamic systems interconnected to support life?
- Unit 2: What affects Earth's capacity to sustain life?
- Unit 3: How can biodiversity and development be sustained?
- Unit 4: How can climate change and impacts of human energy use be managed?



## Environmental Science – Unit 1

### Course Description

Earth has been dramatically altered over the past 4.5 billion years by naturally occurring climate swings, volcanic activity, drifting continents and other transformative processes. Human activities and lifestyles have an impact on, and are impacted by, Earth's systems both directly and indirectly, and with both immediate and far-reaching effects.

In this unit students examine the processes and interactions occurring within and between Earth's four interrelated systems – the atmosphere, biosphere, hydrosphere and lithosphere. They focus on how ecosystem functioning can influence many local, regional and global environmental conditions such as plant productivity, soil fertility, water quality and air quality. Students explore how changes that have taken place throughout geological and recent history are fundamental to predicting the likely impact of future changes. They consider a variety of influencing factors in achieving a solutions-focused approach to responsible management of challenges related to natural and human-induced environmental change.

A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation of primary data and is related to ecosystem components, monitoring and/or change. It draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

### Areas of Study

- How are Earth's system organised and connected?
- How do the Earth's systems change over time?
- How do scientific investigations develop understanding of how Earth's systems support life?

## Environmental Science – Unit 2

### Course Description

A sustainable food and water system with a minimal environmental footprint is necessary to secure the food and water supplies that can meet the demands of current and future populations of Earth's species, including humans. Both natural and human activities can generate pollution that can cause adverse effects across Earth's four interrelated systems – the atmosphere, biosphere, hydrosphere and lithosphere – and consequently affect food and water security. Pollution can make air and water resources hazardous for plants and animals. It can directly harm soil microorganisms and larger soil-dwelling organisms, with consequences for soil biodiversity, as well as impacting on food security by impairing plant function and reducing food yields.

In this unit students consider pollution as well as food and water security as complex and systematic environmental challenges facing current and future generations. They examine the characteristics, impacts, assessment and management of a range of pollutants that are emitted or discharged into Earth's air, soil, water and biological systems, and explore factors that limit and enable the sustainable supply of adequate and affordable food and water.

A student-directed investigation is to be undertaken in Area of Study 3. The investigation explores how science can be applied to address Earth's capacity to sustain life in the context of the management of a selected pollutant and/or the maintenance of food and/or water security.

The investigation draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

### Areas of Study

- How can we manage pollution to sustain Earth's systems?
- How can we manage food and water security to sustain Earth's systems?
- How do scientific endeavours contribute to minimising human impacts on Earth's systems?



## Environmental Science – Unit 3

### Course Description

In this unit students focus on environmental management through the application of sustainability principles. They explore the value of the biosphere to all living things by examining the concept of biodiversity and the ecosystem services important for human health and wellbeing. They analyse the processes that threaten biodiversity and evaluate biodiversity management strategies for a selected threatened endemic animal or plant species. Students use a selected environmental science case study with reference to sustainability principles and environment management strategies to explore management from an Earth systems perspective, including impacts on the atmosphere, biosphere, hydrosphere and lithosphere.

A student-designed scientific investigation involving the generation or primary data related to biodiversity, environmental management, climate change and/or energy use is undertaken in either Unit 3 and/or 4, and is assessed in Unit 4, Outcome 3.

### Areas of Study

- Why is maintaining biodiversity worth a sustained effort?
- When is development sustainable?

## Environmental Science – Unit 4

### Course Description

In this unit students explore different factors that contribute to the variability of Earth's climate and that can affect living things, human society and the environment at local, regional and global scales. Students compare sources, availability, reliability and efficiencies of renewable and non-renewable energy resources in order to evaluate the suitability and the consequences of their use in terms of upholding sustainability principles. They analyse various factors that are involved in responsible environmental decision-making and consider how science can be used to inform the management of climate change and the impacts of energy production and use.

Measurement of environmental indicators often involves uncertainty. Students develop skills in data interpretation, extrapolation and interpolation and test predictions. They recognise the limitations of contradictory, provisional and incomplete data derived from observations and models. They explore relationships and patterns in data, and make judgements about accuracy and validity of evidence.

### Areas of Study

- How can we respond to climate change?
- What might be a more sustainable mix of energy sources?
- How is scientific inquiry used to investigate contemporary environmental challenges?





## Science – Physics (Units 1-4)

### Course Description

The study of VCE Physics involves investigating, understanding and explaining the behaviour of physical phenomena in the Universe. Models are used to explore how physical systems behave at varying scales from the very small (quantum and particle physics) through to the very large (astronomy and cosmology).

Conceptual understanding is developed as students study topics including light, atomic physics, radiation, thermal physics, electricity, fields, mechanics, quantum physics and the nature of energy and matter. Students are given agency through a choice of options and in designing and undertaking their own investigations.

As well as increasing their understanding of scientific processes, students develop insights into how knowledge in physics has changed and continues to change, in response to new evidence, discoveries and thinking. They develop capacities that enable them to critically assess the strengths and limitations of science, respect evidence-based conclusions and gain an awareness of the ethical contexts of scientific endeavours. Students consider how science is connected to innovation in addressing contemporary physics challenges.

Through the study of VCE Physics students continue to develop skills to describe, explain, analyse and mathematically model diverse physical phenomena.

### Units of Study

- Unit 1: How is energy useful in society?
- Unit 2: How does physics help us to understand the world?
- Unit 3: How do fields explain motion and electricity?
- Unit 4: How have creative ideas and investigation revolutionised thinking in physics?



## Physics – Unit 1

### Course Description

Students examine fundamental ideas and models used by physicists in an attempt to understand and explain how energy is used in society. Models are used to explore and understand light, thermal energy, radioactivity, nuclear processes and electricity and these concepts are applied to contemporary societal issues.

### Areas of Study

- How can thermal effects be explained?
- How is energy from the nucleus utilized?
- How can electricity be used to transfer energy?

## Physics – Unit 2

### Course Description

Students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. They choose and investigate one of eighteen options related to a range of real-world applications of physics, allowing them to pursue an area of interest. Students design and undertake an experimental investigation.

### Areas of Study

- How can motion be understood?
- Options: How does physics inform contemporary issues and applications in society?
- Practical Investigation: How do physicists investigate questions?



## Physics – Unit 3

### Course Description

Students use Newton's laws to investigate motion in one and two dimensions. They examine how field models (particularly gravitational, electric and magnetic fields) can be used to understand why objects move when they are not apparently in contact with other objects. 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.

### Areas of Study

- How do physicists explain motion in two dimensions?
- How do things move without contact?
- How are fields used in electricity generation?

## Physics – Unit 4

### Course Description

Students examine the limitations of the wave model in describing light behaviour and use a particle model to better explain some observations of light. Matter is re-imagined using a wave model. Students are introduced to the relativistic world of length contraction and time dilation when motion approaches the speed of light. A student-designed practical investigation related to fields, motion or light is undertaken.

### Areas of Study

- How has understanding about the physical world changed?
- How is scientific inquiry used to investigate fields, motion or light?



## Science – Psychology (Units 1-4)

### Course Description

Psychology is a multifaceted discipline that seeks to describe, explain, understand and predict human behaviour and mental processes. It includes many sub-fields of study that explore and seek to better understand how individuals, groups, communities and societies think, feel and act. VCE Psychology applies a biopsychosocial approach to the systematic study of mental processes and behaviour. Within this approach, different perspectives, models and theories are considered. Each of these has strengths and weaknesses, yet considered together they allow students to develop their understanding of human behaviour and mental processes and the interrelated nature of biological, psychological and social factors.

Biological perspectives focus on how physiology influences individuals through exploring concepts such as hereditary and environmental factors, nervous system functioning and the role of internal biological mechanisms. Psychological perspectives consider the diverse range of cognitions, emotions and behaviours that influence individuals. Within the social perspective, factors such as cultural considerations, environmental influences, social support and socioeconomic status are explored. The biopsychosocial approach can be applied to understand how knowledge in psychology has developed and how this knowledge continues to change in response to new evidence and discoveries in an effort to solve day-to-day problems and improve psychological wellbeing. Where possible, engagement with Aboriginal and Torres Strait Islander ways of doing, being and knowing has been integrated into the study, providing students with the opportunity to contrast the Western paradigm of psychology with Indigenous psychology. An understanding of the complexities and diversity of psychology provides students with the opportunity to appreciate the interconnectedness of concepts both within psychology and across psychology and the other sciences.

As well as increasing their understanding of scientific processes, students develop insights into how knowledge in psychology has changed, and continues to change, in response to new evidence, discoveries and thinking. They develop the capacity to critically assess the strengths and limitations of science, they develop respect for evidence-based conclusions, and they gain an awareness of the ethical and cultural contexts of scientific endeavours.

### Units of Study

- Unit 1: How are behaviour and mental processes shaped?
- Unit 2: How do internal and external factors influence behaviour and mental processes?
- Unit 3: How does experience affect behaviour and mental processes?
- Unit 4: How is mental wellbeing supported and maintained?



## Psychology – Unit 1

### Course Description

Students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples, has made to an understanding of psychological development and to the development of psychological models and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the structure and functioning of the human brain and the role it plays in mental processes and behaviour and explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. A student-directed research investigation into contemporary psychological research is undertaken in Area of Study 3. The investigation involves the exploration of research, methodology and methods, as well as the application of critical and creative thinking to evaluate the validity of a research study by analysing secondary data. The investigation draws on the key science skills and key knowledge from Area of Study 1 and/or Area of Study 2.

### Areas of Study

- What influences psychological development?
- How are mental processes and behaviour influenced by the brain?
- How does contemporary psychology conduct and validate psychological research?

## Psychology – Unit 2

### Course Description

Students 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 individuals and groups, recognising that different cultural groups have different experiences and values. Students are encouraged to consider Aboriginal and Torres Strait Islander people's experiences within Australian society and how these experiences may affect psychological functioning. Students examine the contribution that classical and contemporary research has made to the understandings of human perception and why individuals and groups behave in specific ways. 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. A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation of primary data and is related to internal and external factors that influence behaviour and mental processes. The investigation draws on key knowledge and key science skills from Area of Study 1 and/or Area of Study 2.

### Areas of Study

- How are people influenced to behave in particular ways?
- What influences a person's perception of the world?
- How do scientific investigations develop understanding of influences on perception and behaviour?



## Psychology – Unit 3

### Course Description

Students investigate the contribution that classical and contemporary research has made to the understanding of the functioning of the nervous system and to the understanding of biological, psychological and social factors that influence learning and memory. Students investigate 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 stress as a psychobiological process, including emerging research into the relationship between the gut and the brain in psychological functioning. Students investigate how mechanisms of learning and memory lead to the acquisition of knowledge and the development of new and changed behaviours. They consider models to explain learning and memory as well as the interconnectedness of brain regions involved in memory. The use of mnemonics to improve memory is explored, including Aboriginal and Torres Strait Islander peoples' use of place as a repository of memory. A student-designed scientific investigation involving the generation of primary data related to mental processes and psychological functioning is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4 Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format.

### Areas of Study

- How does the nervous system enable psychological functioning?
- How do people learn and remember?
- How is scientific inquiry used to investigate mental processes and psychological functioning?

## Psychology – Unit 4

### Course Description

Students will explore the demand for sleep and the influences of sleep on mental wellbeing. They consider biological mechanisms that regulate sleep and the relationship between rapid eye movement (REM) and non-rapid eye movement (NREM) sleep across the life span. They also study the impact that changes to a person's sleep-wake cycle and sleep hygiene have on a person's psychological functioning and consider the contribution that classical and contemporary research has made to the understanding of sleep. Students consider ways in which mental wellbeing may be defined and conceptualized, including social and emotional wellbeing (SEWB) as a multidimensional and holistic framework to wellbeing. They explore the concept of mental wellbeing as a continuum and apply a biopsychosocial approach, as a scientific model, to understand specific phobia. They explore how mental wellbeing can be supported by considering the importance of biopsychosocial protective factors and cultural determinants as integral to the wellbeing of Aboriginal and Torres Strait Islander peoples.

### Areas of Study

- How does sleep affect mental processes and behaviour?
- What influences mental wellbeing?



## Applied Computing (Units 1 and 2)

### Course Description

VCE Applied Computing provides a pathway to further studies in areas such as business analysis, computer science, cybersecurity, data analytics and data science, data management, games development, ICT, networks, robotics, software, engineering and telecommunications, and other careers relating to digital technologies.

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

VCE Applied Computing provides students with opportunities to acquire and apply knowledge and skills to use digital systems efficiently, effectively and innovatively when creating digital solutions. Students investigate legal and ethical responsibilities relating to data security. Through a structured approach to problem solving, incorporating computational, design and systems thinking, students develop an awareness of the technical, social and economic impacts of information systems, both currently and into the future.

### Entry

There are no prerequisites for entry to Units 1, 2 and 3. However, students must undertake Unit 3 and Unit 4 as a sequence. Previous computing classes at other year levels will be very beneficial. Each unit involves at least 50 hours of scheduled classroom instruction.

### Units of Study

- Unit 1: Applied Computing
- Unit 2: Applied Computing

#### Use of digital resources

Students require access to the following resources to be able to demonstrate the outcomes:

- Appropriate laptop, notebook or desktop computers
- Printers
- Internet
- A range of software tools including:
  - Database management software to format, store, edit and retrieve data
  - Spreadsheet and/or statistical software to format, store, edit and retrieve data
  - Software to edit, retrieve, insert and delete data such as text, sound, static and moving images to create multimedial presentation of information
  - Drawing and graphic software and data visualisation software to create graphic output
  - Tools to provide programming environments.



## Applied Computing – Unit 1

### Course Description

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

#### Software Tools

The following indicates the software tools that students are required to both study and use in this unit .

- Database software, spreadsheet software and data visualisation software.
- An appropriate programming language.

### Areas of Study

#### Data Analysis

In Area of Study 1, an introduction to data analysis, students learn to analyse a problem or opportunity, plan solutions and commit to often creative designs as part of their development of a solution to the matter. They identify and collect data being mindful of legislation pertaining to privacy laws. Student deliverables may include presentations or reports that include graphical data to present a solution or highlight information or data patterns pertaining to demographics or certain issues such as traffic analysis.

#### Programming

In Area of Study 2, students select and use a programming language to create a working software solution. Students prepare, document and monitor project plans and engage in all stages of the problem-solving methodology.

### Key Study Areas

- Digital systems
- Data and information
- Approaches to problem solving
- Interactions and impacts between information systems
- Skills related to developing a software solution.

## Applied Computing – Unit 2

### Course Description

In this unit, students focus on developing innovative solutions to needs or opportunities that they have identified, and propose strategies for reducing security risks to data and information in a networked environment. All stages of the problem solving methodology are applied.

#### Software Tools

The following indicates the software tools that students are required to both study and use in this unit.

- Any software tools used to create an innovative solution, for example a programming language, spreadsheet software, web-authoring software, presentation software, tool for planning a project
- A software tool to represent a network.





## **Areas of Study**

### **Innovative solutions**

In this area of study, students work collaboratively to develop an innovative solution that may take the form of a proof of concept, prototype or product in areas such as artificial intelligence, games development, web authoring and more. A project plan is prepared to support an organised approach to problem solving. On completion of this unit the student should be able to analyse, design, develop and evaluate an innovative solution to an identified need or opportunity involving a digital system.

### **Network security**

In this area of study, students investigate how networks enable data and information to be exchanged locally and globally. They apply this knowledge to design a Local Area Network (LAN). Students develop an understanding of cybersecurity issues and apply systems thinking skills when designing LANs and proposing strategies for reducing security risks.

On completion of this unit the student should be able to respond to a teacher-provided case study to examine the capabilities and vulnerabilities of a network, design a network solution, discuss the threats to data and information, and propose strategies to protect the security of data and information.

## **Some Key Skills:**

- Digital systems
- Data and information
- Approaches to problem solving
- Interactions and impacts
- Key skills used in developing software solution.



## Software Development (Units 3 and 4)

### Unit 3

#### Course Description

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

#### Software tools

The following indicates the software tools that students are required to both study and use in this unit.

- An appropriate programming language
- Unified Modelling Language (UML) and UML tools.

#### Areas of Study

- Programming
- Analysis & Design

#### Programming

Students respond to teacher-provided solution requirements and designs and develop a set of working modules through the use of a programming language. Students examine a simple software requirements specification and a range of software design tools in order to apply specific processing features of a programming language to create working modules.

#### Analysis & Design

Students construct the framework for the development of a software solution that meets a student-identified need or opportunity. Students analyse and document a need or opportunity, justify the use of an appropriate development model, formulate a project plan, generate alternative design ideas and represent the preferred solution design for creating a software solution. Unit 2 forms the first part of the School-Assessed Task (SAT) that is completed in Unit 4, Area of Study 1.

## Software Development – Unit 4

#### Course Description

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

#### Software Tools

The following indicates the software tools that students are required to both study and use in the unit.

- An appropriate programming language
- Appropriate tool for documenting project plans (required to study but not use.)



## **Areas of Study**

### **Development and evaluation**

In Area of Study 1, students apply the problem-solving stage of development and evaluation to develop their preferred design prepared in Unit 3, in area of study 2, into a software solution and evaluate the solution, chosen development model and project plan, area of study 1 forms the second part of the School-Assessed Task (SAT).

### **Cybersecurity: software security**

Students focus on the security risks to software and data during the software development process and throughout the use of the software solution by an organisation. The student should be able to respond to a case study to examine the current software development security strategies of an organisation, identify the risks and the consequences of ineffective strategies and recommend a risk management plan to improve current security practices.

## **External Assessment**

The level of achievement for Units 3 and 4 is also assessed by a VCAA end-of-year examination. The examination will contribute 50 per cent to the study score. All the key knowledge and key skills that underpin the outcomes in Units 3 and 4 are examinable.



## **Art Creative Practice (Units 1-4)**

### **Course Description**

VCE Art Creative Practice incorporates three approaches to inquiry through art practice: Experiential learning, Inquiry learning and Project-based learning. These approaches echo the thinking and actions inherent in art making and mirror the practices of artists in different cultures and periods of time.

### **Units of Study**

- Unit 1: Inquiry and Experimental learning – Interpreting artworks and exploring the Creative Practice
- Unit 2: Inquiry and Experimental learning – Interpreting artworks and developing the Creative Practice
- Unit 3: Project-based learning – Investigation, ideas, artworks and the Creative Practice
- Unit 4: Project-based learning – Interpreting, resolving and presenting artworks and the Creative Practice



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

### Course Description

This unit focuses on the making of art and the examination of how artists communicate ideas and meaning. Students explore how artists create new ways of thinking and representation, while developing their own art practice. Students learn about components of Creative Practice and explore areas of personal interest to develop a series of visual responses. They 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 their personal observations of artwork. They develop a range of technical skills through the study of both traditional and contemporary practices.

### Areas of Study

#### Inquiry learning

- Artist
- Audience
- Structural lens
- Personal lens
- Artworks
- Contexts

#### Experiential learning

- Art form
- The Creative Practice
- Personal responses.

#### Experiential learning

- Research
- Reflection
- Evaluation.

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

### Course Description

This unit focuses on the Cultural Lens and examination of artworks from different periods of times and cultures. Students explore the collaborative practices of artists and use the Creative Practice to make and present artworks. They develop visual responses based on their investigations, exploring historical and contemporary cultural contexts, ideas and approaches that have influenced the artworks and the practices of the artists they investigate. Students analyse the varying historical and contemporary artworks and cultural contexts of artworks.

### Areas of Study

#### Inquiry learning

- Artist
- Society
- Culture
- Australian Artists
- Contemporary and historical artworks.

#### Inquiry learning

- The Creative Practice
- Collaborative approaches.

#### Inquiry learning

- Reflection
- Discussion
- Evaluation.



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

### Course Description

In Unit 3 the Interpretative Lenses are used in Making and Responding throughout the student's art practice. Students use Inquiry and Project-based learning as starting points to develop a Body of Work. They explore ideas and experiment with materials, techniques and processes using the Creative Practice. The research of historical and contemporary artists is integral to students' use of the Creative Practice and informs the basis of their investigation. Unit 3 commences with students researching the practice of selected artists as the starting point to develop a finished artwork.

### Areas of Study

#### Project based learning

- Artists and artworks
- Ideas and issues
- Investigation
- Research
- Exploration
- Presentation.

#### Project based learning

- The Creative Practice
- Investigation
- Exploration
- Experimentation
- Development.

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

### Course Description

In this unit students continue to develop their art practice through Project-based and Inquiry learning as their research and exploration continues to support the development of their Body of Work. They use the Interpretative Lenses to analyse, compare and interpret the meanings and messages of artworks. Students resolve and refine their Body of Work through Interpretive and Creative Practice. Students build on ideas begun in Unit 3. The Body of Work is presented to an audience, accompanied by documentation, and takes place before the resolution and presentation of the Body of Work after feedback on a personal critique.

### Areas of Study

#### Project based learning

- The Creative Practice
- Documentation
- Reflection
- Evaluation
- Critique.

#### Project based learning

- Body of work
- Presentation.
- Resolution
- Refinement

#### Inquiry learning

- Artists and artworks
- Discussion.
- Interpretive lenses
- Contexts



## Product Design & Technology – Soft Materials (Units 1-4)

### Course Description

Product design is part of people's responses to changing needs to improve quality of life by designing and creating artefacts. Product design is enhanced through knowledge of social, technological, economic, historic, ethical, legal, environmental and cultural factors. These factors affect the aesthetics, form and functions of products developed in the past and those yet to be developed. Central to VCE Product Design and Technology is the product design process, which provides a structure for students to develop an effective design practice. The design process involves identification of a real need that is then articulated in a design brief. The need is investigated and informed by research to aid the development of solutions that take the form of physical, three-dimensional functional products. Development of these solutions requires the application of technology and a variety of cognitive and physical skills, including creative design thinking, drawing and computer-aided design, testing processes and materials, planning, construction, fabrication and evaluation.

In VCE Product Design and Technology students assume the role of a designer-maker. In adopting this role, they require and apply knowledge of factors that influence design. Students address the design factors relevant to their design situation. The knowledge and use of resources is integral to product design. These resources include a range of materials, and the tools, equipment and machines need to transform these materials in a safe manner into useful products. Increasingly, the importance of environmental sustainability is having an impact on product design and development. More sustainable approaches are therefore at the forefront throughout the product lifecycle.

### Units of Study

- Unit 1: Sustainable product redevelopment
- Unit 2: Collaborative design
- Unit 3: Applying the product design process
- Unit 4: Product development and evaluation.



## Product Design & Technology – Soft Materials: Unit 1

### Course Description

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic markets. Sustainable redevelopment refers to designers and makers ensuring products serve social, economic and environmental needs.

### Areas of Study

#### Sustainable redevelopment of a product

This area of study introduces students to the product design process, lifecycle analysis/assessment (LCA), IP and the product design factors, with an emphasis on sustainability. Students consider contemporary practices of designers who claim to incorporate sustainable practices.

#### Producing and Evaluating a Redeveloped Product

This area of study focuses on the implementation of the design and planning completed in Area of Study 1. Students refer to their working drawings and scheduled production plan, and apply a range of techniques and processes safely to make a redeveloped product.

## Product Design & Technology – Soft Materials: Unit 2

### Course Description

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants, function, purpose and context for product design, aesthetics, materials and sustainability and the impact of these factors on a design solution.

### Areas of Study

#### Designing with a Team

This area of study enables students to apply the product design process collaboratively and individually. Each student works in a design team to generate one design brief collaboratively from a scenario, based around a theme and contributes to the design, planning and production of a group product. Individual roles and responsibilities are allocated.

#### Producing and Evaluating within a Team

In this area of study students apply knowledge, skills, techniques and processes, including risk management, to make their product designed in Area of Study 1, in accordance with the team requirements. To ensure consistency throughout production, the team refers to the historical or contemporary cultural design movement or style that inspired their designs.





## Product Design & Technology – Soft Materials: Unit 3

### Course Description

In this unit students are engaged in the design and development of a product that addresses a personal, local or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product, user-centred design, innovation and creativity, design elements and principles, sustainability concerns, economic limitations, legal responsibilities, material characteristics and properties and technology.

### Areas of Study

#### Designing for end-user/s

In this area of study students examine the product design process and develop skills in writing a design brief, which is vital for the development of a viable solution. They focus on identifying and designing for a potential end-user/s of an intended product. They consider methods used to establish an end-user/s' needs for the development of a solution to a design problem.

#### Product development in industry

This area of study focuses on the factors, processes and systems that influence the design and development of products within industrial settings. Students explore specific cases and the reasons why design and innovation are integral to value-adding to products. They also examine how companies react to market demands and technological developments. Students look at the role of market research in determining end-user/s' needs in relation to sustainability.

#### Designing for Others

This area of study focuses on students working as designers and applying the product design process to meet the requirements of an end-user/s. Students identify specific needs of the end-user/s by referring to the product design factors and conducting research. Students prepare a design brief that guides their work for this area of study and for Areas of Study 2 and 3 in Unit 4.



## Product Design & Technology – Soft Materials: Unit 4

### Course Description

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

### Areas of Study

#### Product analysis and comparison

In this area of study students examine design factors that influence the success of commercially available products. Products are analysed and evaluated in terms of the product design factors. Students develop an understanding of what people value and how they evaluate products using qualitative and quantitative methods, and consider the impacts and consequences of product design success and failure.

#### Product manufacture

This area of study focuses on the skills, production techniques and processes employed to make a product to suit the needs of an end-user/s. Students continue to implement their schedule production plan, apply skills and processes including risk management in safe use of materials, tools, equipment and machines and complete the product to specified standards of quality. They monitor and record their progress and make modifications if necessary.

#### Product Evaluation

This area of study focuses on the student's application of evaluation criteria, the performance of checks and tests, and gaining end-user/s feedback to determine how well a product meets the needs and requirements outlined in the design brief developed in Unit 3.



## Product Design & Technology – Hard Materials (Units 1-4)

### Course Description

Product design is part of people's responses to changing needs to improve quality of life by designing and creating artefacts. Product design is enhanced through knowledge of social, technological, economic, historic, ethical, legal, environmental and cultural factors. These factors affect the aesthetics, form and functions of products developed in the past and those yet to be developed. Central to VCE Product Design and Technology is the product design process, which provides a structure for students to develop an effective design practice. The design process involves identification of a real need that is then articulated in a design brief. The need is investigated and informed by research to aid the development of solutions that take the form of physical, three-dimensional functional products. Development of these solutions requires the application of technology and a variety of cognitive and physical skills, including creative design thinking, drawing and computer-aided design, testing processes and materials, planning, construction, fabrication and evaluation.

In VCE Product Design and Technology students assume the role of a designer-maker. In adopting this role, they require and apply knowledge of factors that influence design. Students address the design factors relevant to their design situation.

The knowledge and use of resources is integral to product design. These resources include a range of materials, and the tools, equipment and machines need to transform these materials in a safe manner into useful products. Increasingly, the importance of environmental sustainability is having an impact on product design and development. More sustainable approaches are therefore at the forefront throughout the product lifecycle.

### Units of Study

- Unit 1: Sustainable product redevelopment
- Unit 2: Collaborative design
- Unit 3: Applying the product design process
- Unit 4: Product development and evaluation



## Product Design & Technology – Hard Materials: Unit 1

### Course Description

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic markets. Sustainable redevelopment refers to designers and makers ensuring products serve social, economic and environmental needs.

### Areas of Study

#### Sustainable redevelopment of a product

This area of study introduces students to the product design process, lifecycle analysis/assessment (LCA), IP and the product design factors, with an emphasis on sustainability. Students consider contemporary practices of designers who claim to incorporate sustainable practices.

#### Producing and evaluating a redeveloped product

This area of study focuses on the implementation of the design and planning completed in Area of Study 1. Students refer to their working drawings and scheduled production plan, and apply a range of techniques and processes safely to make a redeveloped product.

## Product Design & Technology – Hard Materials: Unit 2

### Course Description

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants, function, purpose and context for product design, aesthetics, materials and sustainability and the impact of these factors on a design solution.

### Areas of Study

#### Designing with a team

This area of study enables students to apply the product design process collaboratively and individually. Each student works in a design team to generate one design brief collaboratively from a scenario, based around a theme and contributes to the design, planning and production of a group product. Individual roles and responsibilities are allocated.

#### Producing and evaluating within a team

In this area of study students apply knowledge, skills, techniques and processes, including risk management, to make their product, designed in Area of Study 1, in accordance with the team requirements. To ensure consistency throughout production, the team refers to the historical or contemporary cultural design movement or style that inspired their designs.



## **Product Design & Technology – Hard Materials: Unit 3**

### **Course Description**

In this unit students are engaged in the design and development of a product that addresses a personal, local or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product, user-centred design, innovation and creativity, design elements and principles, sustainability concerns, economic limitations, legal responsibilities, material characteristics and properties and technology.

### **Areas of Study**

#### **Designing for End-User/s**

In this area of study students examine the product design process and develop skills in writing a design brief, which is vital for the development of a viable solution. They focus on identifying and designing for a potential end-user/s of an intended product. They consider methods used to establish an end-user/s' needs for the development of a solution to a design problem.

#### **Product Development in Industry**

This area of study focuses on the factors, processes and systems that influence the design and development of products within industrial settings. Students explore specific cases and the reasons why design and innovation are integral to value-adding to products. They also examine how companies react to market demands and technological developments. Students look at the role of market research in determining end-user/s' needs in relation to sustainability.

#### **Designing for Others**

This area of study focuses on students working as designers and applying the product design process to meet the requirements of an end-user/s. Students identify specific needs of the end-user/s by referring to the product design factors and conducting research. Students prepare a design brief that guides their work for this area of study and for Areas of Study 2 and 3 and in Unit 4.



## Product Design & Technology – Hard Materials: Unit 4

### Course Description

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

### Areas of Study

#### Product analysis and comparison

In this area of study students examine design factors that influence the success of commercially available products. Products are analysed and evaluated in terms of the product design factors. Students develop an understanding of what people value and how they evaluate products using qualitative and quantitative methods, and consider the impacts and consequences of product design success and failure.

#### Product manufacture

This area of study focuses on the skills, production techniques and processes employed to make a product to suit the needs of an end-user/s. Students continue to implement their schedule production plan, apply skills and processes including risk management in safe use of materials, tools, equipment and machines and complete the product to specified standards of quality. They monitor and record their progress and make modifications if necessary.

#### Product evaluation

This area of study focuses on the student's application of evaluation criteria, the performance of checks and tests, and gaining end-user/s feedback to determine how well a product meets the needs and requirements outlined in the design brief developed in Unit 3.



## Visual Communication Design (Units 1-4)

### Course Description

The Visual Communication Design study examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. Designers create and communicate through visual means to influence everyday life for individuals, communities and societies. Visual communication design relies on drawing as the primary component of visual language to support the conception and visualisation of ideas. Consequently, the study emphasises the importance of developing a variety of drawing skills to visualise thinking and to present potential solutions.

### Units of Study

- Unit 1: Introduction to visual communication design
- Unit 2: Applications of visual communication design
- Unit 3: Visual communication design practices
- Unit 4: Visual communication design development, evaluation and presentation.



## Visual Communication Design – Unit 1

### Course Description

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to create messages, ideas and concepts, both visible and tangible. Students practice their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications.

### Areas of Study

#### Drawing as means of communication

This area of study introduces the knowledge and skills that underpin some of the stages in the design process of generating ideas, developing concepts and refinement of visual communications. It focuses on the development of visual language and design thinking. Students use observational, visualisation and presentation drawing as the means by which ideas and concepts are communicated.

#### Design elements and design principles

This area of study focuses on design elements and design principles. Students experiment with these elements and principles, using manual and digital drawing methods such as photography, digital photography, printmaking and collage to visualise ideas and concepts.

#### Visual communication in context

Visual communication design draws on a broad range of sources to support creativity and innovation. Historical and cultural practices and the values and interests of different societies influence innovation in visual communication designs. In this area of study, students explore how visual communications have been influenced by social and cultural factors and past and contemporary visual communication practices in the design fields of communication, industrial and environmental design.

## Visual Communication Design – Unit 2

### Course Description

This unit focuses on the application of visual communication design knowledge, design thinking and drawing methods to create visual communications to meet specific purposes in designated fields. Students use presentation drawing methods that incorporate that use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design.

### Areas of Study

#### Technical drawing in context

On completion of this unit the student should be able to create a presentation drawings that incorporate relevant technical drawing conventions and effectively communicate information and ideas for a selected design field.

#### Type and imagery

On completion of this unit the student should be able to manipulate type and images to create visual communications suitable for print and screen-based presentations, taking into account copyright.

#### Applying the design process

On completion of this unit the student should be able to engage in stages of the design process to create a visual communication appropriate to a given brief. Students respond to a given brief addressing communication, environmental or industrial fields of design that outlines the messages or information to be conveyed to a target audience.





## Visual Communication Design – Unit 3

### Course Description

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media and materials, and the application of design elements and design principles, can create effective visual communications for specific audiences and purposes. They investigate and experiment with the use of manual and digital methods, media and materials to make informed decisions when selecting suitable approaches for the development of their own design ideas and concepts.

### Areas of Study

#### Analysis and practice in context

Students analyse how design elements, design principles, methods media and materials are used in visual communications in these fields to achieve particular purposes for target audiences. Students draw on their findings from the analysis to inform the creation of their own visual communications and articulate these connections.

#### Design industry practice

In this area of study students investigate how the design process is applied in industry to create visual communications. Students develop an understanding of the practices used to support collaboration between designers, specialists and clients when designing and producing visual communications.

#### Developing a brief and generating ideas

In this area of study students gain a detailed understanding of three stages of the design process: development of a brief, research and the generation of ideas. Students develop an understanding of the contents of a brief and the critical role that it plays in forming the direction and boundaries for their research and generation of ideas. They apply this knowledge when developing a single brief that proposes and defines two distinct communication needs for a real or an imagery client.

## Visual Communication Design – Unit 4

### Course Description

The focus of this unit is on the development of design concepts and two final presentations of visual communications to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated communication needs.

### Areas of Study

#### Development, refinement and evaluation

On completion of this unit the student should be able to develop distinctly different design concepts for each need, and select and refine for each need a concept that satisfies each of the requirements of the brief.

#### Final presentations

This area of study focuses on the final stage in the design process, the resolution of presentations. Students produce two final visual communication presentations, which are the refinements of the concepts developed in Outcome 1 Unit 4.

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Warragul

## VCE – Years 11 & 12



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