



Melbourne High School



VCE Information Booklet

**for 2022 Year 11
students and their parents**

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General information

Contacts		
The following staff can provide appropriate advice to students and parents.		
Year 10 Co-ordinators	Mr James Guthrie (10A-10G)	james.guthrie@mhs.vic.edu.au
	Mr Robert Sette (10H-10N)	robert.sette@mhs.vic.edu.au
Year 11 Co-ordinators	Ms Vassie Kakolyris (11A-11G)	vassie.kakolyris@mhs.vic.edu.au
	Mr Michael Chandler (11H-11N)	michael.chandler@mhs.vic.edu.au
Careers Co-ordinator	Mr Bill Theodoropoulos	bill.theodoropoulos@mhs.vic.edu.au
Assistant Principals	Mr Marcus Sharp, Mr Andrew Sloan & Ms Pelissa Tsilimidos	
Principal	Dr Anthony Mordini	

Timeline for subject selections	
Wednesday 21 July	VCE Information Booklet available electronically.
Tuesday 27 July	6.30pm – Parent & Student Information event via MS Teams
Late July 2021	Year 10 VTAC Guide published
Friday 6 August	Draft subject selections due
Monday 9 August	Year 10 students begin one-on-one counselling sessions with Form Teachers.
Wednesday 18 August	Online subject selection closes.
Term 4, week 1	Late VCE subject selection changes can be submitted.

Advice for students in managing the VCE

The VCE years at Melbourne High are a strenuous academic experience. The keys to your success are planning, time management, self-awareness, and the development of positive working relationships with your teachers. As a student, you should familiarise yourself with the basic concepts of the VCE:

- The study of semester-long Units (twelve in Year 11, and ten in Year 12)

- Learning Outcomes - what you must know, or be able to do, by the time you have finished a unit. If you fail to demonstrate a learning outcome you will receive an N (not satisfactory) result for the entire unit.
- School assessments and examinations which indicate the quality of student work are graded from A+ to E or UG

From Student Learning Co-ordinators' (SLC's) point of view, the most common problems faced by students in managing the VCE include:

- failure to meet deadlines
- lack of honest discussion with teachers and SLCs
- choosing subjects on an unrealistic basis
- lack of balance between academic, sporting, cultural and personal activities
- poor organisation, security and storage of work

Some advice:

- ✓ Carefully study the assessment calendar issued at the start of Term 1 and chart all due dates and the estimated time required to complete all tasks. Individual faculty documents or discussion with teachers will enable students to accurately predict the time needed for each piece of work. Note any pressure points during the year and develop strategies to handle them. Learn to work efficiently and to co-ordinate work between different subject areas.
- ✓ Aim to complete work before the due date. If serious problems are emerging, talk to your teachers or co-ordinators. Extensions can be granted to deserving students who have evidence of conscientious completion of parts of a task. Class teachers along with SLCs can grant extensions for set work and the SLC can grant an extension (in exceptional circumstances) for an assessment task (normally extensions for assessment tasks are only granted with a medical certificate).
- ✓ Learn to see teachers as partners in the learning process. They are just as interested in teaching you how to learn as in teaching particular knowledge and skills. Approach them with any learning difficulties in the collection, organisation, analysis or presentation of information. Be honest in explaining your difficulties and be willing to accept advice.
- ✓ Choose subjects mainly on the basis of your interests and abilities. The choice of subjects must be made with an eye to future careers and the university courses that lead to them. Check Tertiary Entry Requirements very carefully and learn to use the Careers Room regularly. Be willing to look at your own performance and abilities and be willing to make changes to your VCE program in the middle of Year 11 or at the start of Year 12 if necessary. Only tackle a Units 3 & 4 sequence in Year 11 if you can demonstrate the capacity to handle it.
- ✓ **Keep your life in perspective.** The best achievers at this school have always been students who remain committed to a reasonable range of school and outside activities. Some scaling back may be needed, but too many students cut out all non-academic activities and have no real outlet for relieving stress and miss out on a most valuable aspect of the education of the whole person.

- ✓ Look after your work. Keep developing work securely at home. Be proud of your own achievements. Share ideas, but do not share written work.
- ✓ Back up all your work on a regular basis.
- ✓ Above all, learn to enjoy the VCE and treat it as a significant part of your education for life.

A parent's role with the VCE student

In many ways, it is not only a student who completes a VCE course, but also the whole family. The practical and emotional support of the parent is essential for success.

Attendance at information nights and parent & teacher interviews is just the first step in making yourself aware of exactly what the VCE is and how the whole process functions. Obtain and read a copy of all written information published by the school and VCAA. Perhaps the major considerations for your son are the concepts of time management and a study program. It can be said the VCE is an assessment of a student's organisational ability and in this area a parent can be directly involved. Now is the time to start planning for how the year can be organised.

There are numerous resources available on study skills and time management – our own School library has over 70 listings in this area (a copy of this list can be obtained from the Student Welfare Co-ordinator). In general, a few basics should be heeded:

- ✓ have an interest in your son's progress – ask what he has learnt each day
- ✓ praise your son for the good work that he does
- ✓ help him to develop a work schedule and hold him accountable if necessary
- ✓ discuss VCE issues with your son
- ✓ establish a set routine for the whole family
- ✓ have a separate folder for each subject, a year planner, and a set place for your son to study without distraction

Students will benefit if the parent is fully conversant with VCE and what it involves and is aware of their son's work schedule and assessment program.

On a different level, the VCE can be a very emotionally trying time. Parents' roles are to support their son, not to do the work for him. It is not your responsibility – it is the responsibility of your son. A fine balance needs to be achieved between supporting your son and having him feel that you are "constantly on his back". You ultimately must trust your son to do the work – allowing him to take responsibility for his own actions.

It can be a difficult time, combined with your son's need to assert his own personality. Encouragement, understanding, and praise are essential for a successful partnership.

The VCE can be a stressful, taxing, and demanding and yet a rewarding experience – this may sound contradictory, but success will be the result of a partnership between the parent, student and the school working together with sound communication right from the outset.

In discussing this issue with a number of parents whose students have finished their VCE, the words of wisdom which came through over and over again were: if all else fails, maintain a good sense of humour!



Selecting a VCE program

In selecting a VCE program, students should first consider what subjects and areas of study they enjoy! This may then impact choices regarding their likely destination beyond Year 12. Most students at Melbourne High School will aspire to progress to university study that requires both the successful completion of the VCE and the achievement of their best possible Australian Tertiary Admissions Rank (ATAR).

As the VCE is a two-year certificate, students should endeavour to map out a program of study for both Year 11 and Year 12. Students who do not think beyond Year 11 run the risk of overlooking subjects that may be required for entry into post-secondary courses. This is particularly so in subjects that are “cumulative”, that is, the subject at Units 3 & 4 level requires completion of the equivalent Units 1 & 2 sequence as a requirement. For example, if a particular university course requires Units 3 & 4 Chemistry, Maths Methods or Physics for entry, the student must include not only Units 3 & 4 in his plan, but Units 1 & 2 in those studies as well.

Students and parents please note that Melbourne High School strives to offer as extensive a VCE program as possible to allow students a wide range of options. However, like all schools, there is a limit to the resources the School has available – both human resources (in the form of teaching staff) and physical resources (in terms of rooms), particularly specialist rooms such as laboratories. As a result, it is not always possible to run enough classes in certain subjects to match demand. In these cases, Student Learning Co-ordinators will use their discretion to identify affected students and then guide them through a subject reselection process.

In planning a program, there are three groups of subjects to consider:

1. Must-do subjects - VCE requirements

All students must enrol in a minimum of four Units (1, 2, 3 & 4) of English, English Language, English Literature or English EAL (Units 3 & 4 only).

2. Must-do subjects - Tertiary course prerequisites

In determining these subjects, the student should identify the tertiary courses in which he has an interest. For each of these courses, there will be a list of prerequisites that are documented on the VTAC web site. Students considering interstate tertiary studies should consult the equivalent documents from each relevant tertiary body.

Under normal circumstances, the pre-requisites will be expressed in Units 3 & 4 studies that may imply the completion of all four VCE Units: for example, Mathematical Methods Units 1, 2, 3 & 4 for Commerce at The University of Melbourne.

Students should use the VTAC Prerequisite & Course Explorer that matches each student's VCE subject selection with the pre-requisite subjects for tertiary courses across Victoria. Students will need to see the Careers Co-ordinator if they need further information about a specific course which is not listed on the website.

3. Subjects of interest

Having 'covered the bases' with required studies, students should choose those which they would enjoy. The subjects we enjoy are usually those in which we do best.

How ATAR scores are calculated

ATAR scores are ranks, based on how well the individual student achieves compared to the rest of the VCE students completing their studies in the same year. They are calculated from:

- the study scores for the top four Unit 3 & 4 subjects, which must include the student's English subject, *even if they didn't perform well in that subject.*
- 10% of the study scores of optional fifth and sixth Units 3 & 4 subjects.

	Tally the study scores of:	Max possible score:
"Top four" subjects	The score in the best English group subject	50
	The score in the best other subject	50*
	The score in the second-best other subject	50*
	The score in the third best other subject	50*
	Plus	
Optional subjects	10% of the score of the 5 th other subject	5
	10% of the score of the 6 th other subject	5
	Aggregate score	210

* Some subjects' study scores can scale above 50

The total scores of all VCE students in the state are ranked from lowest to highest, with the top students being awarded an ATAR of 99.95. Each rank (e.g. 99.90, 99.85 etc.) includes approximately 30-35 students.

Example ATAR calculation	Scaled study score:
English	36 [#]
Economics	47
Geography	44
Media	42
<i>plus</i>	
Further Maths (10%)	3.9
Biology (10%)	3.7
Aggregate score	176.6
ATAR*	95.95

[#] The best performing English subject is counted in the "top four", regardless of how the student scored in that subject

* Based on the aggregate to ATAR table (<http://www.vtac.edu.au/pdf/aggregate-ATAR.pdf>)

The minimum number of Units 3 & 4 subjects required for an ATAR is four; the fifth and sixth subjects each offer a 10% bonus to the ATAR calculation. Consequently, to maximise his ATAR, a student should consider a program that contains up to six Units 3 & 4 sequences. *Students should NOT study more than six subjects, as the time and effort taken to study for these additional subjects will jeopardise their ability to gain the maximum study scores for their top six subjects – it is an unnecessary burden.* **Melbourne High School does not support VCE students studying seven or more Unit 3 & 4 subjects internally, and strongly advocates against taking additional subjects externally.**

Many MHS students will choose a program that includes one Unit 3 & 4 sequence at Year 11, followed by five Units 3 & 4 sequences at Year 12. For some students, this is not advisable. There are alternatives, and students should consult with both the Careers Coordinator and the Year 10 SLCs. Not all Units 3 & 4 sequences are available to Year 11 students. A list of those available can be found on **page 24** of this booklet.

Year 11 and 12 VCE study options

STUDENTS MUST STUDY **SIX** SUBJECTS AT YEAR 11
AND **FIVE** SUBJECTS AT YEAR 12.

	Compulsory VCE Subjects		Optional VCE Subjects	Number of VCE Subjects
Year 11	One English Unit 1 & 2 subject (<i>English, Literature or English Language</i>)	Four other Unit 1 & 2 subjects (which can include a VET subject)	Plus one of the following: - An internal Unit 3 & 4 subject - A sixth Unit 1 & 2 subject - An external language Unit 3 & 4 subject - A VET Unit 1 & 2 subject (note: only one VET subject can be studied)	6 subjects per semester*
Year 12	One English Unit 3 & 4 subject (<i>English / EAL, Literature, or English Language</i>)	Three other Unit 3 & 4 subjects	Plus one of the following: - A fifth Unit 3 & 4 subject - A VET Unit 3 & 4 subject - A university extension course	5 subjects per semester*

* Number of subjects may vary due to exceptional circumstances, as determined by the Student Learning Co-ordinators (SLCs).

<p>Year 11:</p> <ul style="list-style-type: none"> • Year 11 students must study six VCE subjects • Year 11 students may study six Unit 1 & 2 subjects; or • Year 11 students may study five Unit 1 & 2 subjects (which may include a VET subject) and one Unit 3 & 4 subject <ul style="list-style-type: none"> • One of these subjects may be studied externally (e.g. languages or distance education) • Year 11 students are not permitted to study <u>more than six</u> subjects • Year 11 students are <u>not</u> permitted to study <u>five or fewer</u> subjects unless exempted at SLCs discretion • Year 11 students <u>are</u> permitted to study an external Unit 3 & 4 language subject plus Unit 3 & 4 Music <i>Performance</i> or Unit 3 & 4 Music <i>Investigation</i> at Melbourne High School • Year 11 students are <u>not</u> permitted to study <u>two internal Unit 3 & 4 subjects</u> at Melbourne High School 	<p>Year 12:</p> <ul style="list-style-type: none"> • Year 12 students must study five Unit 3 & 4 subjects <ul style="list-style-type: none"> ○ One of these subjects may be studied externally (e.g. languages or distance education) • Year 12 students are <u>not</u> permitted to study <u>four or fewer</u> Unit 3 & 4 subjects unless exempted at SLCs discretion • Year 12 students are <u>not</u> permitted to study <u>six or more</u> Unit 3 & 4 subjects <ul style="list-style-type: none"> ○ Students studying VET or university extension courses, or external VCE subjects (e.g. external language or distance education subjects) will do so instead of an internal VCE subject
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VCE student programs at MHS

A student's ATAR score is calculated from the study scores for his top four Unit 3 & 4 subjects, and 10% of the study scores of his fifth and sixth Unit 3 & 4 subjects. Due to this, **Year 11 students at Melbourne High School are not permitted to study seven VCE subjects.** A typical Melbourne High School student will undertake five or six VCE Units per semester in Year 11 (with the sixth subject typically being a Unit 3 & 4 subject), and then undertake five VCE Units per semester in Year 12 (Year 12 students at Melbourne High School are not allowed to study only four VCE subjects).

In the Unit Descriptions section of this booklet (from page 24), there is a complete list of VCE studies offered at Melbourne High School, including detailed information on topics covered in each unit of study. Students are encouraged to choose some Units from the Arts, Humanities, Languages, Maths, Science and Technology areas in order to experience a broad education.

Below is information relating to Melbourne High School's programs on studying English, English as an Additional Language (EAL, formerly ESL), Maths, Vocational Education & Training (VET), external VCE studies, studying Unit 3 & 4 Study in Year 11, alterations to a VCE student program and Higher Education Studies (first-year university subjects).

Studies of English

All students must undertake one or two English subjects at Year 11 and one or two English subjects at Year 12 as demonstrated in the table below:

Year 11 (1 & 2)	Year 12 (Units 3 & 4)
A choice of either one or two of the following: <ul style="list-style-type: none"> • English • English Language • Literature 	A choice of either one or two of the following: <ul style="list-style-type: none"> • English* / EAL (English as an Additional Language)*** • English Language** • Literature**
<p>* Students who chose English Language or Literature at Year 11 instead of English can opt to undertake Unit 3 & 4 English instead of Literature or English Language in Year 12 (i.e. 'drop' Literature or English Language).</p> <p>** Students will be counselled against choosing Unit 3 & 4 English Language or Literature if a Unit 1 & 2 sequence has not been undertaken in Year 11.</p> <p>*** Students must meet strict conditions to be eligible for EAL Status.</p>	

Students are advised that both English Language and English Literature are specialist subjects and should not be viewed as a 'soft option' in place of English. It is recommended that students should have achieved strong results for Year 10 English before considering either English Language or Literature instead of English.

It is advisable and strongly recommended that students keep their options open by choosing both English and English Language or Literature at Year 11. At the end of Year 11 they can then decide which subject they would like to complete in Year 12.

Before making their decision, students and parents are advised to read the information about each English group subject from this site: <http://www.mhs.vic.edu.au/english/english/> Students and parents are also advised to consult the respective VCE Study Designs available on the VCAA website. An overview of each subject has been provided in this handbook.

As noted in the table above, the decision to allow a student to undertake Unit 3 & 4 English Language or Literature in Year 12 (if not undertaken in Year 11) in place of Unit 3 & 4 English will be based upon the written recommendation of the English, English Language and English Literature teachers, and only be considered when the "Request Form" has been completed and signed (see below). Students who require further information or clarification should see the English Co-ordinator, Mr Mahoney.

Year 12 English at MHS



Request to study 3 & 4 English Language or 3 & 4 Literature as an alternative to Unit 3/4 English without having studied either subject at Year 11

Students must be aware of the following:

- At Year 11, all students must undertake at least one and no more than two of the following: English or English Language or Literature.
- At Year 12, all students must undertake at least one and no more than two of the following: English or English Language or Literature.
- At Year 12, students who have not undertaken a sequence in either English Language or Literature will need to demonstrate outstanding results in Year 11 English if they wish to choose either subject instead of English. They are advised that they will face a challenging workload, especially in developing the essential knowledge and skills to confidently meet the demands of the subject and its outcomes.
- Although not a prerequisite, it is strongly advised that students will have undertaken Units 1 & 2 English Language or Literature in Year 11.

Candidate's reasons for requesting Year 12 English Language or Literature as an alternative to English (please provide below):

Year 11 English teacher's comment on the student's aptitude for undertaking either English Language or Literature instead of English:

Signed

Date

Parent's approval

Signed

Date

SLC's (Student Learning Co-ordinator) final approval

YES/NO Signed

Date

EAL (English as an Additional Language) Status

Students from non-English speaking backgrounds are eligible for EAL status if they satisfy both of the following conditions:

1. The student has been a resident in Australia for a period of not more than seven calendar years prior to 1 January of the year in which the VCE is attempted.
2. English has been the student's major language of instruction for a total period of not more than seven years.

Under certain circumstances, students who do not meet the criteria fully may be awarded EAL status. Enquiries should be directed to the VCE Coordinator. **Students who are eligible for EAL status should select EAL English Unit 3 & 4 in Year 12.**

Studies of Mathematics

Melbourne High School offers all three Unit 1–4 sequences in VCE Mathematics.

Year 11 (Unit 1 & 2)	Year 12 (Unit 3 & 4)
<ul style="list-style-type: none">• General Mathematics• Mathematical Methods• Specialist Mathematics#	<ul style="list-style-type: none">• Further Mathematics• Mathematical Methods*• Specialist Mathematics*#

*The corresponding Unit 1 & 2 studies are an essential foundation for Unit 3 & 4

Mathematical Methods must be chosen if Specialist Mathematics is chosen.

Choosing VCE Mathematics Subjects

In choosing Mathematics subjects, careful consideration should be given to the student's interests, mathematical ability, willingness and capacity to commit time to mathematics studies, and preferred tertiary courses.

Students should read the document *VCE Mathematics Studies – Overview for Year 10s* that is available on Canvas.

Students will normally take one of the following combinations of mathematics subjects in Year 11.

1. Students who enjoy difficult, abstract mathematics – or are considering university studies in any branch of engineering, the mathematical or physical sciences, computer science, or econometrics – should consider taking **both Mathematical Methods 1 & 2 and Specialist Mathematics 1 & 2**. The presumption is that students will continue to both Mathematical Methods 3 & 4 and Specialist Mathematics 3 & 4 in Year 12, although some students may be advised by teachers to continue Mathematical Methods only. ("Trying out" Specialist Mathematics in Year 11, without sufficient commitment to the subject, is unlikely to lead to an enjoyable experience or successful learning.)
2. Students considering university studies in other sciences (social sciences, chemical sciences, life sciences, health sciences or professions), or commerce with an economics focus, should consider taking **Mathematical Methods 1 & 2 only** (not Specialist Mathematics). Students then have these options for Year 12:
 - a. continuing to Mathematical Methods 3 & 4 only;
 - b. taking up Further Mathematics 3 & 4 in addition to Methods 3 & 4 (Further Mathematics is particularly relevant to studies in business/finance/accounting);
 - c. taking Further Mathematics Units 3 & 4 only.Students considering option c must speak with their mathematics teacher for advice on whether option 2C (above) or 3 (below) is more appropriate.
3. Students considering tertiary studies in business, management, geography, or public policy should consider taking **General Mathematics 1 & 2**. This prepares students to take **Further Mathematics 3 & 4**, which provides general preparation for further study, in particular where data analysis and quantitative modelling are important.

Note:

- While the VCAA permits students to study both Mathematical Methods 1 & 2 and General Mathematics 1 & 2, it is not possible to do so at Melbourne High School. Students who successfully complete Methods 1 & 2 will be sufficiently prepared for Further Mathematics 3 & 4.

- Although the VCAA allows students to study all three mathematics subjects, this option is NOT possible at Melbourne High School, because:
 - it reduces the breadth of a student's VCE studies;
 - only two Unit 3 & 4 Mathematics subjects can be used in the 'top four' when calculating ATAR scores.

Permitted sequences of mathematics studies at MHS

	Year 11: Units 1 & 2			Year 12: Units 3 & 4		
	Mathematical Methods	Specialist Mathematics	General Mathematics	Mathematical Methods	Specialist Mathematics	Further Mathematics
Option 1	✓	✓	-	✓	✓	-
Option 2a	✓	-	-	✓	-	-
Option 2b	✓	-	-	✓	-	✓
Option 3	-	-	✓	-	-	✓

Possible sequences of mathematics studies at MHS.

	Year 11: Units 1 & 2			Year 12: Units 3 & 4		
	Mathematical Methods	Specialist Mathematics	General Mathematics	Mathematical Methods	Specialist Mathematics	Further Mathematics
Option 2c	✓	-	-	-	-	✓

Studies of Foreign Languages

Melbourne High School offers VCE French, German, Indonesian and Japanese from Units 1-4.

MHS firmly endorses the study of languages as an integral part of our students' education. It increases communication skills and provides them with an appreciation of another culture as well as a heightened appreciation of their own. Learning a language helps develop skills in flexibility, problem solving and contributes to social cohesiveness, all of which are integral in the employment market. In our globalised world, languages also allow Australian students access to various post-school and job opportunities.

Many international and national educational settings are looking for students who can show a breadth of knowledge and the study of languages can play an integral role in this. Through learning languages, students will have access to numerous pathways into higher education and then into careers. Not only are individuals with language skills more employable, but they also open up opportunities to study or work overseas.



External VCE studies

Students may enrol in additional VCE Units not offered by Melbourne High School through other VCE providers (e.g. TAFE, Victorian School of Languages, Community Language Schools and Distance Education Centre Victoria).

A Year 11 SLC must be consulted about this intention, as all such enrolments must be processed and entered onto the VASS system by Melbourne High School as the 'home school'.

When choosing to study an external VCE study, the School's recommendation of only studying one VCE Units 3 & 4 subject in Year 11 should be considered. A reminder that students must do five subjects in year 12, so doing an 'extra' seventh Units 3 & 4 sequence becomes redundant and is contrary to school policy.

Before deciding to study an external Unit 3 & 4 Language subject in Year 11, remember that just because a student can speak the language, it doesn't necessarily mean that his literacy and grammar in that language is of a Year 12 level (what's more, all MHS students can speak English, yet none are allowed to study Unit 3 & 4 English in Year 11).

Unit 3 & 4 studies in Year 11

Year 11 students may apply to undertake one VCE Units 3 & 4 study at Melbourne High School. This type of VCE student program is provided to enable individual students the opportunity to broaden and enrich their academic program through the additional challenge and stimulation of a Units 3 & 4 study. Each application is considered individually and approval is only granted subject to the student being clearly able to demonstrate both an aptitude and a strong need for this type of VCE Student Program.

At Melbourne High School, students will typically undertake five Unit 3 & 4 studies in Year 12, so the opportunity to undertake a Unit 3 & 4 study in Year 11 will provide an additional bonus in attaining an ATAR. The specific advantages that a student may consider include:

- To provide additional challenge and an early introduction to Unit 3 & 4-level work
- Experience of sitting the GAT (General Achievement Test)
- To help maximise the ATAR to have the best possible chance of gaining entry to a range of tertiary courses

It should be noted that all students are strongly advised that their **"best four" subjects should be attempted in Year 12**, when the student will have better prospects of performing to his optimum level. A possible exception may be the case where a student is already a strong native speaker of a LOTE (N.B. English must be included in the "top four"). Students who are considering this type of VCE program should:

- Investigate career aspirations extensively during Year 10 and be very well informed of the most current entrance requirements and advice for any intended course or courses at relevant tertiary institutions
- Be able to provide substantial evidence to show the following capacities:
 - ✓ Strong academic ability across all subjects
 - ✓ The ability to work independently and without direct supervision in accordance with work requirement demands

- ✓ The ability to organise tasks and priorities to achieve an efficient workload
- ✓ The ability to set goals and manage time to meet all commitments and deadlines
- ✓ The ability to recognise difficulties and display initiative in seeking assistance as appropriate
- ✓ The ability to work cooperatively and communicate effectively with other students

Students should also consult with the relevant subject co-ordinator about the necessary background knowledge and skills required to effectively undertake the study. In some cases, the Unit 3 & 4 study co-ordinator will also need to be consulted. Several faculties have their own specific pre-requisites and conditions that you will have to consider.

All students intending to apply to undertake a 3 & 4 subject in Year 11 will be required to participate in a counselling process and a special VCE induction program specifically designed for students with this type of program. The subject co-ordinator must sign the Year 11 Course Selection Form indicating that the student has attended an information session and understands the demands of Units 3 & 4 before submission.

Year 10 SLCs may interview you regarding your application. The Year 11 and 12 SLCs may also consider further information (e.g. school reports). They may consult with relevant Year 10 class teachers or interview parents to decide whether or not to approve the application.

Students will be informed of SLCs' decisions before the end of the year so that they can commence preparation immediately for the Unit 3 & 4 study, if approved. Further, the Unit 3 & 4 subject co-ordinators will provide some material to assist students in their preparation during the transition program.



Vocational Education & Training (VET) at MHS

What is VET?

- VET = Vocational Education and Training
- VET focuses on students developing industry-specific skills
- It is designed to meet the needs of industry
- It is a two-year program combining VCE studies and a nationally accredited training course

Melbourne High School belongs to a group of secondary schools that form the Inner Melbourne VET Cluster (IMVC). The cluster rationalises and coordinates the many VET Programs in the district and therefore enables all students across all schools to access the different programs offered. The programs listed below are some of the ones that are available to Melbourne High School students. Please visit www.imvc.com.au to find out about VET studies or download the 2022 VET Handbook from Canvas

(under Careers/VET). Only programs listed on Wednesday afternoon or after school hours are available to MHS students.

Benefits of VET Programs:

- VET qualifications articulate directly into further education both at TAFE and some selected universities
- Improve a student's employability
- Students learn specific skills related to a career ambition
- Students are awarded a nationally recognised accredited certificate
- Broadens VCE options
- Helps prepare students for specific vocations

Contribution of VET to the VCE and ATAR:

- VET VCE Units contribute to a student's VCE program (up to 4 Units for 1 VET program)
- Some VET subjects contribute directly to the ATAR, like the study score of a VCE subject
- Other VET subjects gain increments (Block Credit) to the ATAR based on a 10% of the lowest study score out of the 'top four' subjects.
 - For example, if a student has a study score of 40 as the lowest study score from his 'top four' subjects he is awarded an increment of 4 for his VET block credit
- This increment is used when calculating the ATAR as a fifth or sixth subject
- Students will only gain ATAR increments if they have satisfactorily completed a Units 3 & 4 sequence.

All VCE VET subjects (Scored and Block Credit) contribute to a student's VCE program.

At MHS, students can include one VCE VET subject with a Unit 3 & 4 sequence in their VCE program. Students must study Units 1 & 2 of a VCE VET subject to be eligible for Units 3 & 4.

Examples of VET programs include:

Certificate III in Acting (Screen)	Four Units	Increment 10%
Certificate III in Allied Health *	Four Units	Score
Certificate II in Automotive	Four Units	Increment 10%
Certificate II in Community Services	Four Units	Score
Certificate II in Hospitality	Four Units	Score
Certificate II in Community Recreation	Four Units	Score
Certificate II in Engineering	Four Units	Score
Certificate II in Broadcasting	Four Units	Increment 10%
Certificate III in Laboratory Skills	Four Units	Score
Certificate III in Sport & Recreation	Four Units	Score
Certificate III in Technical Production (Music)	Four Units	Score

NOTE: All the above programs have a cost attached. Approximate costs range from \$300 to \$500.

For a full list of VET subjects go to: <http://www.vcaa.vic.edu.au/Pages/vet/programs/index.aspx#H2N1004E>

How VET works at MHS

Year 10 students will receive a digital VET Handbook from Ms Yeaman and should read it carefully.

The digital Expression of Interest form, from the above VET Handbook, must be completed and forwarded to Mr Theodoropoulos or Ms Yeaman by Friday 6 August, 2021. Students then register online with the IMVC. **Parents and students are advised that it is not possible to discontinue a VET course. Once it has been started, it must be completed, irrespective of any dislikes or challenges.**

Students and parents are obliged to attend an online orientation presentation event in Term 4. Information about other VET orientation sessions are in the IMVC VET Handbook. Students and parents will be notified in December of the cost of the VET subject.

Students attend the host school offering the VET Program, one afternoon per week for the duration of the program. Students will then undertake the practical and theoretical Units of study required to obtain the VET certificate.

VCE Structured Workplace Learning (SWL) Recognition

Students studying a VET subject can undertake a structured workplace placement. In a number of VET programs a structured work placement is a compulsory component of the course. These placements allow students to obtain some 'hands-on' practical experience within the specific industry. This placement is completed during the school holidays.

** Where a work placement is compulsory, a student will not pass the subject if they do not complete their work placement. In recognising the difficulty of completing SWL during the pandemic, it is very likely that health courses such as Certificate III in Allied Health will not be permitted to be undertaken by our students due to the difficulties in being able to complete all requirements of this VET subject.*

In recognition of the time students put into the placement and the learning that takes place, a VCE subject (SWL Recognition) is now available for students studying a VET subject and completing at least 80 hours of structured work placements. Students who complete 80 hours and some additional requirements can then receive a VCE Unit of credit.

Attendance is a key criterion for passing VET and can at times conflict with MHS events especially sport. **Careful consideration is required.**

For further information, students should contact Ms Travers or Mr. Theodoropoulos in the Careers Room.

Traineeship contribution to VCE

Students who undertake and complete a traineeship (in their part-time job) or other nationally recognized certificate course through Scouts or other community organizations may be eligible for credit towards their VCE.

Usually, a Certificate II course will give credit at the Unit 1 & 2 level and Certificate III course will provide credit at the Unit 3 & 4 level.

After completing the course, a student needs to bring in their Certificate of completion to Mr. Theodoropoulos (in T39), which includes the following information: Certificate Title, Name of the RTO (Registered Training Organisation) and an official statement of all the competencies completed.

Further options for Year 12

Algorithmics (Higher Education Scored Study - HESS) in Year 12

Algorithmics is a new VCE study offered at Melbourne High School. Students will investigate algorithmics, a structured framework for solving real-world practical problems with computational methods. Algorithmics is fundamental to computer science and software engineering and is essential for understanding the technical underpinnings of the information society. Beyond its use in computing, algorithmics provides a general discipline of rational thought through the methodical way it approaches problem solving across many different fields. This study enables students to:

- understand the mathematical foundations of computer science and software engineering
- use symbolic representations and abstraction to formalise real-world information problems
- design algorithms to solve practical information problems, using suitable abstract data types and algorithm design patterns
- investigate the efficiency and correctness of algorithms through formal analysis and empirically through implementation as computer programs
- reason about the physical, mathematical and philosophical limits of computability.



University Extension in Year 12

First-year university extension or higher education studies include first-year university studies and advanced standing TAFE courses recognised by the VCAA and made available to Year 12 VCE students who are very able academically and have the endorsement of the school principal. Upon satisfactory completion, these studies will be counted as an increment in the calculation of the ATAR. The increment will be calculated based on performance in the subject, with a possible maximum of 5.

First-year university extension programs or higher education studies are available to certain year 12 students at MHS, most commonly in languages for students who have completed Units 3 & 4 in Year 11. These count as a first-year university subject, so students will gain a credit for the subject upon enrolling in a relevant undergraduate course, as well as counting towards their ATAR. These credits are often transferable to other universities.

Year 11 students who would like to apply for a first-year university subject will need to collect the booklets and enrolment forms from Mr. Theodoropoulos in the Careers Co-ordinator's office and submit a written request to Mr. Ludowyke that supports their application. The Principal will decide if the school will support each application on a case-by-case basis.

Approval will be based on the following:

- ✓ The student has previously completed the equivalent Unit 3 & 4 sequence or is undertaking it in Year 12

- ✓ The student has maintained an outstanding academic record
- ✓ The selection promotes a breadth of subject choices
- ✓ The application is supported by the current subject teacher, the student welfare coordinator and the relevant SLC
- ✓ The revised, draft course selection is checked by the Careers Co-ordinator and the VCE Coordinator
- ✓ Consideration can be given to special circumstances identified by the SLC

Students whose applications are successful will do four Unit 3 & 4 sequences at MHS; the university study will count as their fifth subject and will be included in their ATAR as an increment.

The cost for extension and higher education studies varies. Most tertiary institutions offer university extension programs or higher education studies – students will need to go to their websites to find information about these as they do not send material to schools.

Choosing your VCE program

For further information, consult:

- Your Careers Coordinator, subject coordinators or SLCs
- VTAC – Prerequisites 2024
- Individual selection authorities in tertiary institutions; and institutional handbooks
- VTAC's *VCE Prerequisite and Course Explorer* (<http://delta.vtac.edu.au/CourseSearch/prerequisiteplanner.htm>) – which provides a list of all courses a student is eligible for with a given VCE program

VCE Student Program Selection Form for 2022

All Year 10 students are required to complete a 'Year 10-into-VCE Course Selection Form'. Students will indicate on this form the VCE Units of study they wish to undertake from 2022 to 2023. Students must indicate any VCE Unit 1 & 2 or VCE Unit 3 & 4 subjects that they have already undertaken by listing them on the course selection form.

All students will receive a copy of the selection form at one of the course counselling sessions conducted by Form Teachers during Term 3. As indicated on page 4 of this booklet, this form will need to be returned to the school, after which time the web-based subject selection portal will be opened, and students are to select subjects online at this time.

Changing a VCE Student Program

...in 2021 (Year 10)

Some Year 10 students may need to change their original VCE Program for 2022 after the SLCs have viewed their Term 3 results. Relevant students will be notified by their SLC in early Term 4. Please note that as the 2022 school timetable will be finalised by this date, affected students will be limited in the number of available subjects they can choose to move into.

...in 2022 (Year 11)

Year 11 students may seek to alter their VCE program at the change of semester during Year 11 if there are compelling reasons for change. While all such requests are considered in the best interests of the student, it must be acknowledged that administrative constraints may not always allow

appropriate changes to occur. It is, therefore, very important that each student selects a program of study to be followed for the whole of the school year.

...in 2022 (Year 12)

Year 12 programs are selected at the end of Year 11. Students can choose from the full range of Unit 3 & 4 sequences offered at MHS, except for subjects requiring Units 1 & 2 as a foundation.

Examples of VCE programs

These examples are **NOT** suggested programs; there are many possible scenarios. Each student must consult widely to select the best VCE program for their own interests and skills. For a broad education, it is recommended that students study subjects from a variety of different fields, e.g. languages, humanities, sciences, arts, mathematics, VET etc.

Interested in studying in the field of gallery or museum curatorship?

Year 11	An English group subject Units 1 & 2	General Maths Units 1 & 2	Studio Arts 1 & 2	French Units 1 & 2	History: 20th Century Units 1 & 2	Business Management Units 3 & 4
Year 12	An English group subject Units 3 & 4	Further Maths Units 3 & 4	Studio Arts 3 & 4	French Units 3 & 4	History: Revs Units 3 & 4	

Interested in studying in accounting or business?

Year 11	An English group subject Units 1 & 2	General Mathematics Units 1 & 2	Politics Units 1 & 2	Accounting Units 1 & 2	Economics Units 1 & 2	Business Management Units 3 & 4
Year 12	An English group subject Units 3 & 4	Further Mathematics Units 3 & 4	Global Politics Units 3 & 4	Accounting Units 3 & 4	Economics Units 3 & 4	

Interested in studying engineering or physical sciences?

Year 11	An English group subject Units 1 & 2	Mathematical Methods Units 1 & 2	Specialist Mathematics Units 1 & 2	Physics Units 1 & 2	Chemistry Units 1 & 2	Extended Investigation Units 3 & 4
Year 12	An English group subject Units 3 & 4	Mathematical Methods Units 3 & 4	Specialist Mathematics Units 3 & 4	Physics Units 3 & 4	Chemistry Units 3 & 4	

Interested in studying in the fields of urban planning or architecture?

Year 11	An English group subject Units 1 & 2	Mathematical Methods Units 1 & 2	Geography Units 1 & 2	Vis.Comm. Units 1 & 2	Physics Units 1 & 2	Extended Investigation Units 3 & 4
Year 12	An English group subject Units 3 & 4	Further Mathematics Units 3 & 4	Geography Units 3 & 4	Vis.Comm. Units 3 & 4	Physics Units 3 & 4	

Interested in studying in the fields of economics & commerce?

Year 11	An English group subject Units 1 & 2	Mathematical Methods Units 1 & 2	Philosophy Units 1 & 2	Economics Units 1 & 2	Computing Units 1 & 2	Psychology Units 3 & 4
Year 12	An English group subject Units 3 & 4	Mathematical Methods Units 3 & 4	Further Mathematics Units 3 & 4	Economics Units 3 & 4	Computing: Informatics Units 3 & 4	

Interested in studying in the field of media & communications?

Year 11	English Units 1 & 2	English Language Units 1 & 2	Media Units 1 & 2	Vis. Comm. Units 1 & 2	VET: Multimedia Units 1 & 2	Theatre Studies Units 3 & 4
Year 12	English Units 3 & 4	English Language Units 3 & 4	Media Units 3 & 4	Vis. Comm. Units 3 & 4	VET: Multimedia Units 3 & 4	

Interested in studying international relations?

Year 11	English Units 1 & 2	History: 20th Century Units 1 & 2	Politics Units 1 & 2	Japanese Units 1 & 2	Economics Units 1 & 2	Psychology Units 3 & 4
Year 12	English Units 3 & 4	History: Revolutions Units 3 & 4	Global Politics Units 3 & 4	Japanese Unit 3 & 4	Economics Units 3 & 4	

Interested in studying in the field of social work?

Year 11	An English group subject Units 1 & 2	Philosophy Units 1 & 2	Psychology Units 1 & 2	General Maths Units 1 & 2	VET: Comm. Service Units 1 & 2	Sociology Units 3 & 4
Year 12	An English group subject Units 3 & 4	Health & Human Dev. Units 3 & 4	Psychology Units 3 & 4	Further Maths Units 3 & 4	VET: Comm. Service Units 3 & 4	

Interested in studying in the field of law?

Year 11	An English group subject Units 1 & 2	Legal Studies Units 1 & 2	Politics Units 1 & 2	History: 20th Century Units 1 & 2	Sociology 1 & 2	Philosophy Units 3 & 4
Year 12	An English group subject Units 3 & 4	Legal Studies Units 3 & 4	Global Politics Units 3 & 4	History: Revolutions Units 3 & 4	Sociology 3 & 4	

Interested in studying in the field of medicine?

Year 11	An English group subject Units 1 & 2	Chemistry Units 1 & 2	Biology Units 1 & 2	Psychology Units 1 & 2	German Units 1 & 2	Health & Human Development Units 3 & 4
Year 12	An English group subject Units 3 & 4	Chemistry Units 3 & 4	Biology Units 3 & 4	Psychology Units 3 & 4	German Units 3 & 4	

VCE units offered at MHS in 2022/2023

The following VCE subjects are available for Year 11s to study at MHS

VCE STUDY AREA	Units 1 & 2 Codes	Unit 3 & 4 Codes	Teacher Contact
ACCOUNTING	11AC	12AC	Ms. Belvedere
BIOLOGY	11BI	12BI	Ms. Mulholland
BUSINESS MANAGEMENT	11BM	12BM	Mr. Dowling
CHEMISTRY	11CH	Units 3 & 4 are only available in Year 12	Dr. Kreher

The following VCE subjects are available for Year 11s to study at MHS

VCE STUDY AREA	Units 1 & 2 Codes	Unit 3 & 4 Codes	Teacher Contact
COMPUTING (APPLIED): Units 1 & 2	11IT	not available	Mr. Drew
COMPUTING: ALGORITHMIC (HESS)	not available	Units 3 & 4 are only available in Year 12	Mr. Drew
COMPUTING: SOFTWARE DEVELOPMENT	not available	12ID	Mr. Drew
ECONOMICS	11EC	12EC	Mr. Kaderle
ENGLISH	11EN	Units 3 & 4 are only available in Year 12	Mr. Mahoney
ENGLISH LANGUAGE	11EL	Units 3 & 4 are only available in Year 12	Mr. Mahoney
ENGLISH LITERATURE	11LI	Units 3 & 4 are only available in Year 12	Mr. Mahoney
EXTENDED INVESTIGATION	not available	12EI	Mr Ong
GEOGRAPHY	11GE	12GE	Mr. Pask
HEALTH AND HUMAN DEVELOPMENT	not available	12HH	Mr Guthrie
HISTORY: 20th CENTURY	11HI	not available	Mr. Owen
HISTORY: REVOLUTIONS	not available	12HR	Mr. Sloan
LEGAL STUDIES	11LS	12LS	Mr. Dowling
LANGUAGE: FRENCH	11LF	Units 3 & 4 are only available in Year 12	Mr. Lorient
LANGUAGE: GERMAN	11LG	Units 3 & 4 are only available in Year 12	Ms. Neal
LANGUAGE: INDONESIAN (2 nd Language)	11LN	Units 3 & 4 are only available in Year 12	Ms. Wantania
LANGUAGE: JAPANESE (2 nd Language)	11LJ	Units 3 & 4 are only available in Year 12	Ms Inaba
LANGUAGE: OUTSIDE MHS (VSL etc.)	11LO	12LO	Ms Yeaman
MATHS: GENERAL MATHS (Further)	11MF	Units 3 & 4 are only available in Year 12	Ms. Petrie
MATHS: MATHEMATICAL METHODS	11MM	Units 3 & 4 are only available in Year 12	Ms. Petrie & Dr. Shin
MATHS: SPECIALIST MATHEMATICS	11MS	Units 3 & 4 are only available in Year 12	Dr. Shin
MEDIA	11ME	12ME	Mr. Morton
MUSIC PERFORMANCE	11MP	12MP	Mr. de Korte
MUSIC INVESTIGATION	not available	12MI	Mr. de Korte
PHILOSOPHY	11PI	12PI	Dr. Barham
PHYSICAL EDUCATION	11PE	12PE	Mr. Veale
PHYSICS	11PH	Units 3 & 4 are only available in Year 12	Mr. Draper
POLITICS	11PO	not available	Mr. Owen
POLITICS – GLOBAL	not available	12PG	Mr. Owen
PSYCHOLOGY	11PY	12PY	Mr. Crocket

The following VCE subjects are available for Year 11s to study at MHS

VCE STUDY AREA	Units 1 & 2 Codes	Unit 3 & 4 Codes	Teacher Contact
SOCIOLOGY	11SO	12SO	Ms. Kakolyris
THEATRE STUDIES	11TS	12TS	Ms. Simpson
VISUAL ART - STUDIO ARTS	11SA	12SA	Ms. Brysha
VISUAL COMMUNICATION DESIGN	11VC	12VC	Mr. Moore
VET	11VE	Units 3 & 4 are only available in Year 12	Mr. Theodoropoulos

VCE unit descriptions

Below is a complete list of descriptions for subjects offered at Melbourne High School. The descriptions are taken from summary documents. More detailed information is available on the website for the Victorian Curriculum and Assessment Authority at: <http://www.vcaa.vic.edu.au/vce/studies/index.html>

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

Unit 1 Establishing and operating a service business

This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of accounting information by internal and external users. The cash basis of recording and reporting is used throughout this unit. Using single entry recording of financial data and analysis of accounting information, students examine the role of accounting in the decision-making process for a sole proprietor of a service business.

Unit 2 Accounting for a trading business

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

Unit 3 Recording and reporting for a trading business

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 use the double entry system of recording financial data and prepare reports using the accrual basis of accounting. The perpetual method of stock recording with the First In, First Out (FIFO) method is used.

Unit 4 Control and analysis of business performance

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. The unit is based on the double entry accounting system and the accrual method of reporting for a single activity trading business using the perpetual inventory recording system. Students investigate the role and importance of budgeting for the business and undertake the practical completion of budgets for cash, profit and financial position. Students interpret accounting information from accounting reports and graphical representations and analyse the results to suggest strategies to the owner on how to improve the performance of the business.

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

Unit 1 How do organisms regulate their function?

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 of 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.

Unit 2 How does inheritance impact on diversity?

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

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 interdependences between species, focusing on how keystone species and top predators structure and maintain the 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.

Unit 3 How do cells maintain life?

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

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 poisons on the cellular respiration pathway.

The application of ethical understanding in VCE Biology involves the consideration of approaches to bioethics and ethical concepts. A student-designed scientific investigation related to cellular processes and/or responses to challenges over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format.

Unit 4 How does life change and respond to challenges?

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

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 for 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 responds 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 diseases; 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.

Business Management - <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/business-management/Pages/Index.aspx>

Unit 1 Planning a business

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

Unit 2 Establishing a business

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

Unit 3 Managing a business

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

Unit 4 Transforming a business

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

Chemistry - <https://www.vcaa.vic.edu.au/assessment/vce-assessment/past-examinations/Pages/Chemistry.aspx>

Unit 1 How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms. Students examine the modification of metals, assess the factors that affect the formation of ionic crystals and investigate a range of non-metallic substances from molecules to polymers and giant lattices and relate their structures to specific applications. Students are introduced to quantitative concepts in chemistry including the mole concept. They apply their knowledge to determine the relative masses of elements and the composition of substances. Throughout the unit students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena. A research investigation is undertaken in Area of Study 3 related to one of ten options that draw upon and extend the content from Area of Study 1 and/or Area of Study 2.

Unit 2 What makes water such a unique chemical?

Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students examine the polar nature of a water molecule and the intermolecular forces between water molecules. They explore the relationship between these bonding forces and the physical and chemical properties of water. In this context students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. Students are introduced to stoichiometry and to analytical techniques and instrumental procedures and apply these to determine concentrations of different species in water samples, including chemical contaminants. They use chemistry terminology including symbols, units, formulas and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water. A practical investigation into an aspect of water quality is undertaken in Area of Study 3. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

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

The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources,

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

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

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

Computing: Algorithmics (HESS) (Units 3&4 only in Year 12) -

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

Unit 3 Algorithmic problem solving

This unit focuses on how algorithms are used for solving complex problems. Algorithms are systematic problem-solving procedures that exist independently of computers. The study of algorithms lies at the heart of computer science and provides the formal foundation for computer programming. However, algorithmic problem solving is also a technique that can be applied very broadly in addressing a wide range of complex practical problems. In Area of Study 1 students acquire and apply a range of knowledge and skills to model real-world information. This includes the design of data structures for a problem that will be further considered in Area of Study 2. In Area of Study 2 students learn how to design algorithms following a variety of simple algorithm design patterns. They apply this knowledge to design and implement the algorithm that works on the data structures determined in Area of Study 1. In Area of Study 3 students acquire and apply knowledge and skills for testing, evaluating the adequacy of, and documenting solutions.

Unit 4 Principles of algorithm design

This unit focuses on the algorithm design process. Students develop the knowledge and skills to identify the resources that an algorithm needs to function effectively. In Area of Study 1 students investigate the correctness and efficiency of algorithms and apply these to the formal analysis of a naive algorithm for a given problem. In Area of Study 2 students encounter a variety of more sophisticated algorithm design patterns, and apply their knowledge of these to construct an improved solution for the problem posed in Area of Study 1. In Area of Study 3 students learn about the hard limits to computability, and that there are computational problems which cannot be solved using any kind of computational machinery.

Computing (Applied): Units 1&2 - <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/computing/Pages/index.aspx>

Unit 1 Applied Computing

In this unit students focus on how data, information and networked digital systems can be used to meet a range of users' current and future needs. In Area of Study 1 students collect primary data when investigating an issue, practice or event and create a digital solution that graphically presents the findings of the investigation. In Area of Study 2 students examine the technical underpinnings of wireless and mobile networks, and security controls to protect stored and transmitted data, to design a network solution that meets an identified need or opportunity. They predict the impact on users if the network solution were implemented. In Area of Study 3 students acquire and apply their knowledge of information architecture and user interfaces, together with web authoring skills, when creating a website to present different viewpoints on a contemporary issue.

Unit 2 Applied Computing

In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. In Area of Study 1 students develop their computational thinking skills when using a programming or scripting language to create solutions. They engage in the design and development stages of the problem-solving methodology. In Area of Study 2 students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations that are clear, usable and attractive, and reduce the complexity of data. In Area of Study 3 students apply all stages of the problem-solving methodology to create a solution using database management software and explain how they are personally affected by their interactions with a database system.

Computing: Software Development - <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/appliedcomputing-softwaredevelopment/Pages/index.aspx>

Unit 3 Software Development

In Software development Units 3 and 4, students focus on the application of a problem-solving methodology and underlying skills to create purpose-designed solutions using a programming language. In Unit 3 students develop a detailed understanding of the analysis, design and development stages of the problem-solving methodology and use a programming language to create working software modules. In Area of Study 1 students respond to given software designs and develop a set of working modules through the use of a programming language. Students examine a range of software design representations and interpret these when applying specific functions of a programming language to create working modules. In Area of Study 2 students analyse a need or opportunity, plan and design a solution and develop computational, design and systems thinking skills. This forms the first part of a project that is completed in Unit 4.

Unit 4 Software Development

In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions. They consider the risks to software and data during the software development process, as well as throughout the use of the software solution by an organisation. In Area of Study 1, students apply the problem-solving stages of development and evaluation by transforming their detailed design prepared in Unit 3 into a software solution. They evaluate the efficiency and effectiveness of the solution in meeting needs or opportunities. In Area of Study 2 students examine the security practices of an organisation and the risks to software and data during the development and use of the software solutions. Students evaluate the current security practices and develop a risk management plan.

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

Unit 1 The behaviour of consumers and businesses

Economics is a dynamic and constantly evolving field. As a social science, Economics is interested in the way humans behave and the decisions made to meet the needs and wants of society. In this unit students explore their role in the economy, how they interact with businesses and the way economic models and theories have been developed to explain the causes and effects of human action. Students explore some fundamental economic concepts. They examine basic economic models where consumers and businesses engage in mutually beneficial transactions and investigate the motivations and consequences of both consumer and business behaviour. They examine how individuals might respond to incentives and how technology may have altered the way businesses and consumers interact. Students are encouraged to investigate contemporary examples and case studies to enhance their understanding of the introductory economic concepts. Students examine a simple microeconomic model to explain changes in prices and quantities traded. Through close examination of one or more key markets they gain insight into the factors that may affect the way resources are allocated in an economy and how market power can affect efficiency and living standards.

Unit 2 Contemporary economic issues

As a social science, economics often looks at contemporary issues where there are wide differences of opinion and constant debate. In most instances the decisions made by consumers, businesses and governments may benefit some stakeholders but not others. Trade-offs, where the achievement of one economic or public policy goal may come at the expense of another, are the subject of much debate in economic circles. Students focus on the possible trade-off between the pursuit of growth in incomes and production and the goal of environmental sustainability and long-term economic prosperity. They investigate the importance of economic growth in terms of raising living standards and evaluate how achievement of this goal might result in degradation of the environment and the loss of key resources. Students examine whether the goals of economic growth and environmental sustainability can be compatible and discuss the effect of different policies on the achievement of these important goals. Economic growth is generally associated with improvements in living standards as real incomes grow over time. Students explore how the benefits of economic growth are shared in an economy and begin to appreciate that efforts to increase economic efficiency might lead to a more inequitable distribution of income. They evaluate the role of government intervention in markets and discuss whether achieving greater equality causes a decline in economic growth and average living standards. Through the analysis of specific policy measures, students analyse and question the nature of this key trade-off and evaluate whether there is a degree of compatibility between equity and efficiency. Students consider the influence on the world's

living standards of the decisions made and the actions taken in the global economy by investigating one or more contemporary global issues and the trade-offs involved. Through an examination of the issue, students gain a greater appreciation of additional factors that can affect living standards in both Australia and in other nations. They consider the perspectives of relevant stakeholders and evaluate the validity of individual and collective responses to global issues.

Unit 3 Australia's economic prosperity

The Australian economy is constantly evolving. The main instrument for allocating resources is the market but the Australian Government also plays a significant role in this regard. In this unit students investigate the role of the market in allocating resources and examine the factors that are likely to affect the price and quantity traded for a range of goods and services. They develop an understanding of the key measures of efficiency and how market systems can result in efficient outcomes. Students consider contemporary issues to explain the need for government intervention in markets and why markets might fail to maximise society's living standards. As part of a balanced examination, students also consider unintended consequences of government intervention in the market. In this unit students develop an understanding of the macroeconomy. They investigate the factors that influence the level of aggregate demand and aggregate supply in the economy and use models and theories to explain how changes in these variables might influence the achievement of the Australian Government's domestic macroeconomic goals and affect living standards. Australia's economic prosperity depends, in part, on strong economic relationships with its major trading partners. Students investigate the importance of international economic relationships in terms of their influence on Australia's living standards. They analyse how international transactions are recorded, predict how economic events might affect the value of the exchange rate and evaluate the effect of trade liberalisation.

Unit 4 Managing the economy

The ability of the Australian Government to achieve its domestic macroeconomic goals has a significant effect on living standards in Australia. The Australian Government can utilise a wide range of policy instruments to influence these goals and to positively affect living standards. Students develop an understanding of how the Australian Government can alter the composition and level of government outlays and receipts to directly and indirectly influence the level of aggregate demand and the achievement of domestic macroeconomic goals. Area of Study 1 focuses on the role of aggregate demand policies in stabilising the business cycle to achieve the Australian Government's domestic macroeconomic goals. Students examine the role of the Reserve Bank of Australia (RBA) with a focus on its responsibility to alter the cost and availability of credit in the economy. Students consider each of the transmission mechanisms through which changes to interest rates can affect the level of aggregate demand in the economy and how these changes might affect the achievement of the Australian Government's domestic macroeconomic goals. Students examine and analyse the effects of the last two Australian Government budgets, and how particular initiatives have helped to stabilise the level of aggregate demand and influenced the achievement of domestic macroeconomic goals. In Area of Study 2 students consider how the Australian Government utilises aggregate supply policies to manage the Australian economy. If the productive capacity of the economy is expanding, growth in aggregate demand can be met and economic growth can be maintained both now and into the future. Students investigate the role of both market-based and interventionist approaches to managing the supply side of the economy. They evaluate these policy responses in terms of their effect on incentives and consider how they increase competition and efficiency in the economy. Students assess the role of microeconomic reform in terms of its effect on economic prosperity and the achievement of the Australian Government's domestic macroeconomic goals.

English Faculty Studies: English, EAL, English Language and Literature

English & English as an Additional Language (EAL) -

<https://www.vcaa.vic.edu.au/assessment/vce-assessment/past-examinations/Pages/English.aspx>
<https://www.vcaa.vic.edu.au/assessment/vce-assessment/past-examinations/Pages/English-as-an-Additional-Language.aspx>

Unit 1

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

Unit 2

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

Unit 3

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

Unit 4

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

English Language - <https://www.vcaa.vic.edu.au/assessment/vce-assessment/past-examinations/Pages/English-Language.aspx>

Unit 1 Language and communication

Language is an essential aspect of human behaviour and the means by which individuals relate to the world, to each other and to the 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 an 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.

Unit 2 Language change

In this unit, students focus on language change. Languages are dynamic and language change is an inevitable and a 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 from the present, 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.

Unit 3 Language variation and social purpose

In this unit students investigate English language in contemporary Australian social settings, along a continuum of informal and formal registers. They consider language as a means of social interaction, exploring how through written and spoken texts we communicate information, ideas, attitudes, prejudices and ideological stances. Students examine the stylistic features of formal and informal language in both spoken and written modes: the grammatical and discourse structure of language; the choice and meanings of words within texts; how words are combined to convey a message; the purpose in conveying a message; and the particular context in which a message is conveyed. Students learn how to describe the interrelationship between words, sentences and text as a means of exploring how texts construct message and meaning. Students consider how texts are influenced by the situational and cultural contexts in which they occur. They examine how function, field, mode, setting and the relationships between participants all contribute to a person's language choices, as do the values, attitudes and beliefs held by participants and the wider community. Students learn how speakers and writers select features from within particular stylistic variants, or registers, and this in turn establishes the degree of formality within a discourse. They learn how language can be indicative of relationships, power structures and purpose through the choice of a particular variety of language and through the ways in which language varieties are used in processes of inclusion and exclusion.

Unit 4 Language variation and identity

In this unit students focus on the role of language in establishing and challenging different identities. There are many varieties of English used 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 English varieties also play a role in constructing users' social and cultural identities. Students examine a range of texts to explore the ways different identities are constructed. These texts include extracts from novels, films or television programs, poetry, letters and emails, transcripts of spoken interaction, songs, advertisements, speeches and bureaucratic or official documents. Students explore how our sense of identity evolves in response to situations and experiences and is influenced by how we see ourselves and how others see us. Through our language we express ourselves as individuals and signal our membership of particular groups. Students explore how language can distinguish between 'us' and 'them', creating solidarity and reinforcing social distance.

English Literature - <https://www.vcaa.vic.edu.au/assessment/vce-assessment/past-examinations/Pages/Literature.aspx>

Unit 1 Approaches to literature

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

Unit 2 Context and connections

In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and

shape different meanings. Drawing on a range of literary texts, students consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted. Students analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

Unit 3 Form and transformation

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

Unit 4 Interpreting texts

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

Extended Investigation (Units 3&4 only) -

<https://www.vcaa.vic.edu.au/assessment/vce-assessment/past-examinations/Pages/Extended-Investigation.aspx>

Unit 3 Designing an Extended Investigation

In this unit, students develop skills in question construction and design, explore the nature and purpose of research and various research methodologies, critically review research literature and identify a specific research question. Students undertake initial research and document their progress in their Extended Investigation Journal. They use their Journal to record the progressive refinement of a selected area of interest and the distillation of an individual research question. The research question is formally lodged with the VCAA during Term 1. Underpinning the student's preparatory work for their investigation is the development and application of critical thinking skills. While the critical thinking component of this study is located in Area of Study 3, it is assumed and expected that students will develop and utilise these skills throughout Unit 3 in the context of developing their individual investigation and continue to exercise them in Unit 4.

Unit 4 Presenting an Extended Investigation

This unit is comprised of two parts that together constitute the student's completion of their investigation. The results of the investigation are presented in a final written report and in an oral presentation incorporating a defence to an educated non-specialist audience. While undertaking Unit 4, students are supported and monitored to maintain the dimensions and scope of their investigation and to meet the milestones established in Unit 3. The Extended Investigation Journal is used to record the progress of their investigation and the assistance they receive from supervising teachers, mentors and others.

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

Unit 1 Hazards and disasters

In this unit students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them by people. Hazards represent the potential to cause harm to people and or the environment whereas disasters are judgments about the impacts of hazard events. Hazards include a wide range of situations including those within local areas, such as fast-moving traffic or the likelihood of coastal erosion, to regional and global hazards such as climate change, drought and infectious disease. Students examine the processes involved with hazards and hazard events, including their causes and impacts, human responses to hazard events and interconnections between human activities and natural phenomena. This unit investigates how people and organisations have responded to specific types of hazards, including attempts to reduce vulnerability to, and the impact of, hazard events. Fieldwork is an important part of student activity in this unit and a report forms the basis of a major assessment task.

Unit 2 Tourism

In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it is changing together with its impacts on people, places and environments. They select contrasting examples of tourism from within Australia and elsewhere in the world to support their investigations. Over one billion tourists per year cross international boundaries with greater numbers involved as domestic tourists within their own countries. The scale of tourist movements since the 1950s and its predicted growth has had and continues to have a significant impact on local, regional and national environments, economies and cultures. The travel and tourism industry are directly responsible for one in every twelve jobs globally and generates around 5 per cent of its GDP. Students

undertake fieldwork in this unit and report on fieldwork using the structure provided. Students will investigate the positive and negative impacts of tourism at local, national and global scales including fieldwork activity.

Unit 3 Changing the land

This unit focuses on two investigations of geographical change: change to land cover and change to land use. Land cover includes biomes such as forest, grassland, tundra and wetlands, as well as land covered by ice and water. Natural land cover has been altered by many processes such as geomorphological events, plant succession and climate change. People have modified land cover to produce a range of land uses to satisfy needs such as housing, resource provision, communication, recreation and so on. Students investigate the distribution and causes of two major processes that are changing land cover in many regions of the world: • deforestation and • melting glaciers and ice sheets. At a local scale, students investigate land use change using appropriate fieldwork techniques and secondary sources. They investigate the scale of change, the reasons for change and the impacts of change. Students undertake fieldwork and produce a fieldwork report using the structure provided.

Unit 4 Human population – trends and issues

In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. In this unit, students study population dynamics before undertaking an investigation into two significant population trends arising in different parts of the world. They examine the dynamics of populations and their economic, social, political and environmental impacts on people and places. The growth of the world's population from 2.5 billion in 1950 to over 7 billion since 2010 has been on a scale without parallel in human history. Much of the current growth is occurring within developing countries while the populations in many developed countries are either growing slowly or are declining. Populations change by growth and decline in fertility and mortality, and by people moving to different places. The Demographic Transition Model and population structure diagrams provide frameworks for investigating the key dynamics of population. Population movements such as voluntary and forced movements over long or short terms add further complexity to population structures and to economic, social, political and environmental conditions. Many factors influence population change, including the impact of government policies, economic conditions, wars and revolution, political boundary changes and hazard events.

Health and Human Development (Units 3 & 4 only) -

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

Unit 3 Australia's health

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

Unit 4 Global health and human development

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

History: 20th Century (Units 1&2 only) -

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

Unit 1 Twentieth-century history 1918–1939

In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars. World War One is regarded by many as marking the beginning of twentieth century history since it represented such a complete departure from the past and heralded changes that were to have an impact for decades to come. The post-war treaties ushered in a period where the world was, to a large degree, reshaped with new borders, movements, ideologies and

power structures. These changes affected developments in Europe, the USA, Asia, Africa and the Middle East. Economic instability caused by the Great Depression also contributed to the development of political movements. Despite ideals about future peace, reflected in the establishment of the League of Nations, the world was again overtaken by war in 1939. The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarised and anti-western. In the USA, the consumerism and material progress of the 1920s was tempered by the Great Crash of 1929. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

Unit 2 Twentieth-century history 1945–2000

In Unit 2 students explore the nature and impact of the Cold War and challenges and changes to existing political, economic and social arrangements in the second half of the twentieth century. The establishment of the United Nations in 1945 was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. The Universal Declaration of Human Rights adopted in 1948 was the first global expression of human rights. Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War. The period also saw challenge and change to the established order in many countries. The continuation of moves towards decolonisation led to independence movements in former colonies in Africa, the Middle East, Asia and the Pacific. New countries were created and independence was achieved through both military and diplomatic means. Old conflicts also continued and terrorism became increasingly global. The second half of the twentieth century also saw the rise of social movements that challenged existing values and traditions, such as the civil rights movement, feminism and environmental movements.

History: Revolutions (Units 3&4 only) -

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

Units 3 & 4

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror. In these units students develop an understanding of the complexity and multiplicity of causes and consequences in the revolutionary narrative. They construct an argument about the past using primary sources as evidence and evaluate the extent to which the revolution brought change to the lives of people. They consider how perspectives of the revolution give an insight into the continuity and change experienced by those who lived through dramatic revolutionary moments. Students evaluate historical interpretations about the causes and consequences of revolution and the effects of change instigated by the new order. In developing a course, teachers select two revolutions to be studied from the following, one for Unit 3 and one for Unit 4: • The American Revolution of 1776. • The French Revolution of 1789. • The Russian Revolution of October 1917. • The Chinese Revolution of 1949. For the two selected revolutions, both areas of study must be undertaken. Students are expected to demonstrate a progression from Unit 3 to Unit 4 in historical understanding and skills. Melbourne High School teaches the French and Russian Revolutions.

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

Unit 1 Guilt & liability

The law influences all aspects of society – at home, at work and in the wider community. Criminal law and civil law are used by society to preserve social cohesion, and to ensure the protection of people from harm and from the infringement of their rights. Students will investigate key concepts related to criminal and civil law, including types of crime, what the prosecution need to prove in order to gain a conviction, as well as possible defences to crime available to the accused. For civil law, students will study torts such as negligence and defamation, and what the plaintiff needs to prove to substantiate their claim, as well as defences available to the defendant. Various cases will be studied to see how criminal law and civil law apply in practice.

Students will investigate two recent criminal cases and assess the evidence presented by both the prosecution and the defence. They will also research the outcome of the case and assess the extent to which justice was achieved, in terms of three principles of justice: fairness, equality and access. Students will also explore the main features and operations of criminal and civil courts and consider the effectiveness of our legal system in achieving justice. Students will have an opportunity to participate in an excursion to the County Court to observe a criminal trial in action! There will also be an opportunity for students to prepare and engage in a mock trial, where a crime scene will be outlined and students will adopt roles such as: a panel of judges, prosecutors, defence barristers, solicitors, witnesses, police officers, court

officials, the defendant and the jury. This provides an opportunity for students to apply their knowledge of criminal law to a simulated court environment. This course will be ideal for those students who may be considering a Law Degree at University.

Unit 2 Sanctions, remedies & rights

Criminal and civil law aim to protect the rights of individuals. When rights are infringed, a case or dispute may arise which needs to be determined or resolved, and sanctions or remedies may be imposed. This unit focuses on the enforcement of criminal law and civil law, including the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness. These may include sanctions such as imprisonment, capital punishment, community correction orders and fines. Civil remedies to be studied include damages and injunctions. Students will study both criminal cases and civil cases from the past four years to form a judgement about the ability of sanctions and remedies to achieve the principles of justice. Students develop their understanding of the way rights are protected in Australia and in another country, and possible reforms to the protection of rights. They examine a significant case in relation to protection of rights in Australia. Students will investigate how Australia protects rights with that of another country, and analyse which approach is more effective.

Unit 3 Rights & justice

The Victorian justice system, which includes the criminal and civil justice systems, aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. In this unit students examine the methods and institutions in the 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, such as fairness, equality and access, are upheld in our legal system. They discuss recent reforms from the past four years and recommended reforms to enhance the ability of the justice system to achieve the principles of justice. Throughout this unit, students apply legal reasoning and information to actual cases and to hypothetical scenarios. Students will also have the opportunity to attend an excursion to the Supreme Court, where they will be able to apply legal principles to an actual case they observe. This course will be ideal for those students who may be considering a Law Degree at University.

Unit 4 The people and the law

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 how it protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationship between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing law reform. Students will investigate recent areas of law reform and assess the extent to which these changes have improved our legal system. Throughout this unit, students apply legal reasoning and information to significant High Court cases as well as to hypothetical scenarios.

Languages – French, German, Indonesian 2nd Language, Japanese 2nd Language

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

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

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

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

General Information

The study of a language other than English contributes to the overall education of students, most particularly in the area of communication, but also in the areas of intercultural learning, cognitive development, literacy and general knowledge. It provides access to the culture of communities which use the language and promotes understanding of different attitudes and values within the wider Australian community and beyond. The ability to communicate in another language, in conjunction with other skills, may provide opportunities for employment in the fields of interpreting, social services, ethnic affairs, the tourism and hospitality industries, international relations, the arts, commerce, technology, science, education etc. Students demonstrate the achievement of the outcomes based on progressive development of skills in listening, speaking, reading and writing through activities and tasks organised around the areas of study. The areas of study in Units 1–4 focus on the areas of study for language and culture, which are made up of the themes and topics, text types, kinds of writing, vocabulary and grammar. They are common to all four Units of the study and are published in the study design. They are tailored to the specific qualities of the language being studied.

Unit 1
This unit's main areas of focus are to be able to establish and maintain a spoken or written exchange related to personal areas of experience; to be able to listen to, read and obtain information from spoken and written texts; and to be able to produce a personal response to a text focusing on real or imaginary experience.
Unit 2
This unit's main areas of focus are to be able to participate in a spoken or written exchange related to making arrangements and completing transactions; to be able to listen to, read, and extract and use information and ideas from spoken and written texts; and to be able to give expression to real or imaginary experience in spoken or written form.
Unit 3
This unit's main areas of focus are to be able to express ideas through the production of original texts; to be able to analyse and use information from spoken texts; and to be able to exchange information, opinions and experiences.
Unit 4
This unit's main areas of focus are to be able to analyse and use information from written texts, and to be able to respond critically to spoken and written texts which reflect aspects of the language and culture of (chosen language)-speaking communities.

Mathematics Studies: General / Further Mathematics, Mathematical Methods, Specialist Mathematics

Note: The VCE Mathematics Study Designs will change in 2023. Unless the implementation of the new Study Designs are staggered (with the Units 1 & 2 changing in 2023 and Units 3 & 4 in 2024), there will be substantial changes to the content of Units 1 & 2 General Mathematics and Specialist Mathematics in 2022. There are minor changes to the Mathematical Methods Study Design. Neither the new Study Design nor the timeline for its implementation were finalized when this handbook was published.

General Mathematics Units 1&2 (leading to Further Mathematics)

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

General Mathematics provides for different combinations of student interests and preparation for study of VCE Mathematics at the Unit 3 and 4 level. The areas of study for General Mathematics Unit 1 and Unit 2 are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Geometry, measurement and trigonometry', 'Graphs of linear and non-linear relations' and 'Statistics'. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, financial and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Further Mathematics Units 3&4- <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/furthermathematics/Pages/Index.aspx>

Further Mathematics consists of two areas of study, a compulsory Core area of study to be completed in Unit 3 and an Applications area of study to be completed in Unit 4. The Core comprises 'Data analysis' and 'Recursion and financial modelling'. The Applications comprises two modules to be completed in their entirety, from a selection of four possible modules: 'Matrices', 'Networks and decision mathematics', 'Geometry and measurement' and 'Graphs and relations'. 'Data analysis' comprises 40 per cent of the content to be covered, 'Recursion and financial modelling' comprises 20 per cent of the content to be covered, and each selected module comprises 20 per cent of the content to be covered. Assumed knowledge and skills for the Core are contained in the General Mathematics Units 1 and 2 topics: 'Computation and practical arithmetic', 'Investigating and comparing data distributions', 'Investigating relationships between two numerical variables', 'Linear graphs and modelling', 'Linear relations and equations', and 'Number patterns and recursion'. For each module there are related topics in General Mathematics Units 1 and 2. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, and graphs. They should have a facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, financial and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

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

Unit 1

Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. They are

designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units. The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra' which extends across Units 1 and 2. This content should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units 1 and 2. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs and differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

Unit 2

In Unit 2 students focus on the study of simple transcendental functions and the calculus of simple algebraic functions. The areas of study are 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics'. At the end of Unit 2, students are expected to have covered the material outlined in each area of study. Material from the 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics' areas of study should be organised so that there is a clear progression of skills and knowledge from Unit 1 to Unit 2 in each area of study. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation and anti-differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

Units 3 & 4

Mathematical Methods Units 3 and 4 are completely prescribed and extend the introductory study of simple elementary functions of a single real variable, to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. Units 3 and 4 consist of the areas of study 'Functions and graphs', 'Calculus', 'Algebra' and 'Probability and statistics', which must be covered in progression from Unit 3 to Unit 4, with an appropriate selection of content for each of Unit 3 and Unit 4. Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and skills for the outcomes of Mathematical Methods Units 3 and 4. For Unit 3 a selection of content would typically include the areas of study 'Functions and graphs' and 'Algebra', and applications of derivatives and differentiation, and identifying and analysing key features of the functions and their graphs from the 'Calculus' area of study. For Unit 4, this selection would typically consist of remaining content from the areas of study: 'Functions and graphs', 'Calculus' and 'Algebra', and the study of random variables and discrete and continuous probability distributions and the distribution of sample proportions. For Unit 4, the content from the 'Calculus' area of study would be likely to include the treatment of anti-differentiation, integration, the relation between integration and the area of regions specified by lines or curves described by the rules of functions, and simple applications of this content. The selection of content from the areas of study should be constructed so that there is a development in the complexity and sophistication of problem types and mathematical processes used (modelling, transformations, graph sketching and equation solving) in application to contexts related to these areas of study. There should be a clear progression of skills and knowledge from Unit 3 to Unit 4 in each area of study. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation, anti-differentiation, integration and inference with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

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

Units 1 & 2

Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem solving and reasoning. This study has a focus on interest in the discipline of mathematics in its own right and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields. Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. The areas of study for Units 1 and 2 of Specialist Mathematics are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Geometry, measurement and trigonometry', 'Graphs of linear and non-linear relations' and 'Statistics'. For Units 1 and 2, to suit the range of students entering the study, and cover the four prescribed topics, content must be selected from the six areas of study using the following rules: • for each unit, content covers four or more topics in their entirety, selected from at least

three different areas of study • each unit must include two of the prescribed topics: Number systems and recursion; Vectors in the plane; Geometry in the plane and proof; and Graphs of non-linear relations • other topics can be selected from those included in the areas of study for Specialist Mathematics Units 1 and 2 and/or General Mathematics Units 1 and 2 • courses intended as preparation for study at the Units 3 and 4 level should include selection of content from areas of study that provide a suitable background for these studies • content from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Units 3 & 4

Specialist Mathematics Units 3 and 4 consist of the areas of study: 'Functions and graphs', 'Algebra', 'Calculus', 'Vectors', 'Mechanics' and 'Probability and statistics'. The development of course content should highlight mathematical structure, reasoning 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 skills from Mathematical Methods Units 1 and 2, the key knowledge and skills from Specialist Mathematics Units 1 and 2 topics 'Number systems and recursion' and 'Geometry in the plane and proof', and concurrent or previous study of Mathematical Methods Units 3 and 4. Together these cover the assumed knowledge and skills for Specialist Mathematics, which are drawn on as applicable in the development of content from the areas of study and key knowledge and skills for the outcomes. In Unit 3 a study of Specialist Mathematics would typically include content from 'Functions and graphs' and a selection of material from the 'Algebra', 'Calculus' and 'Vectors' areas of study. In Unit 4 this selection would typically consist of the remaining content from the 'Algebra', 'Calculus', and 'Vectors' areas of study and the content from the 'Mechanics' and 'Probability and statistics' areas of study. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation, anti-differentiation and integration and inference with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

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

Unit 1 Media forms, representations and Australian stories

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

Unit 2 Narrative across media forms

In this unit students further develop an understanding of the concept of narrative in media products and forms in different contexts. Narratives in both traditional and newer forms include film, television, sound, news, print, photography, games, and interactive digital forms. Students analyse the influence of developments in media technologies on individuals and society, examining in a range of media forms the effects of media convergence and hybridisation on the design, production and distribution of narratives in the media and audience engagement, consumption and reception. Students undertake production activities to design and create narratives that demonstrate an awareness of the structures and media codes and conventions appropriate to corresponding media forms.

Unit 3 Media narratives and pre-production

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

to audience engagement, consumption and reception within the selected media form. They explore and experiment with media technologies to develop skills in their selected media form, reflecting on and documenting their progress. Students undertake pre-production processes appropriate to their selected media form and develop written and visual documentation to support the production and post-production of a media product in Unit 4.

Unit 4 Media production and issues in the media

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

Music – Performance- <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/music-performance/Pages/unit3-4.aspx>

Unit 1

This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practice technical work to address these challenges. They also develop skills in performing previously unseen music. Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances.

Unit 2

In this unit students build their performance and musicianship skills. They present performances of selected group and solo music works using one or more instruments. Students study the work of other performers through listening and analysis and use specific strategies to optimise their own approach to performance. They also study strategies for developing technical and expressive performance skills. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practice related technical work. They develop skills in performing previously unseen music and study specific concepts to build their musicianship knowledge and skills. Students also devise an original composition or improvisation.

Unit 3

This unit prepares students to present convincing performances of group and solo works. In this unit students select a program of group and solo works representing a range of styles and diversity of character for performance. They develop instrumental techniques that enable them to interpret the works and expressively shape their performances. They also develop an understanding of performance conventions they can use to enhance their performances. Students develop skills in unprepared performance, aural perception and comprehension, transcription, music theory and analysis. The focus for analysis in Area of Study 3 is works and performances by Australian musicians.

Unit 4

In this unit students refine their ability to present convincing performances of group and solo works. Students select group and solo works that complement works selected in Unit 3. They further develop and refine instrumental and performance techniques that enable them to expressively shape their performance and communicate their understanding of the music style of each work. Students continue to develop skills in aural perception and comprehension, transcription, theory, analysis and unprepared performance. Students continue to study ways in which Australian performers interpret works that have been created since 1910 by Australian composers/songwriters.

Music – Investigation (Units 3&4 only)-

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

Unit 3

In this unit students select a work from a prescribed list as the basis for an investigation of a Focus Area. They explore the Focus Area through three complementary areas of study: Investigation, Composition/arrangement/improvisation and Performance. Area of Study 1, Investigation involves research into background contextual issues relevant to performance practice, critical listening to recordings of performances and examination of texts including musical scores. Area of Study 2, Composition/arrangement/improvisation involves applying these research findings to create a folio of exercises, sketches or recorded improvisations that demonstrate understanding of the characteristics of the Focus Area. Students plan, rehearse and perform a program of works that are representative of the Focus Area and in doing so develop relevant instrumental and performance techniques and apply performance practices. Together, these areas of study require students to apply extensive skills in performance, aural awareness, transcription, music theory and analysis.

Unit 4

In this unit students continue the exploration within the Focus Area they began in Unit 3. In Unit 4 the Investigation involves the preparation of program notes to accompany their end-of-year performance program. In Area of Study 2, the Composition/improvisation/arrangement involves creating and performing a composition, improvisation or arrangement that draws on musical characteristics of the Focus Area. This composition, arrangement or improvisation builds on and extends exercises completed in Unit 3. Students rehearse and perform works for inclusion in a performance program of works that relates to the Focus Area. They develop mastery of relevant instrumental techniques and apply advanced

performance conventions to realise their intended interpretations of each work. They continue to use skills in aural awareness, transcription, music theory and music analysis to support their work.

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

Unit 1 Existence, knowledge and reasoning

What is the nature of reality? How can we acquire certain knowledge? These are some of the questions that have challenged humans for millennia and underpin ongoing endeavours in areas as diverse as science, justice and the arts. This unit engages students with fundamental philosophical questions through active, guided investigation and critical discussion of two key areas of philosophy: epistemology and metaphysics. The emphasis is on philosophical inquiry – ‘doing philosophy’ – and hence the study and practice of techniques of logic are central to this unit. 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 investigate relevant debates in applied epistemology and metaphysics, and consider whether the philosophical bases of these debates continue to have relevance in contemporary society and our everyday lives.

Unit 2 Questions of value

What are the foundations of our judgments about value? What is the relationship between different types of value? How, if at all, can particular value judgments be defended or criticised? This unit invites students to explore these questions in relation to different categories of value judgment within the realms of morality, political and social philosophy and aesthetics. Students also explore ways in which viewpoints and arguments in value theory can inform and be informed by contemporary debates.

Unit 3 Minds, bodies and persons

This unit considers basic questions regarding the mind and the self through two key questions: Are human beings more than their bodies? 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 set texts from the history of philosophy to their own views on these questions and to contemporary debates. It is important for students to understand that arguments make a claim supported by reasons and reasoning, whereas a viewpoint makes a claim without necessarily supporting it with reasons or reasoning. Philosophical debates encompass philosophical questions and associated viewpoints and arguments within other spheres of discourse such as religion, psychology, sociology and politics.

Unit 4 The good life

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? What is the role of happiness in a well lived life? Is morality central to a good life? How does our social context impact on our conception of a good life? In this unit, students explore texts by both ancient and modern philosophers that have had a significant impact on contemporary western ideas about the good life. Students critically compare the viewpoints and arguments in set texts from both ancient and modern periods to their own views on how we should live, and use their understandings to inform their analysis of contemporary debates. It is important for students to understand that arguments make a claim supported by reasons and reasoning, whereas a viewpoint makes a claim without necessarily supporting it with reasons or reasoning. Philosophical debates encompass philosophical questions and associated viewpoints and arguments within other spheres of discourse such as religion, psychology, sociology and politics.

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

Unit 1 Bodies in motion

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

Unit 2 Physical activity, sport and society

This unit develops students' understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people's lives in different population groups. Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups. They gain an appreciation of the level of physical activity required for health benefits. Students investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence and facilitate participation in regular physical activity. They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various communities, social, cultural and environmental contexts. Students investigate individual and population-based consequences of physical inactivity and sedentary behaviour. They then create and participate in an activity plan that

meets the physical activity and sedentary behaviour guidelines relevant to the particular population group being studied. Students apply various methods to assess physical activity and sedentary behaviour levels at the individual and population level, and analyse the data in relation to physical activity and sedentary behaviour guidelines. Students study and apply the social-ecological model and/or the Youth Physical Activity Promotion Model to critique a range of individual- and settings-based strategies that are effective in promoting participation in some form of regular physical activity.

Unit 3 Movement skills and energy for physical activity

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

Unit 4 Training to improve performance

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

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

Unit 1 What ideas explain the physical world?

Ideas in physics are dynamic. As physicists explore concepts, theories evolve. Often this requires the detection, description and explanation of things that cannot be seen. In this unit students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter. Students use thermodynamic principles to explain phenomena related to changes in thermal energy. They apply thermal laws when investigating energy transfers within and between systems, and assess the impact of human use of energy on the environment. Students examine the motion of electrons and explain how it can be manipulated and utilised. They explore current scientifically accepted theories that explain how matter and energy have changed since the origins of the Universe. Students undertake quantitative investigations involving at least one independent, continuous variable.

Unit 2 What do experiments reveal about the physical world?

In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments. Students make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored through indirect observations. In the core component of this unit students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. Students choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science. The option enables students to pursue an area of interest by investigating a selected question. Students design and undertake investigations involving at least one independent, continuous variable. A student-designed practical investigation relates to content drawn from Area of Study 1 and/or Area of Study 2 and is undertaken in Area of Study 3.

Unit 3 How do fields explain motion and electricity?

In this unit students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators. They explore the interactions, effects and applications of gravitational, electric and magnetic fields. Students use Newton's laws to investigate motion in one and two dimensions, and are introduced to Einstein's theories to explain the motion of very fast objects. They consider how developing technologies can challenge existing explanations of the physical world, requiring a review of conceptual models and theories. Students design and undertake investigations involving at least two continuous independent variables. A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

Unit 4	How can two contradictory models explain both light and matter?
<p>A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. Wave theory has classically been used to explain phenomena related to light; however, continued exploration of light and matter has revealed the particle-like properties of light. On very small scales, light and matter – which initially seem to be quite different – have been observed as having similar properties. In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students learn to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. Students design and undertake investigations involving at least two continuous independent variables. A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Unit 3 and Unit 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format</p>	
Politics (Units 1&2 only)- https://www.vcaa.vic.edu.au/Documents/vce/politics/2018AustGlobalPoliticsSD.pdf	
Unit 1	The national citizen
<p>In this unit students are introduced to the study of politics as the exercise of power by individuals, groups and nation-states. Students consider key concepts related to power and influence, types of power, political ideology and values, political involvement and active citizenship. The nature of and philosophical ideas behind democracy are studied, as well as the operation and nature of contemporary Australian representative democracy. Students examine the reasons why people seek political power, the characteristics of successful political activists and leaders, and the political ideas that motivate them. The ways in which political power is exercised and how that power is challenged and resisted by others is explored. Students also examine the role and influence of social and political movements as methods of organising political ideas and action. VCE Australian Politics is contemporary in focus. While the focus of this study is the twenty-first century and current events, historical events, examples and illustrations may provide students with contextual understanding and may provide unique examples of the workings of the Australian political system.</p>	
Unit 2	The global citizen
<p>This unit focuses on the contemporary international community. Students examine their place within this community through considering the debate over the existence of the 'global citizen'. In Area of Study 1 they explore the myriad ways their lives have been affected by the increased interconnectedness – the global threads – of the world through the process of globalisation. In Area of Study 2, students consider the extent to which the notion of an international community exists, and investigate its ability to manage areas of global cooperation and respond to issues of global conflict and instability. This unit is concerned with contemporary issues and events. While these may have antecedents in issues and events before the twenty-first century that students need to understand to contextualise contemporary global situations, focus needs to be on the twenty-first century when choosing particular examples and case studies.</p>	
Politics - Global (Units 3&4 only)- https://www.vcaa.vic.edu.au/Documents/vce/politics/2018AustGlobalPoliticsSD.pdf	
Unit 3	Global actors
<p>In this unit students investigate the key global actors in twenty-first century global politics. They use contemporary evidence to analyse the key global actors and their aims, roles and power. They develop an understanding of the key actors through an in-depth examination of the concepts of national interest and power as they relate to the state, and the way in which one Asia-Pacific state uses power within the region to achieve its objectives. For the purposes of this study, the term 'non-state actors' covers a range of global actors: altruistic non-governments organisations (NGOs), for example Amnesty International and Greenpeace; organised religions; terrorist movements and organised crime syndicates. This unit is concerned with contemporary issues and events. While these may have antecedents in issues and events before the twenty-first century, that students need to understand to contextualise contemporary global situations, focus needs to be on contemporary events when choosing particular examples and case studies.</p>	
Unit 4	Global challenges
<p>In this unit students investigate key global challenges facing the international community in the twenty-first century. They examine and analyse the debates surrounding two ethical issues, which are underpinned by the contested notion of global citizenship. They then evaluate the effectiveness of responses to these issues. Students also explore the context and causes of global crises, and consider the varying effectiveness of responses and challenges to solving them. This unit is concerned with contemporary issues and events. While these may have antecedents in issues and events before the twenty-first century, that students need to understand to contextualise contemporary global situations, focus needs to be on contemporary events when choosing particular examples and case studies.</p>	
Psychology- https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Psychology/Pages/Index.aspx	
Unit 1	How are behaviour and mental processes shaped?
<p>Human development involves changes in thoughts, feelings and behaviours. In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may</p>	

not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours. A student-directed research investigation related to brain function and/or development is undertaken in this unit. The research investigation draws on content from Area of Study 1 and/or Area of Study 2.

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

A person's thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways. A student practical investigation related to internal and external influences on behaviour is undertaken in this unit. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

Unit 3 How does experience affect behaviour and mental processes?

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

Unit 4 How is wellbeing developed and maintained?

Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual's mental functioning and wellbeing. A student practical investigation 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 findings of the investigation are presented in a scientific poster format.

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

Unit 1 Youth and Family

This unit uses sociological methodology to explore the social category of youth and the social institution of family. Sociologists draw on methods of science to understand how and why people behave the way they do when they interact in a group. Sociology attempts to understand human society from a holistic point of view, including consideration of society's composition, how it is reproduced over time and the differences between societies. When sociologists investigate a topic, they attempt to do so with a reflective, critical mindset. Sociologists are guided by theories, or frameworks, to explain and analyse how social action, social processes and social structures work. Area of Study 1 explores the way youth is constructed as a social category, in the light of differing experiences of young people. There is a range of potential negative impacts of categorisation, including stereotyping, prejudice and discrimination. Students explore how and why the experience of being young differs across time and space. They examine a range of factors that lead to different experiences of youth, as well as the potential negative impacts of homogenous categorisation, such as stereotypes of young people in a context characterised by a rich diversity in the ways young people live. In Area of Study 2, students investigate the social institution of the family. In a multicultural society like Australia, different communities have different kinds of families and experiences of family life. Factors such as changing demographics, feminism, individualism, technology, changes in the labour market and government policies have been identified as influencing the traditional view of the family. There is a range of theoretical approaches used by sociologists to explain the purpose and experiences of family life, including functionalist and feminist approaches. Comparative methodologies also enable a comparison of family types and family experiences across time and space. Students draw on quantitative and qualitative sources in their study. These sources may be drawn from secondary sources and from primary research undertaken by the student.

Unit 2	Social Norms: Breaking the code
<p>In this unit students explore the concepts of deviance and crime. The study of these concepts from a sociological perspective involves ascertaining the types and degree of rule breaking behaviour, examining traditional views of criminality and deviance and analysing why people commit crimes or engage in deviant behaviour. It also involves consideration of the justice system, how the understanding of crime and deviance has changed over time, and the relationship between crime and other aspects of a society, such as gender and ethnicity. In Area of Study 1 students explore the concept of deviance. There are different explanations of what constitutes deviant behaviour. Generally, it is defined as involving actions that are considered to be outside the normal range of behaviour according to the majority of members of a society. Students investigate the functionalist, interactionist, social control and positive theories of deviance. Students also explore the phenomenon known as moral panic. This refers to the belief that a subculture or group poses a threat to the social values and culture of broader society. The event is often presented in a stereotypical fashion by the mass media. In Area of Study 2, students investigate crime and punishment. They explore patterns of crime and consider the significance of a range of factors, such as class, gender, age, race and ethnicity. Students explore different methods of punishment and the extent to which each of these methods serves its aims.</p>	
Unit 3	Culture and Ethnicity
<p>This unit explores expressions of culture and ethnicity within Australian society in two different contexts – Australian Indigenous culture, and ethnicity in relation to migrant groups. Area of Study 1 involves a critical exploration of the historical suppression of, and increasing public awareness of, Australian Indigenous culture. This requires some knowledge of the past and its influence on subsequent generations, as well as knowledge of contemporary factors that may be supporting and/or limiting increasing awareness of Australian Indigenous culture. Indigenous and non-indigenous perspectives and responses are integral to the area of study. Ethnicity is investigated in Area of Study 2. Ethnicity is a key sociological category that plays an important role in social life. Individuals often define themselves, or others, as members of at least one ethnic group based on a common heritage that gives them a unique social identity. Ethnicity is not fixed and unchanging; instead, ethnic identities constantly evolve and are shaped through a variety of political, cultural and social forces. The concept is often used in contrast to the concept of race, which generally refers to groups based on visible physical characteristics such as skin colour and facial features. Most sociologists prefer to focus on the concept of ethnicity rather than race. Students develop an understanding of a variety of barriers and enablers that need to be considered when investigating experiences of ethnicity. For example, the way that a group sees itself might not correspond with the way that outsiders see it. Sometimes observers place people into broad ethnic categories that do not correspond with the views of individual group members.</p>	
Unit 4	Community, social movements and social change
<p>In this unit students explore the ways sociologists have thought about the idea of community and how the various types of community are experienced. They examine the relationship between social movements and social change. In Area of Study 1 students examine the changing definitions and experiences of community. This includes examination of the challenges and opportunities posed by political, social, economic and technological change. Students examine the concept of community with particular reference to the theory of Ferdinand Tonnies. In Area of Study 2 students investigate the role of social movements. A social movement involves a group engaged in an organised effort to achieve social change. Students develop an understanding of the purpose, evolution, power and outcomes of social movements.</p>	
<p>Theatre Studies (combined class with Mac.Rob)- https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/theatrestudies/Pages/Index.aspx</p>	
Unit 1	Pre-modern theatre styles and conventions
<p>This unit focuses on the application of acting, direction and design in relation to theatre styles from the pre-modern era, that is, works prior to the 1920s. Students creatively and imaginatively work in production roles with scripts from the pre-modern era of theatre, focusing on at least three distinct theatre styles and their conventions. They study innovations in theatre production in the pre-modern era and apply this knowledge to their own works. Students develop knowledge and skills about theatre production processes including dramaturgy, planning, development and performance to an audience and apply this to their work. Theatre styles from the pre-modern era of theatre include Ancient Greek, Ancient Roman, Liturgical drama such as morality/miracle/mystery plays, Commedia dell'Arte, Elizabethan, Restoration comedies and dramas, Neo-classical, Naturalism/Realism, Beijing Opera, Noh, Bunraku and Kabuki and other traditional indigenous theatre forms. Students begin to develop skills of performance analysis and apply these to the analysis of a play in performance.</p> <p>Outcome 1 On completion of this unit the student should be able to identify and describe distinguishing features of theatre styles and scripts from the pre-modern era. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.</p> <p>Outcome 2 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. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.</p> <p>Outcome 3 On completion of this unit the student should be able to analyse a performance of a script. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.</p>	
Unit 2	Modern theatre styles and conventions

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

Outcome 1 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. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Outcome 2 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. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Outcome 3 On completion of this unit the student should be able to analyse and evaluate a theatre production. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.

Please see Ms Simpson for further details early Term 3

Unit 3 Playscript interpretation

In this unit students develop an interpretation of a playscript through the stages of the theatrical production process: planning, development and presentation. Students specialise in two areas of stagecraft, working collaboratively in order to realise the production of a playscript. They use knowledge they develop from this experience to analyse the ways stagecraft can be used to interpret previously unseen playscript excerpts. Students also attend a performance selected from the prescribed VCE Theatre Studies Unit 3 Playlist published annually in the VCAA Bulletin VCE, VCAL and VET, and analyse and evaluate the interpretation of the playscript in the performance.

Unit 4 Performance interpretation

In this unit students study a scene and associated monologue from the Theatre Studies Stagecraft Examination Specifications published annually by the Victorian Curriculum and Assessment Authority, and develop a theatrical treatment that includes the creation of a character by an actor, stagecraft possibilities, and appropriate research. Students interpret a monologue from within a specified scene using selected areas of stagecraft to realise their interpretation. Students' work for Outcomes 1 and 2 is supported through analysis of a performance they attend selected from the prescribed VCE Theatre Studies Unit 4 Playlist published annually in the VCAA Bulletin VCE, VCAL and VET.

Visual Arts – Studio Art- <https://www.vcaa.vic.edu.au/Documents/vce/studioarts/StudioArtsSD-2017.pdf>

Unit 1 Studio inspirations and techniques

In this unit students focus on developing an individual understanding of the stages of studio practice and learn how to explore, develop, refine, resolve and present artworks. Students explore sources of inspiration, research artistic influences, develop individual ideas and explore a range of materials and techniques related to specific art forms. Using documented evidence in a visual diary, students progressively refine and resolve their skills to communicate ideas in artworks. Students also research and analyse the ways in which artists from different times and cultures have developed their studio practice to interpret and express ideas, source inspiration and apply materials and techniques in artworks.

The exhibition of artworks is integral to Unit 1 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

Unit 2 Studio exploration and concepts

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

Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art. Analysis is used to understand the artists' ideas and how they have created aesthetic qualities and subject matter. Comparisons of contemporary art with historical art styles and movements should be encouraged. The exhibition of artworks is integral to Unit 2 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

Unit 3 Studio practices and processes

In this unit students focus on the implementation of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a studio process to explore and develop their individual ideas. Analysis of these explorations and the

development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4. For this study, the exploration proposal supports the student to identify a direction for their studio process. The student determines the studio process. This process records trialling, experimenting, analysing and evaluating the extent to which art practices successfully communicate ideas presented in the exploration proposal. From this process students progressively develop and identify a range of potential directions. Students will select some of these potential directions from which to develop at least two artworks in Unit 4. The study of artists and their work practices and processes may provide inspiration for students' own approaches to art making. Students investigate and analyse the response of artists to a wide range of source material and examine their use of materials and techniques. They explore professional art practices of artists from different historical and cultural contexts in relation to particular artworks and art forms. The exhibition of artworks is integral to Unit 3 and students are expected to visit a variety of exhibitions throughout the unit, reflect on the different environments where artworks are exhibited and examine how artworks are presented to an audience. Students are expected to visit at least two different exhibitions and study specific artworks displayed in these exhibitions during their current year of study.

Unit 4 Studio practice and art industry contexts

In this unit students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4. The development of these artworks should reflect refinement and skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities discussed in the exploration proposal in Unit 3. Once the artworks have been made, students provide an evaluation about the cohesive relationship between the artworks. This unit also investigates aspects of artists' involvement in the art industry, focusing on a least two different exhibitions, that the student has visited in the current year of study with reference to specific artworks in those exhibitions. Students investigate the methods and considerations of the artist and/or curator involved in the preparation, presentation and conservation of artworks displayed in exhibitions in at least two different galleries or exhibitions. Students examine a range of environments for the presentation of artworks including public galleries and museums, commercial and private galleries, university art galleries, artist-run spaces, alternative art spaces and online gallery spaces.

Visual Arts – Visual Communication Design-

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

Unit 1 Introduction to visual communication design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to create messages, ideas and concepts, both visible and tangible. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications. Through experimentation and exploration of the relationship between design elements and design principles, students develop an understanding of how they affect the visual message and the way information and ideas are read and perceived. Students review the contextual background of visual communication through an investigation of design styles. This research introduces students to the broader context of the place and purpose of design. Students are introduced to the importance of copyright and intellectual property and the conventions for acknowledging sources of inspiration. In this unit students are introduced to four stages of the design process: research, generation of ideas, development of concepts and refinement of visual communications.

Unit 2 Studio exploration and concepts

In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms. Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process. Through the study of art styles and cultural contexts, students begin to understand the use of other artists' work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art and the role of appropriation. They also study Art Copyright Law. Visual analysis is practiced to understand the artists' ideas and how they have created aesthetic qualities and subject matter. The exhibition of artworks is integral to Unit 2 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

Unit 3 Studio practices and processes

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

student determines the studio process. This process records trialling, experimenting, analysing and evaluating the extent to which art practices successfully communicate ideas presented in the exploration proposal. From this process students progressively develop and identify a range of potential directions. Students will select some of these potential directions from which to develop at least two artworks in Unit 4. The study of artists and their work practices and processes may provide inspiration for students' own approaches to art making. Students investigate and analyse the response of artists to a wide range of source material and examine their use of materials and techniques. They explore professional art practices of artists from different historical and cultural contexts in relation to particular artworks and art forms. The exhibition of artworks is integral to Unit 3 and students are expected to visit a variety of exhibitions throughout the unit, reflect on the different environments where artworks are exhibited and examine how artworks are presented to an audience. Students are expected to visit at least two different exhibitions and study specific artworks displayed in these exhibitions during their current year of study.

Unit 4 Studio practice and art industry contexts

In this unit students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4. The development of these artworks should reflect refinement and skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities discussed in the exploration proposal in Unit 3. Once the artworks have been made, students provide an evaluation explaining the cohesive relationship between the artworks and how they should be presented to an audience. This unit also investigates aspects of artists' involvement in the art industry, focusing on a least two different exhibitions, that the student has visited in the current year of study with reference to specific artworks in those exhibitions. Students investigate the methods and considerations of the artist and/or curator involved in the preparation, presentation and conservation of artworks displayed in exhibitions in at least two different galleries or exhibitions. Students examine a range of environments for the presentation of artworks including public galleries and museums, commercial and private galleries, university art galleries, artist-run spaces, alternative art spaces and online gallery spaces.

Important resources

Teachers

Heads of Faculty can provide the most accurate details of courses offered at MHS. Please refer to the list on page 24. Students should consult the teachers at a mutually convenient time with questions about any Units 1-4 studies. Class teachers are also a valuable resource.

Publications

- *WHERE TO NOW?* Guide to the VCE, VCAL and Apprenticeships and Traineeships for 2019, published by VCAA
<http://www.vcaa.vic.edu.au/pages/vce/publications/WhereToNow/default.aspx>
- *VTAC: Year 10 Guide*, published by Victorian Tertiary Admissions Centre (VTAC)
http://www.vtac.edu.au/pdf/publications/vtac_year10_guide.pdf
- University booklets for Year 10 students.
- Year 11 Handbook (to be issued in February next year). This provides details of School Policy on a range of issues, including assessment rules and procedures.
- MHS VCE study-specific handbooks/handouts (to be issued in February next year). These publications are essential references which must be read thoroughly and consulted regularly.

Internet Sites

Melbourne High School	http://www.mhsviceduau.com
Victorian Curriculum & Assessment Authority	http://www.vcaa.vic.edu.au
Victorian Tertiary Admissions Centre	http://www.vtac.edu.au

VTAC: Prerequisites & Course Explorer	http://delta.vtac.edu.au/CourseSearch/prerequisiteplanner.htm
Australian Universities	http://www.australian-universities.com/
Courses across Australia	http://www.grad.com.au
Job Search	http://www.jobsearch.gov.au
The Good Careers Guide	https://www.goodcareersguide.com.au/
My Future Careers Site	http://www.myfuture.edu.au

Glossary of terms

Acronyms	
ATAR	Australian Tertiary Admission Rank
EAL	English as an Additional Language (<i>formerly English as a Second Language - ESL</i>)
GAT	General Achievement Test
LOTE	Languages Other Than English
TAFE	Technical and Further Education
VCAA	Victorian Curriculum and Assessment Authority
VCAL	Victorian Certificate of Applied Learning
VCE	Victorian Certificate of Education
VET	Vocational Education & Training
VTAC	Victorian Tertiary Admissions Centre
VTAC Bulletin	Regular updates to the VTAC Guide and Tertiary Entrance Requirements, announcing future changes to courses, entrance requirements and VTAC procedures

Terms	
English group studies	Refers to the VCE subjects of: English, EAL, English Literature, English Language
Prerequisite studies	Those Units 3 & 4 studies nominated by individual course authorities as studies which must be satisfactorily completed (often with set minimum study scores) by all applicants seeking admission to that course. Applicants who do not meet prerequisites may not be considered for selection.
Top Four	Studies that will be counted first when creating an ATAR, namely an English study plus those with the next three highest scaled study scores permissible. Some combinations of studies are not permissible in the 'Top Four'. (<i>Also known as the 'Primary Four'</i>)
Increment	Additional points given for the 5 th and/or 6 th studies taken at Units 3 & 4 level. These incremental studies will attract 10% each of the scaled VCE study score achieved. There are some restrictions on choices for 5 th and 6 th studies in the calculation of the ATAR.
VCE study score (relative position)	This score (indicating the relative position within the study), issued by VCAA, is used in the creation of the scaled ATAR Subject Score and hence the ATAR. Scores lie between 0 and 50 with a mean of 30. A study score of 40 indicates a result in the top 8%, and a study score of 45 indicates a result in the top 2%.
ATAR Subject Score	VTAC will scale the study scores and create the ATAR Subject Score to ensure that each study is accorded the agreed weighting in the ATAR for each applicant.
Scaling	Scaling compares results in any one study with the results in all the studies for the group of students taking that study. If the students do well in all their studies, the results are adjusted up in the particular study. If the students do poorly in all their studies, the results are adjusted down in that particular study. If these adjustments were not made, students would be advantaged by taking a study which attracted a higher proportion of less able students and disadvantaged by taking a study which attracted a higher proportion of more able students.

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