



Yarra Hills
SECONDARY COLLEGE

RESPECT ENDEAVOUR ACHIEVEMENT PRIDE

2025
Senior School
Handbook

Principal:

Mr Darren Trippett

Campus Principals:

Mooroolbark: Mr Cameron Woods
Mount Evelyn: Mr Leighton O'Donnell

Head of Senior School:

Mrs Carolyn Hunyadi

Pathways Leader and VET Coordinator:

Ms Joyce Wong

Year Level Coordinators:

Year 11/12 VCE: Ms Chelsea Doig
Year 11/12 VCE VM: Mrs Niccola Waterson

Phone: 9839 8800

9736 3650

Email: yarra.hills.sc@education.vic.gov.au



Yarra Hills
SECONDARY COLLEGE

Contents

Senior School Programs	1
Victorian Certificate of Education	2
School Assessment	3
Reporting Results	4
Accelerated Programs	5
Conditions of Enrolment	5
Careers	7
VCE Subject Selection	8
Accounting	10
Art Making & Exhibiting	13
ASPIRE	16
Biology	17
Business Management	20
Chemistry	23
Computing	26
Computing: Software Development	28
Dance	29
Drama	32
English	36
EAL	38
Environmental Science	40
Food Studies	43
Foundation Maths	46
Health and Human Development	48
History – Modern	51
History – Revolutions	53
Legal Studies	55
Literature	58
General Maths	61
Maths Methods	64
Media	67
Music Performance	70
Outdoor & Environmental Studies	73
Physical Education	76
Physics	79
Psychology	82
Sociology	85
Strive	88
Systems Engineering	89
Visual Communication Design	92
Vocational Major	95
Structured Work Placement	99
Vocational Education & Training	101

Introduction

At Yarra Hills Secondary College, we go to great lengths to ensure that we offer an engaging and supportive learning environment that provides opportunity and encouragement for each of our students. This allows us to be able to develop our students' individual strengths and talents. Our College Values, Respect, Endeavour, Achievement and Pride provide the basis for all interactions within and across our school community. We are proud of the achievements of our students, and all college staff members are committed to ensuring our students develop life-long learning skills, curiosity, resilience and determination.

Our senior students experience a young adult learning environment. Academic rigour, initiative and self-discipline are central to life at the senior levels with a cooperative team culture supporting each student's quest for success. We continue to offer a comprehensive selection of pathways for those students choosing to undertake senior studies. Our experience over many years with Victorian Certificate of Education (VCE), Vocational Education and Training (VET), Victorian Certificate of Applied Learning (VCAL) School Based Apprenticeships (SBATs) and Head Start programs allows us to seamlessly transition into the new DET Senior School Model incorporating VCE and Vocational Major (VM) pathways. Our VCE students consistently gain placement in their top preferred tertiary venues and our vocationally focussed students have consistently high levels of full-time work placements as a result of their studies. Our ability to offer these alternatives ensures that we can find an appropriate pathway for each individual student.

I encourage students and parents to review this handbook carefully and discuss thoroughly the options and opportunities it presents. The handbook is just part of the support offered to students in developing their pathways through secondary school. Key personnel in the College who can also assist are the Campus Principals and Assistant Principals, Heads of School, Year Level Coordinators, Careers & Pathways Leader and individual teachers who are all committed to the development of every student into well-educated, responsible and resilient young adults.



Darren Trippett
College Principal

Senior School Program

The curriculum structure of the Senior School is designed to meet a variety of needs and offers the traditional academic emphasis leading to tertiary placement, as well as a more vocational, work orientated focus leading to direct employment or a combination of work and further training or industry based certification. The Victorian Certificate of Education (VCE) suits most students, while Vocation Education Training (VET) Programs are for more vocationally oriented and can contribute to the VCE and ATAR. The Victorian Certificate of Education (Vocational Major) may be completed through either our traineeship or Pathway program. These options are explained in detail in the following pages in the following order:

- VCE
- VCE (Vocational Major)
- VET

The curriculum and assessment for each of these alternatives is centrally determined. All students must sign an agreement to abide by Victorian Curriculum and Assessment Authority (VCAA) regulations. This declaration is incorporated in the Student Details form which students sign.

Attendance is closely linked to student performance at school, including in assessment tasks and examinations. Therefore we expect students to have a minimum attendance of 90%, taking into account students involvement in approved school activities and illness, so that each student can maximise their learning and achieve the highest possible results. Where a student is absent due to illness they should ensure that they catch up on work completed during missed classes. Absence is displayed on the attendance page in Compass. A student cannot satisfactorily complete a unit if there has been a substantial breach of school attendance, as outlined in the college's attendance policy.

In addition to subject information this handbook includes information on:

- Expectations of Senior Students
- Conditions of Enrolment
- Careers

Students are strongly advised to consult the full subject descriptions on the VCAA website. Use this link to locate them: <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Pages/vce-study-designs.aspx>

All senior school students will select their priorities through an electronic platform. Students will need their individual username and password to access the platform. These details will be given during the course selection process. Once completed students are required to print their priorities and ensure that they and a parent/guardian sign it before returning to the Senior School Office. Throughout the course selection process staff will be available to assist students and their families with all aspects of this important process.

Choosing a VCE Program

The normal workload is 22 units over two years. The workload for students completing the Vocational Major VCE option will depend on stream that they select. Further information is provided in this handbook. Modified programs may be negotiated under special circumstances. It is not uncommon for a student to undertake a combination of Units 1/2 and 3/4 in the one year as part of an accelerated or extended VCE. There is no Victorian Curriculum Assessment Authority (VCAA) penalty for taking more than one year to accumulate Unit 3/4 studies and a unit may be repeated. However, students can only get credit once for that unit and for a study score to be awarded both Units 3 and 4 must be completed within the one school year.

When choosing your VCE program:

Carefully read the unit descriptions included in this booklet.

Consult careers teachers for information on tertiary courses and employment opportunities.

Consider units that:

- interest you
- you do well in
- lead to preferred employment
- are prerequisites for further training and tertiary courses
- are part of the VET in Schools program.

Having followed these steps a program selection sheet will be completed in consultation with a pathways counsellor and your selections entered via the school intranet. Whilst every effort will be made to accommodate students' selected programs, timetabling constraints may affect options for some student programs.

Entry to VCE

General entry students will be required to have satisfactorily completed a Year 10 course of study; special entry students will be considered on an individual basis.

VCE Programs

A VCE program is the complete set of VCE units undertaken by a student over two or more years. Each unit typically runs for a semester. Units 1 and 2 refer to units generally completed by at the Year 11 level and Units 3 and 4 at the Year 12 level. Units 1 and 2 can be completed as independent semester length units, but Units 3 and 4 must still be taken as a sequence over a full year. In order to maximize their performance students are advised to complete Units 1 – 4 of each subject selected.

The usual model for students is:

Year 11 study six units each semester (may include a VET or Unit 3/4 subject)

Year 12 study a further five units each semester at the Unit 3/4 level.

Satisfactory completion of the VCE

Students are required to have satisfactorily completed sixteen semester length units of study.

These sixteen units must include:

- Three units from the English Group (English Units 1 to 4; EAL (English as an Additional Language) and Literature Units 1 to 4 and English Language). One of the unit 3/4 sequences from the English Group will be counted in the ATAR, but no more than two can be allowed in the primary four.
- At least three sequences of Units 3 and 4 in studies other than English.

These students at Yarra Hills Secondary College will also be enrolled in ASPIRE at both Year 11 and 12 to support positive study in the VCE.

Unit outcomes

Each VCE unit includes between two and four outcomes. Outcomes must all be achieved for satisfactory completion of the unit. Achievement of the outcomes is based on the teacher's assessment of the student's achievement of the required level of key knowledge and key skills for those outcomes. The school, in accordance with the VCAA requirements, determines satisfactory completion of units.

Assessment of VCE Units 1 and 2

All studies have both school assessment and school examinations.

School assessment is made up of classwork (hurdle tasks), assessment tasks used to assess the level of performance in learning outcomes and are completed mainly in class under test conditions. Assessment tasks are reported to the student.

Students have ONE attempt to generate a score for a SAC. However, they have three attempts to generate an S for the SAC.

All Units 1 and 2 studies have exams in June and November. Exams are compulsory and are separately reported on end of semester reports.

Assessment of VCE Units 3 and 4

A study score in the range from 0 to 50 is awarded where a student has achieved a 'satisfactory' result for both Units 3 and 4 in the study. This score is based upon both school assessment and external examination(s). Results of all assessment tasks are converted from a numerical score and reported by the VCAA as grades ranging from A+ to E or NA (Not Assessed – where the task was not attempted). These may be changed by VCAA following statistical moderation.

School Assessment

School-assessed coursework (SACs)

School assessed coursework is made up of a number of assessment tasks that are specified by the Victorian Curriculum Assessment Authority (VCAA). Assessment tasks are used to assess the unit learning outcomes.

The assessment tasks are part of the regular teaching and learning program.

They are completed mainly in class time and in a limited timeframe. This allows the teacher to validate that the work is from the student.

Students only have ONE attempt to generate a score for their SACs.

School-assessed tasks (SATs)

A small number of studies will have school-assessed tasks (SATs). These occur in studies where products and models are assessed. Media, Studio Arts, Visual Communication and Design, Applied Computing and Systems Engineering have school-assessed tasks that measure performance in production of a physical product. Vocational Major uses SATs as the main assessment model for applied learning.

Examinations

Examinations are set and assessed by the VCAA and are held throughout October and November. Music, Dance and Drama have additional performance examinations and LOTE an oral examination. To assist students to develop their examination skills the school provides internally assessed examinations for all Unit 3 subjects during the June examination period.

General Achievement Test (GAT)

The GAT is compulsory for every student, including Vocational Major students, enrolled in Unit 3 and 4 sequences, whether in Year 11 or 12. It does not, however, contribute to the final VCE result but the VCAA uses the GAT as one of the checks to ensure an examination paper is marked accurately. If a result is two grades lower than the grade predicted by the GAT, then the paper is automatically assigned to an additional marker for checking. The GAT is also used in situations where a derived grade is required due to a medical condition. Students will receive a report on their GAT results at the end of the year telling them their performance in the areas of Literacy, Mathematics and the Arts relative to the other students sitting the GAT. Tertiary institutions are increasingly using the GAT scores to distinguish between students in the "middle selection band".

Dates and Deadlines

An important aspect of the VCE is adherence to due dates for assessment tasks. Students will be given the weeks for assessment tasks as early as possible in the unit. It is very important that students and their parents realise that:

Non-attendance at an assessment task must be covered by a medical certificate.

Failure to complete an assessment task, SAT or SAC, on the due date without extenuating circumstances will result in the student receiving a Not Assessed (NA) for the task.

Special provision

Students experiencing personal difficulty completing their VCE studies may apply for Special Provision in the following categories:

Assistance in choosing or changing a VCE program.

Special arrangements for completion of sets of outcomes, school assessed coursework or examinations and the GAT.

A derived score can be awarded by the VCAA in cases where SACs or exams are missed or are severely affected by illness or personal trauma.

Students are required to provide documentary evidence such as medical certificates or reports from health care professionals. The principal determines whether the application meets the criteria set by the VCAA. Students considering applying for special provision are strongly encouraged to speak with the Senior School leader as soon as possible to ensure that the College is able to support the student and provide all required information to the VCAA at the earliest opportunity.

Reporting Results

The school issues written reports at the end of semester 1 and 2. Progress reports are provided at the end of terms 1 & 3. Reports provide information on student progress and achievement and state the results awarded for assessment tasks.

Students undertaking Units 1 and 2 receive a Statement of Results from the VCAA showing 'S' or 'N' for units. The school distributes this at the end of the year.

Students undertaking Units 3 and 4 receive a Statement of Results from the VCAA showing 'S' or 'N' for units. It will also show the grades awarded for school assessed coursework and examinations and a Study Score (relative position) for each unit 3 and 4 sequence. In addition, this Statement of Results states whether VCE requirements have been met.

The Statement of Results is mailed directly to students in December; however, the VCE Certificate issued by the VCAA for graduating students must be collected from the school in December.

Australian Tertiary Admissions Rank (ATAR)

The ATAR is calculated by the Victorian Tertiary Admissions Centre (VTAC) and is derived by formula calculation from a student's scaled study scores for Units 3 and 4 studies. Its objective is to rank students for tertiary selection.

The ATAR is only calculated if a student has satisfactorily completed the VCE, including both Units 3 and 4 from the English Group. Further details about the ATAR are given in the *Tertiary Selection and the ATAR booklet* available from the school. Students apply for tertiary courses using the VTAC Infoline or at www.vtac.edu.au. VTAC guides and briefing sessions are provided in Term 3.

Accelerated Programs

Studying a Unit 3/4 sequence during Year 11 is desirable for students who have demonstrated a capacity to work at the higher level. The experience of sitting the exams and GAT is invaluable and adds a sixth subject from which an ATAR score is calculated. For advice on entry into the Acceleration Program students should seek a teacher recommendation and possibly an interview to assess suitability.

Year 11 students undertaking an accelerated program must select a full twelve unit program in their first year of VCE. Selected students should recognise that the Acceleration Program carries an additional workload to the standard year 11 program, and that once commenced, students will be expected to complete the full program.

Difficulties in coping with the Unit 3/4 study will not be considered a suitable reason for modifying the student's Year 11 program. It is expected that students in this program will complete another five subjects the next year. Reduction in an acceleration program will only be considered if it is supported by medical/welfare evidence to protect the student's health or welfare. Studying only four subjects in Year 12 negates the benefits of the accelerated program for a higher ATAR score.

Conditions of Enrolment

Attendance at School

All students are to remain on the Campus until the end of the school day, with the exception of VET students who must attend VET classes off campus. Please refer to the college's Attendance Policy for more information on absence from school or class. Absence from school must be approved through submission of a medical certificate or other appropriate documentation.

If a student is absent on the day of a School Assessed Coursework (SAC) or School Assessed Task (SAT) will require a medical certificate or provide appropriate documentation to be able to sit this missed assessment for a grade at another time arranged with the subject teacher.

Lateness to School

Notes must be provided for all late arrivals. School detentions are given for unapproved lateness. Lateness to class is disruptive, shows poor organisation and a lack of respect for other class members. Consequences for unapproved lateness to class include after school detentions to make up the lost time.

Early Leaving

Students who need to leave the campus before the end of the day must obtain an 'Early Leaver' pass from the General Office. It is the responsibility of the student to supply written permission from a parent/guardian or to arrange a phone call from home to the Office before a pass is given. Students over 18 cannot write their own notes and must have contact details for another responsible adult for the school to contact.

Uniform

The College has a mandatory school uniform; Senior School Students are expected to be role models for the college, and this includes wearing the college uniform with pride. Failure to do so will result in detentions and may even result in the student being sent home. Year 12 students may purchase the Year 12 Bomber jackets which can be worn in addition to the College uniform. Hair must be of natural colours and make-up and jewellery must be minimal. (For more information on the College uniform, please consult the College's uniform policy.)

Voluntary Levies and Cost Intensive Subjects

These costs are also shown in at the end of this handbook.

Meeting deadlines

To obtain an “S” for a unit, all sets of outcomes must be satisfactorily completed. At the beginning of each unit teachers will distribute a list of outcomes and deadlines for submitting the work. Deadlines can only be extended with very good reason. Failure to meet deadlines may result in failing a unit. Students who miss an Assessment Task and can provide a medical certificate or a valid reason to the Campus Principal, may apply to sit the task. This redemption process is organised through a VCE Coordinator. Without a medical certificate a zero result will be recorded for the Task, however the student will still be required to complete the task to demonstrate the outcomes.

Smoking & Vaping

Smoking and vaping are anti-social activities harmful to personal and social health. A Ministerial Ban Order was imposed and legislated in 2009 making it illegal to smoke on the grounds of all Victorian Government Schools. From April 2015, under an amendment to the Tobacco Act (1987) a further ban was imposed on smoking within four metres of any school entrance, including within the vehicles of student and staff. Please note that any students found associating with smoking activity will incur the same consequences as smokers and vapours, whether they can be directly confirmed as smoking/vaping, or not. Students that are found to breach the college Anti-smoking policy, as a first offence, will receive an Internal Suspension/Exclusion, then External Suspension for any further offences. Students who infringe will be required to undertake a ‘Quit’ program for their own welfare.

Student parking on Campus

Students who successfully obtain their Probationary licence whilst at school and who wish to park their car on campus grounds may do so only when the following conditions are met:

1. An application for Student Parking is approved.
2. The vehicle is registered and roadworthy
3. The student parks the vehicle only in the designated areas
4. The student does not use the vehicle to transport other students to and from the Campus
5. The vehicle is driven within speed limits & safely

Mobile Phones and other electronic devices

Under the Ministerial Policy, formally issued by Minister of Education under section 5.2.1(2)(b) of the Education and Training Reform Act 2006, students who choose to bring mobile phones to school must have them switched off and securely stored in their locker for the duration of the school day. For the purpose of this policy, a mobile phone is a telephone or other mobile device with access to a cellular (telecommunication) system, with or without a physical connection to a network. Exceptions to the policy may be applied if certain conditions are met. Exceptions can be granted by the principal, or by a member of the Senior School Team.

It is the student’s responsibility to ensure phones remain on silent or turned off. Consequences apply for students who breach this, which includes confiscation of the device until the end of the day. More serious consequences apply for repeat offenders and parents will be contacted. Occasionally mobiles are used within the context of a lesson, but this is only done with the permission of the teacher in charge. Electronic devices cannot be taken into any examinations.

Careers

The Careers Office has up-to-date and accurate information about tertiary courses and applying for jobs. Job Guides available to begin your search. There are also handbooks for all major Victorian universities, institutes and colleges; some interstate handbooks and brochures on new courses, apprenticeships and traineeships.

Course Scan is also available and this allows you to enter your VCE subjects and get a printout of all courses that you would be able to access, the ATAR required for entry, any special requirements for entry and where you can study.

Students will be interviewed at various times, and complete Career Action Plans at regular intervals so that students are aware of the various pathways that are available after school.

In July, Year 12 students are expected to attend the T.I.S. (Tertiary Information Service) seminar and the University Tours excursion. They can talk to representatives from universities and institutes and to collect current entry information.

Students should continue to work with their families to investigate various post-schooling options and make appointments with the Careers Leader for advice.

VCE Subject Selection

Your Dream Career	Subjects to consider	Faculty Area
-------------------	----------------------	--------------

Journalist Writer Secretary Lawyer Copywriter Advertising Executive Actor Editor Script writer	English English as an Additional Language (EAL) Literature	English
--	--	----------------

Physiotherapist Dietitian Sports Journalist Sports Coach Air Force Officer Ambulance Officer Fitness Instructor Park Ranger Nutritionist	Health & Human Development Outdoor and Environmental Studies Physical Education Food Studies	Health & Physical Education
--	---	--

Interpreter Hotel/Motel Manager Translator Travel Consultant	Languages through VSL	Languages
---	-----------------------	------------------

Accountant Bank Officer Engineer Surveyor Retail buyer Actuary Auditor Air Traffic Controller Financial Planner Market Research	General Mathematics Mathematical Methods Foundation Maths	Mathematics
--	---	--------------------

Accountant Lawyer Tour Guide Anthropologist Archaeologist Foreign Affairs and Trade Officer Editor Journalist Industrial Relations Officer Historian Researcher	Accounting Business Management History: 20th Century History: Revolutions Legal Studies Sociology	Humanities
--	--	-------------------

<p>Forensic Scientist Chiropractor Dentist Food Technologist Landscape architect Medical Practitioner Nurse Nutritionist Occupational Therapist Psychologist Physiotherapist Biochemist</p>	<p>Biology Chemistry Environmental Science Physics Psychology</p>	<p>Science</p>
---	---	-----------------------

<p>Choreographer Entertainer Dancer Actor Scriptwriter Industrial Designer Architect Construction Manager Plumber Engineer Jeweller Chef Food Stylist Caterer Nutritionist Animator Illustrator Multimedia Designer Web Designer App Developer Game Designer Film and TV lighting/camera operator Film + TV producer Sound Engineer Singer Musician Composer Artist Photographer Desktop Publisher Graphic Design Visual Merchandiser Sign Maker Interior Designer Theatre Mechanist Art Historian Teacher</p>	<p>Drama Music Performance Media Studio Arts Visual Communication & Design Informatics: Computing Informatics: Software Development Systems Engineering Product Design & Technology Food Studies</p>	<p>Arts ICT Technology</p>
--	---	---

For more information about Careers, go to [My future Website](#)

- [My skills Website](#)
- [Career Bullseye Posters](#)
- [Jobs Outlook](#)

Or make an appointment with our Careers Leader

Accounting



Scope of Study:

VCE Accounting focuses on the financial recording, reporting and decision-making processes of a sole proprietor small business. Students study both theoretical and practical aspects of accounting. Financial data will be collected and recorded, and accounting information reported, using both manual and information and communications technology (ICT) methods. It plays an integral role in the successful operation and management of businesses. Many students who study VCE Accounting will go on to further studies and careers in business and finance.

Additional Course Requirements

Students are required to have a scientific calculator for this subject.

Unit 1: The role of Accounting

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.

Area of Study 1: Role of accounting

On completion of this outcome students should be able to describe the reasons for establishing a business and possible alternatives to operating a business. Students will explore types of business ownership; factors that contribute to the success or failure of business; sources of finance and the role and importance of accounting in operating a business.

Area of Study 2: Recording financial data and reporting accounting information for a service business

Students investigate the role of accounting in generating financial data and accounting information. They use the accrual method for determining profit for a service business operating as a sole proprietor with cash and credit transactions.

Unit 2: Accounting & Decision Making 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.

Area of Study 1: Accounting for inventory

On completion of this outcome the student should be able to record financial data and report for inventory. They can discuss the impact of inventory related decisions.

Area of Study 2: Managing accounts receivable & payable

On completion of this outcome the student should be able to record financial data and report accounting information related to these types of accounts. They can discuss the impact of credit transactions on business decisions.

Area of Study 3: Accounting for & managing non-current assets

On completion of this outcome the student should be able to record and reports transactions involving non-current assets including depreciation.

Unit 3: Financial Accounting 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 using the accrual basis of accounting. They interpret reports, in a variety of formats, and present and justify strategies to improve performance.

Area of Study 1: Recording & analysing financial data

On completion of this outcome the student should be able to record financial data for a single activity sole trader using a double entry system with a General Journal and inventory cards and discuss the various aspects of the accounting system.

Area of Study 2: Preparing & interpreting accounting reports

On completion of this outcome the student should be able to record relevant transactions and prepare, interpret and analyse accounting reports.

Unit 4: Recording, reporting, budgeting & decision making

This unit further develops the understanding of the accounting system used by sole traders. This includes using balance-day adjustments, alternate methods of depreciation and budgeting. Students analyse and evaluate reports and suggest strategies to improve performance.

Area of Study 1: Extension of Recording and Reporting

On completion of this outcome the student should be able to record financial data using balance day adjustments using a double entry system, report using an accrual-based system and evaluate the effects of balance-day adjustments and accrual accounting.

Area of Study 2: Budgeting and Decision Making

On completion of this outcome the student should be able to prepare budgeted accounting reports and variance reports and model, analyse and discuss the effects of various strategies on the performance of a business.



Scope of Study:

VCE Art Making and Exhibiting introduces students to the methods used to make artworks and how artworks are presented and exhibited. Students use inquiry learning to explore, develop and refine the use of materials, techniques and processes and to develop their knowledge and understanding of the ways artworks are made. They learn how art elements and art principles are used to create aesthetic qualities in artworks and how ideas are communicated through the use of visual language. Their knowledge and skills evolve through the experience of making and presenting their own artworks and through the viewing and analysis of artworks by other artists.

Visiting and viewing exhibitions and displays of artwork is a necessary part of this study. It helps students understand how artworks are displayed and exhibitions are curated. It also has an influence on the students' own practice, and encourages them to broaden and develop their own ideas and thinking around their own art making.

A strong focus on the way we respond to artworks in galleries, museums, other exhibition spaces and site-specific spaces is integral to study and research in VCE Art Making and Exhibiting. The way institutions design exhibitions and present artworks, and also how they conserve and promote exhibitions, are key aspects of the study.

Additional Course Requirements:

There will be an excursion to Top Arts and art galleries and venues in the city.

Unit 1: Explore, expand and investigate

Students explore materials, techniques and processes in a range of art forms. They expand their knowledge and understanding of the characteristics, properties and application of materials used in art making. They explore selected materials to understand how they relate to specific art forms and how they can be used in the making of artworks. Students also explore the historical development of specific art forms and investigate how the characteristics, properties and use of materials and techniques have changed over time. Throughout their investigation students become aware of and understand the safe handling of materials they use.

Area of Study 1: How do artists use materials, techniques & art forms

On completion of this unit the student should be able to explore materials and demonstrate how they can be manipulated to develop subject matter and represent ideas in art making.

Area of Study 2: Expand – make, present & reflect

On completion of this unit the student should be able to make & present at least one finished artwork and document their art making in a Visual Arts journal.

Area of Study 3: Investigate – research and present

On completion of this unit the student should be able to research Australian artists and present information about them in a format for a proposed exhibition.

Unit 2: Understand, develop and resolve

In Unit 2 students continue to research how artworks are made by investigating how artists use aesthetic qualities to represent ideas in artworks. They broaden their investigation to understand how artworks are displayed to audiences, and how ideas are represented to communicate meaning.

Students respond to a set theme and progressively develop their own ideas. Students learn how to develop their ideas using materials, techniques and processes, and art elements and art principles.

Area of Study 1: Understand – ideas, artworks & exhibition

On completion of this unit the student should be able to select a range of artworks from an exhibition & other sources to design their own thematic exhibition.

Area of Study 2: Develop – theme, aesthetic qualities & style

On completion of this unit the student should be able to explore & document the use of elements, principles and aesthetic qualities to make experimental artworks in response to a selected theme.

Area of Study 3: Develop – ideas subject matter & style

On completion of this unit the student should be able to document & resolve subject matter & ideas in at least one finished artwork he use of elements, principles and aesthetic qualities to

Unit 3: Studio practices and processes

This unit focuses on 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 exploration. 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. The student determines the studio process. Students will select some potential directions from which to develop at least two artworks in Unit 4.

Students are expected to visit at least two different exhibitions and study specific artworks displayed in these exhibitions during their current year of study.

Area of Study 1: Exploration proposal

On completion of this unit the student should be able to prepare an exploration proposal that formulates the content and parameters of an individual studio process including a plan of how the proposal will be undertaken.

Area of Study 2: Studio process

On completion of this unit the student should be able to progressively present an individual studio process recorded in written and visual form that produces a range of potential directions, and reflects the concepts and ideas documented in the exploration proposal and work plan.

Area of Study 3: Artists and studio practices

On completion of this unit the student should be able to examine the practice of at least two artists, with reference to two artworks by each artist, referencing the different historical and cultural context of each artwork.

Unit 4: Studio practice and art industry contexts.

The focus for this unit is on planning, production & evaluation required to develop, refine & present artworks that link cohesively to the ideas resolved in Unit 3. To support the creation of artworks, students present visual & 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. This unit investigates aspects of artists' involvement in the art industry, focusing on a least two different exhibitions or galleries that the student has visited in the current year. Students investigate the preparation, presentation and conservation of artworks displayed in exhibitions. Students examine a range of environments for the presentation of artworks including galleries, artist-run & online spaces & alternative art spaces.

Area of Study 1: Production and presentation of artworks

On completion of this unit the student should be able to present at least two finished artworks based on selected and evaluated potential directions developed through the studio process, which demonstrate refinement and application of materials and techniques, and that realise and communicate the student's ideas expressed in the exploration proposal.

Area of Study 2: Evaluation

On completion of this unit the student should be able to provide visual & written documentation that identifies & evaluates the extent to which the artworks reflect the selected potential directions, & effectively demonstrates a cohesive relationship between the works.

Area of Study 3: Art industry contexts

On completion of this unit the student should be able to compare methods used by artists & considerations of curators in preparation, presentation, conservation & promotion of specific artworks in at least two different exhibitions.

ASPIRE



ASPIRE is a compulsory part of VCE Studies at Yarra Hills Secondary College. Students completing a VCE VM course do not participate in ASPIRE. The college understands that achievement is connected to a student's wellbeing. Thus, ASPIRE is a Senior School initiative that aims to integrate student wellbeing and engagement into the life of our young adults.

The program is underpinned by a Positive Education Framework that places Positive Emotions, Engagement, Relationships, Meaning & Purpose and Accomplishment at the very heart of wellbeing. We aim to cultivate a sense of resilience and purpose in our students. The program further introduces Study Skills, Mentoring and Pathways Information, to pave the way for success, both at school and beyond.

At the very heart of **ASPIRE**, we teach core units in:

- **Accomplishing Goals**
- **Study Skills**
- **Positive Emotions**
- **Investigating Pathways and Purpose**
- **Relationships**
- **Engagement**

The content delivered during ASPIRE is complimented by the Year 12 Big Days Program and Year 11 Study Skills Day, as well as student supports within the school community, such as links with our Senior Sub-School Team, Senior Mentors and Senior Wellbeing Team.

Other curriculum & events included in ASPIRE include:

- Key aspects of the Resilience, Rights, Respectful Relationships learning curriculum; including Personal Strengths, Goal Setting and Time Management, Stress Management and Safe Socialising
- Career awareness, career education and "work readiness".
- Guest Speakers
- College Events

Key assessment tasks, including English and Math Assessment Tasks, will also be scheduled during this time.

Additional Course Requirements:

Students will be given an ASPIRE journal, the cost of which is incorporated into the costs of the Year 12 Big Days Program and Year 11 Study Skills Day.

Biology



Scope of Study:

The study of Biology explores the diversity of life as it has evolved and changed over time and considers how living organisms function and interact. It explores the processes of life, from the molecular world of the cell to that of the whole organism and examines how life forms maintain and ensure their continuity. Students study contemporary research, models, and theories to understand how knowledge in biology has developed and how this knowledge continues to change in response to new evidence and discoveries. An understanding of the complexities and diversity of biology provides students with the opportunity to appreciate the interconnectedness of concepts and areas both within biology, and across biology and the other sciences.

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

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

Additional Course Requirements:

Unit 1: How do organisms regulate their functions?

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

Area of Study 1: How do cells function?

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

Area of Study 2: How do plant and animal systems function?

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

Area of Study 3: How do scientific investigations develop understanding of how organisms regulate their functions?

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

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 predator 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.

Area of Study 1: How is inheritance explained?

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

Area of Study 2: How do inherited adaptations impact on diversity?

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

Area of Study 3: How do humans use science to explore and communicate contemporary bioethical issues?

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

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.

Area of Study 1: What is the role of nucleic acids and proteins in maintaining life?

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

Area of Study 2: How are biochemical pathways regulated?

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

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 palaeontology, 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.

Area of Study 1: How do organisms respond to pathogens?

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

Area of Study 2: How are species related over time?

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

Area of Study 3: How is scientific inquiry used to investigate cellular processes and/or biological change?

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

Business Management



Scope of Study:

VCE Business Management examines the ways businesses manage resources to achieve objectives. The VCE Business Management study design follows the process from the first idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure continued success of a business. Students develop an understanding of the complexity of the challenges facing decision makers in managing these resources.

In studying VCE Business Management, students develop knowledge and skills that enhance their confidence and ability to participate effectively as socially responsible and ethical members, managers and leaders of the business community, and as informed citizens, consumers and investors. The study of Business Management leads to opportunities across all facets of the business and management field such as small business owner, project manager, human resource manager, operations manager or executive manager. Further study can lead to specialisation in areas such as marketing, public relations and event management.

Additional Course Requirements

Unit 1: Planning a Business

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. The ability of entrepreneurs to establish a business 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, as well as the effect of these on planning a business. They also consider the importance of the business sector to the national economy and social wellbeing.

Area of Study 1: The Business Idea

On completion of this unit the student should be able to describe a process for creating and developing a business idea, and explain how innovative and entrepreneurial practices can contribute to the national economy and social wellbeing.

Area of Study 2: Internal Business Environment and Planning

On completion of this unit the student should be able to describe the internal business environment and analyse how factors from within it may affect business planning. This includes key knowledge such as business types and models, financing and location considerations, planning tools and business supports.

Area of Study 3: External Business Environment and Planning

On completion of this unit the student should be able to describe the external environment of a business and explain how the macro and operating factors within it may affect business planning, including factors such as societal attitudes, economic conditions, technological considerations and corporate social responsibility

Unit 2: Establishing a Business

This unit focuses on the establishment phase of a business. Establishing a business involves compliance with legal requirements as well as 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 met 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 management practices by applying key knowledge to contemporary business case studies from the past four years.

Area of Study 1: Legal Requirements and Financial Obligations

On completion of this unit the student should be able to outline the key legal requirements and financial record-keeping considerations when establishing a business and explain the importance of establishing effective policies and procedures to achieve compliance with these requirements.

Area of Study 2: Marketing a Business

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

Area of Study 3: Staffing a Business

On completion of this unit the student should be able to discuss the importance of staff to a business, discuss the staffing needs for a business, and evaluate staff-management strategies from both an employer and staff perspective.

Unit 3: Managing a Business

In this unit students explore the key processes and considerations for managing a business efficiently and effectively to achieve business objectives. Students examine different types of businesses and their respective objectives and stakeholders. They investigate strategies to manage both staff and business operations to meet objectives and develop an understanding of the complexity and challenge of managing businesses. Students compare theoretical perspectives with current practice using contemporary Australian and global business case studies from the past four years.

Area of Study 1: Business Foundations

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

Area of Study 2: Human Resource Management

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

Area of Study 3: Operations Management

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

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 effective management and leadership in change management. Using one or more contemporary business case studies from the past four years, students evaluate business practice against theory.

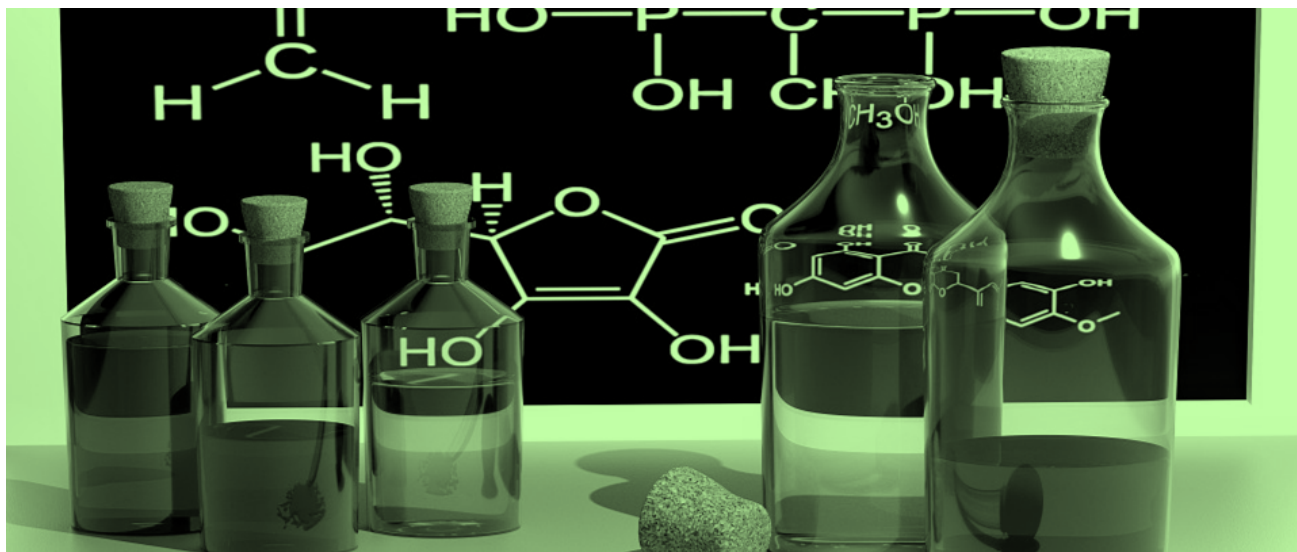
Area of Study 1: Reviewing Performance - the need for change

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

Area of Study 2: Implementing Change

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

Chemistry



Scope of Study:

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

As well as increasing their understanding of scientific processes, students develop insights into how knowledge in chemistry has changed, and continues to change, in response to new evidence, discoveries and thinking. They explore the impact of chemistry on their own lives, and on society and the environment.

Additional Course Requirements:

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 structures and properties of a range of materials, including covalent compounds, metals, ionic compounds and polymers. They are introduced to ways that chemical quantities are measured. They consider how manufacturing innovations lead to more sustainable products being produced for society through the use of renewable raw materials and a transition from a linear economy towards a circular economy.

Area of Study 1: How do the chemical structures of materials explain their properties and reactions?

On completion of this unit the student should be able to explain how elements form carbon compounds, metallic lattices and ionic compounds, experimentally investigate and model the properties of different materials, and use chromatography to separate the components of mixtures.

Area of Study 2: How are materials quantified and classified?

On completion of this unit the student should be able to calculate mole quantities, use systematic nomenclature to name organic compounds, explain how polymers can be designed for a purpose, and evaluate the consequences for human health and the environment of the production of organic materials and polymers.

Area of Study 3: How can chemical principals be applied to create a more sustainable future?

On completion of this unit the student should be able to investigate and explain how chemical knowledge is used to create a more sustainable future in relation to the production or use of a selected material.

Unit 2: How do chemical reactions shape the natural world?

Society is dependent on the work of chemists to analyse the materials and products in everyday use. In this unit students analyse and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid-base and redox reactions in society.

Area of study 1: How do chemicals interact with water?

On completion of this unit the student should be able to explain the properties of water in terms of structure and bonding, and experimentally investigate and analyse applications of acid-base and redox reactions in society.

Area of study 2: How are chemicals measured and analysed?

On completion of this unit the student should be able to calculate solution concentrations and predict solubilities, use volumetric analysis and instrumental techniques to analyse for acids, bases and salts, and apply stoichiometry to calculate chemical quantities.

Area of Study 3: How do quantitative scientific investigations develop our understanding of chemical reactions?

On completion of this unit the student should be able to draw an evidence-based conclusion from primary data generated from a student-adapted or student-designed scientific investigation related to the production of gases, acid-base or redox reactions or the analysis of substances in water.

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

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

Area of study 1: What are the current and future options for supplying energy?

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

Area of study 2: How can the rate and yield of chemical reactions be optimised?

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

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

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

Area of study 1: How are organic compounds categorised and synthesised?

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

Area of study 2: How are organic compounds analysed and used?

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

Area of study 3: How is scientific inquiry used to investigate the sustainable production of energy and/or materials?

Students undertake a student-designed scientific investigation in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation involves the generation of primary data related to the production of energy and/or chemicals and/or the analysis or synthesis of organic compounds, and should be inspired by a contemporary chemical challenge or issue.



Computing

Scope of Study:

Digital computing can be found in the home, where we work, and everywhere in between. Digital literacy skills are required in 87% of current jobs and employers in Australia will need to find an additional 156,000 people with digital skills to fill one in four new jobs created over the next three years [“Ready, set, upskill” report by RMIT]. The VCE Applied Computing subjects provide you with the opportunity to acquire and develop these highly sought-after digital skills.

VCE Applied Computing focuses on how we use technology to solve specific problems. With rapidly increasing threats to our digital security from ransomware and hacking, we look at how we can minimise threats to our data and security.

VCE Applied Computing is based on four key concepts: digital systems (hardware, software, and networks), data and information, approaches to problem solving (analysis, design, development, and evaluation), and interactions and impact.

VCE Applied Computing provides you with opportunities to acquire and develop the knowledge and skills to use digital systems efficiently, effectively, and innovatively when creating digital products. We will investigate legal requirements and ethical responsibilities that individuals and organisations have with respect to the security and usefulness of data and information. VCE Applied Computing develops an awareness of the technical, social, and economic impacts of information systems, both currently and into the future.

VCE Applied Computing provides you with opportunities to acquire and develop skills in using a wide range of software applications, many of which are highly desired by employers.

The Study of Applied Computing at Units 1 and 2 leads to two pathways:

- Data Analytics at Units 3 & 4
- Software Development at Units 3 & 4

Unit 1: Applied Computing

In this dynamic unit, you'll dive into both qualitative and quantitative data types, from interviews and surveys to AI-generated data. You'll master data characteristics and quality factors like accuracy and relevance. Discover the latest in programming trends, AI code generators, and low-code development. Get hands-on with design tools, OOP principles, and essential programming language features. Explore ethical issues, Australian Privacy Principles, and perfect your APA referencing. Learn cutting-edge validation, debugging, and testing techniques, perform statistical analysis, and craft stunning data visualizations. Key skills include interpreting solution requirements, utilizing design tools, developing robust software, documenting functionality, and navigating legal and ethical landscapes.

Area of Study 1: Data analysis

You will use software tools to create data visualizations from provided designs and data. You will interpret and manipulate data to draw conclusions, creating charts, graphs, maps, infographics, and dashboards. You will apply computational and design thinking skills to develop effective data visualizations.

Area of Study 2: Programming

You will use the PHP language to create a working software solution based on provided requirements. You will apply the problem-solving stages of design and development, using a range of design tools and OOP features, including data structures, naming conventions, internal documentation, and validation. You will also apply testing and debugging techniques to ensure your solution works as intended.

Unit 2: Applied Computing

In this unit, you'll uncover the power of curiosity, ingenuity, and the UN's Sustainable Development Goals to fuel innovation. Delve into digital systems like assistive technologies, GPS devices, and robotics, and explore the impacts of emerging technologies such as automation and cyberbullying. You'll learn how to craft creative solutions and specifications, and master data collection methods. Get hands-on with design tools like mock-ups and sitemaps, and dive into OOP principles and legal requirements, including AI ethics and copyright. Explore network security topics, from hardware and software components to communication technologies and cyber threats, focusing on mitigation strategies and cryptographic techniques. Key skills include analysing network vulnerabilities, proposing security strategies, and evaluating the effectiveness of innovative solutions.

Area of Study 1: Innovative solutions

You work collaboratively and select a topic for further study to create an innovative solution in an area of interest. The innovative solution can be presented as a proof of concept, a prototype or a product. You engage in all areas of the problem-solving methodology.

Area of Study 2: Network security

As an introduction to cybersecurity, you investigate networks and the threats, vulnerabilities and risks to data and information. You propose strategies to protect the data accessed using a network and carry out an investigation into the school's network.

Computing: Software Development Units 3 & 4

```
10 }
11
12 // write data to file
13 class writefile {
14     function file_write($file_name, $data) {
15         $filename = fopen($file_name, "a") or die("Unable to write to file!");
16         fwrite($filename, $data);
17         fclose($filename);
18     }
19 }
```

Unit 3: Software development

In this unit, you will utilise a problem-solving methodology to build functional software modules using an object-oriented programming (OOP) language. You will delve into the analysis, design, and development stages of this approach.

In Area of Study 1, you will implement teacher-provided requirements and designs to create software modules using OOP features and various design tools.

Area of Study 2 focuses on analysing a problem, planning a project, defining software requirements, and designing a solution. This area sets the foundation for the School-assessed Task (SAT) completed in Unit 4, Area of Study 1.

Area of Study 1: Programming

You will interpret requirements and designs to develop functional software modules using the PHP language. You will manipulate, validate, test, and document these modules, focusing on OOP features and creating graphical user interfaces for specified modules. You will use validation to ensure data integrity, and debugging/testing to ensure functionality.

Area of Study 2: Analysis and design

In this area of study, you will prepare for developing a software solution to address a problem, need, or opportunity identified within your community. You will independently identify the issue, create a comprehensive project plan with defined milestones and use analysis tools to depict user-system relationships.

Unit 4: Software development

In this unit, you will use an object-oriented programming (OOP) language to create software solutions that meet both individual and organizational needs, while also addressing cyber security risks.

In Area of Study 1, you will take the design you developed in Unit 3 and refine it into a fully functional software solution. This process involves thorough testing, evaluation, and assessment of your project plan.

In Area of Study 2, which is part of the School-assessed Task in Unit 4, you will analyse an organization's current software development practices, identify security risks, and propose recommendations to enhance security in software development environments and practices.

Area of Study 1: Development and evaluation

In this area of study, you will develop the solution you designed in Unit 3 into a software solution that meets your identified problem by applying the problem-solving stages of development and evaluation. You will use appropriate features of an OOP language to develop an efficient and effective software solution. Validation, debugging, and testing techniques will ensure the software solution meets requirements.

Area of Study 2: Cybersecurity – software security

In this area of study, you will focus on the security risks posed to organisations by insecure software development environments and practices. You will analyse and evaluate current software development practices, identifying vulnerabilities and risks using threat-modelling principles. Consider the consequences of these issues and propose strategies to minimise or mitigate risks, while adhering to legal requirements and ethical considerations.

Dance



Scope of Study:

VCE Dance develops students' physical skills, personal movement vocabulary, and application of choreographic and analytical principles. Students create and perform their own dance works as well as studying the dance works of others through performance and analysis. They consider influences on the expressive intention and movement vocabulary of their own dances and also on works created by choreographers working in a range of styles, genres and traditions. Influences on aspects of production in dance works are also studied. In each unit, students are required to undertake systematic dance training to build physical skills and develop their ability to execute safely a diverse range of expressive body actions. Students develop and refine their choreographic skills by exploring personal and learnt movement vocabularies, and ways in which movement can be created and arranged to communicate the expressive intention of the dance-maker. Students perform choreographed or learnt solo and group dance works using different dance-making processes. They also study ways in which ideas are communicated through the skilled performance of their own and others' dances.

Additional Course Requirements:

Students will need to change into suitable clothing for practical dance classes.

Unit 1:

In this unit students explore the potential of the body as an instrument of expression. They learn about and develop physical skills. Students develop and perform movement studies and dances with unified compositions created through a range of movement creation processes. They also begin to develop skills in documenting and analysing movement and develop understanding of how choreographers use these processes.

Area of Study 1: Dance perspectives

On completion of this unit the student should be able to describe and document the expressive and technical features of their own and other choreographers' dance works and discuss influences on their own dance-making.

Area of Study 2: Choreography and performance

On completion of this unit the student should be able to choreograph and perform a solo or group dance work and complete structured improvisations.

Area of Study 3: Dance technique and performance

On completion of this unit the student should be able to perform a learnt solo or group dance work safely and expressively.

Area of Study 4: Awareness and maintenance of the dancer's body

On completion of this unit the student should be able to describe aspects of the physiology, and demonstrate the safe use and maintenance, of the dancer's body.

Unit 2:

This unit focuses on expanding students' personal movement vocabulary and choreographic skills through the exploration of the elements of movement: time, space and energy and the study of form. Students apply their understanding of form and the expressive capacity of the elements of movement to the dance-making and performing processes involved in choreographing and performing their own dance works and dance works created by others. Students are also introduced to dance traditions, styles, and works. Students describe, analyse, and discuss their own and others' dances.

Area of Study 1: Dance perspectives

On completion of this unit the student should be able to analyse use of the elements of movement – time, space, and energy – in selected dance traditions, styles and dance works.

Area of Study 2: Choreography, performance, and dance-making analysis

On completion of this unit the student should be able to choreograph and perform a solo or group dance work, complete structured improvisations, and describe the dance-making processes and performance practices used in their own works.

Area of Study 3: Dance technique, performance, and dance analysis

On completion of this unit the student should be able to expressively perform a learnt solo or group dance work and analyse the processes used.

Unit 3:

This unit focuses on choreography, rehearsal and performance of a solo dance work and involves the execution of a diverse range of body actions and use of performance skills. Students also learn a group dance work created by another choreographer. The dance-making and performance processes involved in choreographing, rehearsing, and performing the solo dance work, and learning, rehearsing and performing the learnt group dance work are analysed.

Area of Study: Dance perspectives

On completion of this unit the student should be able to analyse selected solo dance works.

Area of Study 2: Choreography, performance, and dance-making analysis

On completion of this unit the student should be able to choreograph, rehearse and perform a solo dance work and analyse the processes and practices used.

Area of Study 3: Dance technique, performance, and analysis

On completion of this unit the student should be able to learn, rehearse and perform a group dance work created by another choreographer and analyse the processes and practices used.

Unit 4:

This unit focuses on choreography, rehearsal and performance of a unified solo dance work. When rehearsing and performing this work, students focus on expressive and accurate execution of choreographic variations of spatial organisation and demonstration of artistry in performance. Students also document and analyse the dance-making and performance processes involved in the choreography, rehearsal, and performance of the solo dance work.

Area of Study 1: Dance perspectives

On completion of this unit the student should be able to analyse a selected group dance work.

Area of Study 2: Choreography, performance, and dance-making analysis

On completion of this unit the student should be able to choreograph, rehearse and perform a solo dance work and analyse the processes and practices used.

Drama



Scope of Study:

The study of Drama focuses on the creation and performance of characters and stories that communicate ideas, meaning and messages. Students use creative processes, a range of stimulus material and play-making techniques to develop and present devised work. Students learn about and draw on a range of performance styles relevant to practices of ritual and storytelling, contemporary drama practice and the work of significant drama practitioners. Students explore characteristics of selected performance styles and apply and manipulate conventions, dramatic elements, and production areas. They use performance skills and expressive skills to explore and develop role and character. The performances they create will go beyond the reality of life as it is lived and may pass comment on or respond to aspects of the real world. These performances can occur in any space. Students also analyse the development of their own work and performances by other drama practitioners. Drama requires students to be creative and critical thinkers. The study of drama provides students with knowledge, skills, and confidence to communicate as individuals and collaboratively. Drama can provide pathways to training and further studies in fields such as acting, direction, playwriting, production design, production management, communication and drama criticism.

Additional Course Requirements:

Students are required to attend the excursions to professional theatre performances to undertake and complete the outcomes. This will incur costs to the students which include the ticket, plus possible script and pre- and post-show forums. Students will undertake extra rehearsals for their ensemble and solo performances outside of class time.

Unit 1: Introducing performance styles

This unit focuses on three or more performance styles from a range of social, historical, and cultural contexts. Students examine drama traditions of ritual and storytelling to devise performances that go beyond re-creation and/or representation of real life as it is lived. Students will be creating, presenting, and analysing a devised solo and/or ensemble performance that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. Students analyse their own performance work and a work by professional drama performers. Students apply play-making techniques to shape and give meaning to their performance. They manipulate expressive and performance skills in the creation and presentation of characters and develop awareness and understanding of how characters are portrayed in a range of performance styles. They document the processes they use as they explore a range of stimulus material, and experiment with production areas, dramatic elements, conventions and performance styles.

Area of Study 1: Creating a devised performance

On completion of this unit the student should be able to devise and document solo and/or ensemble drama works based on experiences and/or stories.

Area of Study 2: Presenting a devised performance

On completion of this unit the student should be able to perform devised drama works created in Area of Study 1 to an audience.

Area of Study 3: Analysing a devised performance

On completion of this unit the student should be able to analyse the development, and the performance to an audience, of their devised work.

Area of Study 4: Analysing a professional drama performance

On completion of this unit the student should be able to analyse the presentation of ideas, stories, and characters in a drama performance by professional or other drama practitioners.

Unit 2: Australian Identity

In this unit students study aspects of Australian identity evident in contemporary drama practice. This may also involve exploring the work of selected drama practitioners and associated performance styles. A focus on the use and documentation of the processes involved in constructing a devised solo or ensemble performance. Students create, present, and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context. Students analyse their own performance work as well as undertaking an analysis of a performance of an Australian work, where possible, by professional actors.

Area of Study 1: Perspective

On completion of this unit the student should be able to analyse use of the movement categories and elements of movement in selected dance traditions, styles and/or works.

Area of Study 2 Choreography and performance Students choreograph a solo, duo or group dance work. Using the choreographic process and choreographic devices to safely manipulate movement, they explore their chosen intention and develop personal movement vocabulary

Unit 3: Devised ensemble performance

In this unit students explore the work of drama practitioners and draw on contemporary practice as they devise ensemble performance work. Students explore performance styles and associated conventions from a diverse range of contemporary and/or traditional contexts. They work collaboratively to devise, develop and present an ensemble performance. Students create work that reflects a specific performance style or one that draws on multiple performance styles and is therefore eclectic in nature. They use play-making techniques to extract dramatic potential from stimulus material, then apply and manipulate conventions, dramatic elements, expressive skills, performance skills and production areas. Throughout development of the work, they experiment with transformation of character, time and place, and application of symbol. Students devise and shape their work to communicate meaning or to have a specific impact on their audience. In addition, students document and evaluate stages involved in the creation, development, and presentation of the ensemble performance. Students analyse and evaluate a professional drama performance selected from the prescribed VCE Drama Unit 3 Playlist published annually on the VCAA website.

Area of Study 1 Devising and presenting ensemble performance

On completion of this unit the student should be able to develop and present characters within a devised ensemble performance that goes beyond a representation of real life as it is lived.

Area of Study 2 Analysing a devised ensemble performance

On completion of this unit the student should be able to analyse the use of processes, techniques, and skills to create and present a devised ensemble performance.

Area of Study 3 Analysing and evaluating a professional drama performance

On completion of this unit the student should be able to analyse and evaluate a professional drama performance selected from the prescribed VCE Drama Unit 3 Playlist.

Unit 4: Devised solo performance

This unit focuses on the development and the presentation of devised solo performances. Students explore contemporary practice and works that are eclectic in nature; that is, they draw on a range of performance styles and associated conventions from a diverse range of contemporary and traditional contexts. Students develop skills in extracting dramatic potential from stimulus material and use play-making techniques to develop and present a short solo performance. They experiment with application of symbol and transformation of character, time and place. They apply conventions, dramatic elements, expressive skills, performance skills and performance styles to shape and give meaning to their work. Students further develop and refine these skills as they create a performance in response to a prescribed structure. They consider the use of production areas to enhance their performance and the application of symbol and transformations. Students document and evaluate the stages involved in the creation, development, and presentation of their solo performance. Students are encouraged to attend performances that incorporate a range of performance styles to support their work in this unit.

Area of Study 1: Demonstrating techniques of solo performance

On completion of this unit the student should be able to demonstrate, in response to given stimulus material, application of symbol and transformation of character, time and place, and describe the techniques used in a short solo performance.

Area of Study 2 Devising a solo performance

On completion of this unit the student should be able to create, develop and perform a solo performance in response to a prescribed structure. The structure must be selected from the VCE Drama Solo Performance Examination published annually by the VCAA.

Area of Study 3 Analysing and evaluating a devised solo performance

On completion of this unit the student should be able to analyse and evaluate the creation, development and presentation of a solo performance devised in response to a prescribed structure.



Scope of Study:

VCE English has an emphasis the progressive development of critical understanding and control of the English language. 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. They also focus on the analysis and construction of texts that attempt to influence an audience. Students explore the use of language for persuasive effect and the structure and presentation of argument. They consider different types of persuasive language, including written, spoken, and visual, and combinations of these, and how language is used to position the reader.

Students explore how comparing texts can provide a deeper understanding of ideas, issues and themes. They investigate how the reader's understanding of one text is broadened and deepened when considered in relation to another text. Students explore how features of texts, including structures, conventions and language convey ideas, issues and themes that reflect and explore the world and human experiences, including historical and social contexts. Students practise their listening and speaking skills through discussion, developing their ideas and thinking in relation to the texts studied. Students build on their understanding of argument and the use of persuasive language in texts that attempt to influence an audience.

Additional Course Requirements:

Unit 1

In this unit, students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors. Students engage with and develop an understanding of effective and cohesive writing.

Area of Study 1: Reading and Exploring texts

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

Area of Study 2: Crafting texts

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

Unit 2

In this unit students develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing, to further open possible meanings in a text, and to extend their writing in response to text. Students also consider the way arguments are developed and delivered in many forms of media

Area of Study 1: Reading and Exploring texts

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

Area of Study 2: Exploring Argument

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

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.

Area of Study 1: Reading and Creating

On completion of this unit, students should be able to produce an analytical interpretation of a selected text, and a creative response to a different selected text.

Area of Study 2: Analysing Argument

On completion of this unit, students should be able to analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.

Unit 4:

In this unit students compare the presentation of ideas, issues and themes in texts.

Area of Study 1: Reading and Comparing

Students should be able to produce a detailed comparison which analyses how two selected texts present ideas, issues and themes.

They create an oral presentation intended to position audiences about an issue currently debated in the media.

Area of Study 2: Presenting Argument

Students should be able to construct a sustained and reasoned point of view on an issue currently debated in the media.

English as an Additional Language (EAL)



Scope of Study:

VCE English focuses on how English language is used to create meaning in written, spoken and multimodal texts of varying complexity. Literary texts selected for study are drawn from the past and present, from Australia and from other cultures. Other texts are selected for analysis and presentation of argument. The study is intended to meet the needs of students with a wide range of expectations and aspirations, including those for whom English is an additional language.

The study of English contributes to the development of literate individuals capable of critical and creative thinking, aesthetic appreciation, and creativity. This study also develops students' ability to create and analyse texts, moving from interpretation to reflection and critical analysis.

Through engagement with texts from the contemporary world and from the past, and using texts from Australia and from other cultures, students studying English become confident, articulate and critically aware communicators and further develop a sense of themselves, their world and their place within it. English helps equip students for participation in a democratic society and the global community.

Students must meet VCAA eligibility requirements to be enrolled in this subject.

Additional Course Requirements:

Students must supply or purchase a bilingual dictionary (English and their first language).

Unit 1

In this unit, students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors. Students engage with and develop an understanding of effective and cohesive writing.

Area of Study 1: Reading and Exploring texts

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

Area of Study 2: Crafting texts

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

Unit 2

In this unit students develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing, to further open possible meanings in a text, and to extend their writing in response to text. Students also consider the way arguments are developed and delivered in many forms of media

Area of Study 1: Reading and Exploring texts

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

Area of Study 2: Exploring Argument

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

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. They also develop and refine their listening skills. They listen to a range of spoken texts and use active listening strategies to understand information, ideas and opinions presented in texts. Listening skills are developed in the context of Areas of Study 1 and 2 and specific speaking and listening activities.

Area of Study 1: Reading and Creating texts

On completion of this unit the student should be able to produce an analytical interpretation of a selected text, and a creative response to a different selected text.

Area of Study 2: Analysing Argument

On completion of this unit the student should be able to analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.

Area of Study 3: Listening to Texts

On completion of this unit the student should be able to comprehend a spoken text.

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

Area of Study 1: Reading and Comparing Texts

On completion of this unit the student should be able to produce a detailed comparison which analyses how two selected texts present ideas, issues and themes.

Area of Study 2: Presenting Argument

On completion of this unit the student should be able to construct a sustained and reasoned point of view on an issue currently debated in the media.

Environmental Science



Scope of Study:

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

In VCE Environmental Science, Earth is understood as a set of four interrelated systems: the atmosphere, the biosphere, the hydrosphere, and the lithosphere. This study explores how the relationships between these systems produce natural environmental change over a variety of time scales and how these systems respond to change and disruption. Students investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts with a focus on biodiversity, pollution, food and water security, climate change and energy use. Students examine the challenges and opportunities presented by selected environmental issues and case studies, and consider how different value systems, priorities, knowledge, and regulatory frameworks affect environmental decision-making and planning for a sustainable future.

Additional Course Requirements:

Unit 1: How are Earth's dynamic systems interconnected to support life

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

In this unit students examine the processes and interactions occurring within and between Earth's four interrelated systems – the atmosphere, biosphere, hydrosphere, and lithosphere. They focus on how ecosystem functioning can influence many local, regional, and global environmental conditions such as plant productivity, soil fertility, water quality and air quality. Students explore how changes that have taken place throughout geological and recent history are fundamental to predicting the likely impact of future changes.

Area of Study 1: How are Earth's systems organised and connected?

On completion of this unit the student should be able to describe the movement of energy and nutrients across Earth's four interrelated systems and analyse how dynamic interactions among biotic and abiotic components of selected local and regional ecosystems contribute to their capacity to support life and sustain ecological integrity.

Area of Study 2: How do Earth's systems change over time?

On completion of this unit the student should be able to analyse how changes occurring at various time and spatial scales influence Earth's characteristics and interrelated systems, and assess the impact of diverse stakeholder values, knowledge and priorities in the solutions-focused management of a selected regional environmental challenge.

Area of Study 3: How do scientific investigations develop understanding of how Earth's systems support life?

On completion of this unit the student should be able to draw an evidence-based conclusion from primary data generated from a student-designed or student-adapted scientific investigation related to ecosystem components, ecosystem monitoring and/or change affecting Earth's systems.

Unit 2: What affects Earth's capacity to sustain life?

A sustainable food & water system with a minimal environmental footprint is necessary to secure food & water supplies to meet demands of current & future populations of Earth's species, including humans. Both natural & human activities can generate pollution that can cause adverse effects across Earth's four interrelated systems – the atmosphere, biosphere, hydrosphere and lithosphere – consequently affect food & water security. Pollution can make air & water resources hazardous for plants & animals. It can directly harm soil microorganisms & larger soil-dwelling organisms, with consequences for soil biodiversity, as well as impacting on food security by impairing plant function & reducing food yields. Students consider pollution as well as food and water security as complex & systemic environmental challenges facing current & future generations. They examine the characteristics, impacts, assessment, and management of a range of pollutants that are emitted or discharged into Earth's air, soil, water & biological systems, & explore factors that limit & enable the sustainable supply of adequate & affordable food & water.

Area of Study 1: How can we manage pollution to sustain Earth's systems?

On completion of this unit the student should be able to explain how the chemical and physical characteristics of pollutants impact on Earth's four systems and recommend and justify a range of options for managing the local and global impacts of pollution.

Area of Study 2: How can we manage food and water security to sustain Earth's systems?

On completion of this unit the student should be able to compare the advantages and limitations of different agricultural systems for achieving regional and global food security, evaluate the use of ecological footprint analysis for assessing future food and/or water security, and recommend and justify a range of options for improving food and/or water security for a nominated region.

Area of Study 3: How do scientific endeavours contribute to minimising human impacts on Earth's systems?

On completion of this unit the student should be able to investigate and explain how science can be applied to address the impacts of natural and human activities in the context of the management of a selected pollutant and/or the maintenance of food and/or water security.

Unit 3: How can biodiversity and development be sustained?

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

Area of Study 1: Why is maintaining biodiversity worth a sustained effort?

On completion of this unit the student should be able to explain the importance of Earth's biodiversity and how it has changed over time, analyse the threats to biodiversity, and evaluate management strategies to maintain biodiversity in the context of one selected threatened endemic species.

Area of Study 2: When is development sustainable?

On completion of this unit the student should be able to explain how sustainability principles relate to environmental management, analyse how stakeholder perspectives can influence environmental decision-making, and evaluate the effectiveness of environmental management strategies in a selected case study.

Unit 4: How can climate change and the impacts of human energy use be managed?

Unit 4: How can climate change and the impacts of human energy use be managed?

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

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

Area of Study 1: How can we respond to climate change?

On completion of this unit the student should be able to analyse the major factors that affect Earth's climate, explain how past and future climate variability can be measured and modelled, and evaluate options for managing climate change.

Area of Study 2: What might be a more sustainable mix of energy sources?

On completion of this unit the student should be able to compare the advantages and disadvantages of using a range of energy sources and evaluate the suitability and impacts of their use in terms of upholding sustainability principles.

Area of Study 3: How is scientific inquiry used to investigate contemporary environmental challenges?

On completion of this unit the student should be able to design and conduct a scientific investigation related to biodiversity, environmental management, climate change and/or energy use, and present an aim, methodology and method, results, discussion, and a conclusion in a scientific poster.

Food Studies



Scope of Study:

VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills, and building individual pathways to health and wellbeing through the application of practical food skills. VCE Food Studies provides a framework for informed and confident food selection and food preparation within today's complex architecture of influences and choices.

Students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems, and the many physical and social functions and roles of food. Students research sustainability and the legal, economic, psychological, sociocultural, health, ethical and political dimensions of food, and critically evaluate information, marketing messages and new trends.

Practical activities are integral to Food Studies and include comparative food testing, cooking, creating and responding to design briefs, demonstrations, dietary analysis, nutritional analysis, product analysis, scientific experiments and sensory analysis (including taste testing and use of focus groups).

Additional Course Requirements

Unit 1: Food Origins

In this unit students focus on food from historical and cultural perspectives. They investigate the origins and roles of food through time and across the world.

Area of Study 1: Food around the world

On completion of this unit the student should be able to analyse major factors in the development of a globalised food supply, and through practical activities critique the uses and adaptations of selected food from earlier cuisines in contemporary recipes.

Area of Study 2: Food in Australia

On completion of this unit the student should be able to describe patterns of change in Australia's food industries and cultures, and through practical activities critique contemporary uses of foods indigenous to Australia and those foods introduced through migration.

Unit 2: Food Makers

In this unit students investigate food systems in contemporary Australia. Students use practical knowledge and skills to produce foods and consider a range of evaluation measures to compare their foods to commercial products.

Area of Study 1: Australia's food systems

On completion of this unit the student should be able to analyse relationships, opportunities, and challenges within Australia's food systems, and respond to a design brief that produces a food product and demonstrates the application of commercial food production principles.

Area of Study 2: Food in the home

On completion of this unit the student should be able to use a range of measures to evaluate food products prepared in different settings for a range of dietary requirements and create a food product that illustrates potential adaptation in a commercial context.

Unit 3: Food in Daily Life

In this unit students investigate the many roles and everyday influences of food. Students investigate the science of food appreciation, the physiology of eating and digestion, and the role of diet on gut health. Students inquire into the role of food in shaping and expressing identity and connectedness, and the ways in which food information can be filtered and manipulated.

Area of Study 1: The science of food

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

Area of Study 2: Food choices, health, and wellbeing

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

Unit 4: Food Issues, Challenges and Futures

In this unit students examine debates about Australia's food systems as part of the global food systems and describe key issues relating to the challenge of adequately feeding a rising world population. Students focus on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices.

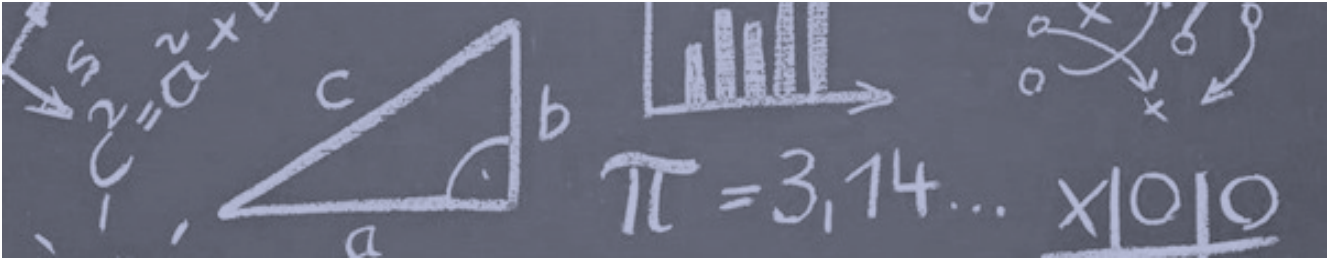
Area of Study 1: Navigating food information

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

Area of Study 2: Environment and ethics

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

Foundation Mathematics



Scope of Study:

Foundation Mathematics Units 1 and 2 focus on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society. They are also designed as preparation for Foundation Mathematics Units 3 and 4 and contain assumed knowledge and skills for these units.

Assumed knowledge and skills for Foundation Mathematics Units 3 and 4 are contained in Foundation Mathematics 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 key skills for the outcomes.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving integer, rational and real arithmetic, sets, lists and tables, contemporary data displays, diagrams, plans, geometric objects and constructions, algorithms, measures, 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, statistical and financial functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Additional Course Requirements:

Students must have a Scientific calculator and textbook to undertake this subject.

Units 1 and 2

In Unit 1 students consolidate mathematical foundations, further develop their knowledge and capability to plan and conduct activities independently and collaboratively, communicate their mathematical ideas, and acquire mathematical knowledge skills to make informed decisions in their lives.

The focus of Unit 2 is on extending breadth and depth in the application of mathematics to solving practical problems from contexts present in students' other studies, work and personal or other familiar situations.

Area of Study 1: Algebra, number and structure

In this area of study students cover estimation, and the use and application of different forms of number and related calculations in practical, everyday and routine work contexts

Area of Study 2: Data analysis, probability and statistics

In this area of study students cover collection, presentation and analysis of gathered and provided data from community, work, recreation and media contexts, including consideration of suitable forms of representation.

Area of Study 3: Discrete mathematics Financial and consumer mathematics

In this area of study students cover the use and interpretation of different forms of numbers and calculations, and their application in relation to the understanding and management of personal, local and national financial matters.

Area of Study 4: Space and measurement

In this area of study students cover time, and the use and application of the metric system and related measurements in a variety of domestic, societal, industrial and commercial contexts.

Units 3 and 4

Foundation Mathematics Units 3 and 4 focus on providing students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, community and global settings relevant to contemporary society. All four areas of study are to be completed over the two units, and content equivalent to two areas of study covered in each unit.

Area of Study 1: Algebra, number and structure

In this area of study students cover estimation, the use and application of different forms of numbers and calculations, algorithmic and computational thinking, and the representation of formal mathematical expressions and processes including formulas and other algebraic expressions to solve practical problems in community, business and industry contexts.

Area of Study 2: Data analysis, probability and statistics

In this area of study students cover collection, presentation and analysis of gathered and provided data from community, work, recreation and media contexts, including consideration of suitable forms of representation and summaries. This area of study incorporates the ability to critically reflect on statistical data and results, and to be able to communicate and report on the outcomes and any implications.

Area of Study 3: Discrete mathematics Financial and consumer mathematics

In this area of study students cover the use and application of different forms of numbers and calculations, relationships and formulae, and their application in relation to the analysis of, and critical reflection on, personal, local, national and global financial, consumer and global matters.

Area of Study 4: Space and measurement

In this area of study students cover the use and application of the metric system and related measurement in a variety of domestic, societal, industrial and commercial contexts, including consideration of accuracy, precision and error.

Health and Human Development



Scope of Study:

VCE Health and Human Development takes a broad and multidimensional approach to defining and understanding health and wellbeing. Students investigate the World Health Organization's definition and other interpretations of health and wellbeing. For the purposes of this study, students consider wellbeing to be an implicit element of health. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged.

Students examine health and wellbeing, and human development as dynamic concepts, subject to a complex interplay of biological, sociocultural and environmental factors, many of which can be modified by health care and other interventions. Students consider the interaction of these factors, with particular focus on the social factors that influence health and wellbeing; that is, on how health and wellbeing, and development, may be influenced by the conditions into which people are born, grow, live, work and age. Students consider Australian and global contexts as they investigate variations in health status between populations and nations. They look at the Australian healthcare system and research what is being done to address inequalities in health and development outcomes. They examine and evaluate the work of global organisations such as the United Nations and the World Health Organization, as well as non-government organisations and the Australian government's overseas aid program.

This study presents concepts of health and wellbeing, and human development, from a range of perspectives: individual and collective; local, national and global; and across time and the lifespan. Students develop health literacy as they connect their learning to their lives, communities and world. They develop a capacity to respond to health information, advertising and other media messages, enabling them to put strategies into action to promote health and wellbeing in both personal and community contexts.

Additional Course Requirements

Unit 1: Understanding health and wellbeing

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and also explore other interpretations. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged. For the purposes of this study, students should consider wellbeing to be an implicit element of health.

Area of Study 1: Health perspectives and influences

On completion of this unit the student should be able to explain multiple dimensions of health and wellbeing, explain indicators used to measure health status and analyse factors that contribute to variations in health status of youth.

Area of Study 2: Health and nutrition

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

Area of Study 3: Youth health and wellbeing

On completion of this unit the student should be able to interpret data to identify key areas for improving youth health and wellbeing, and plan for action by analysing one particular area in detail.

Unit 2: Managing health and development

This unit investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. This unit promotes the application of health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes.

Area of Study 1: Developmental transitions

On completion of this unit the student should be able to explain developmental changes in the transition from youth to adulthood, analyse factors that contribute to healthy development during prenatal and early childhood stages of the lifespan and explain health and wellbeing as an intergenerational concept.

Area of Study 2: Health care in Australia

On completion of this unit the student should be able to describe how to access Australia's health system, explain how it promotes health and wellbeing in their local community, and analyse a range of issues associated with the use of new and emerging health procedures and technologies.

Unit 3: Australia's health in a globalised world

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). 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.

Area of Study 1: Understanding health and wellbeing

On completion of this unit the student should be able to explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status.

Area of Study 2: Promoting health and wellbeing

On completion of this unit the student should be able to explain changes to public health approaches, analyse improvements in population health over time and evaluate health promotion strategies.

Unit 4: Health and human development in a global context

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. 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.

Area of Study 1: Health and wellbeing in a global context

On completion of this unit the student should be able to analyse similarities and differences in health status and burden of disease globally and the factors that contribute to differences in health and wellbeing.

Area of Study 2: Health and the Sustainable Development Goals

On completion of this unit the student should be able to analyse relationships between the SDGs and their role in the promotion of health and human development, and evaluate the effectiveness of global aid programs.

History – Modern (Units 1 & 2)



Scope of Study:

Modern History provides students with an opportunity to explore the significant events, ideas, individuals and movements that shaped the social, political, economic and technological conditions and developments that have defined the modern world. The late 19th century marked a challenge to existing empires, alongside growing militarism and imperialism. Empires continued to exert their powers as they competed for new territories. World War One was a significant turning point in modern history. It represented a complete departure from the past and heralded changes that were to have significant consequences for the rest 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.

Additional Course Requirements:

Unit 1: Change And Conflict

Students investigate the nature of social, political, economic and cultural change in the later part of the 19th century and the first half of the 20th century.

Area of Study 1: Ideology and Conflict

Outcome 1: On completion of this unit the student should be able to explain how significant events, ideologies and individuals contributed to political and economic changes in the first half of the 20th century, and analyse how these contributed to the causes of World War Two.

Area of Study 2: Social and Cultural Change

Outcome 2: On completion of this unit the student should be able to explain patterns of social and cultural change in everyday life in the first half of the twentieth century, and analyse the conditions which influenced these changes.

Unit 2: The Changing World Order

Students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century.

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.

Area of Study 1: Causes, Course and Consequences Of The Cold War

Outcome 1: On completion of this unit the student should be able to explain the causes of the Cold War and analyse its consequences on nations and people.

Area of Study 2: Challenge and Change

Outcome 2: On completion of this unit the student should be able to explain the challenges to social, political and/or economic structures of power and evaluate the extent to which continuity and change occurred.

History: Revolutions (Units 3 & 4)



Scope of Study:

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 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 1917
- The Chinese Revolution of 1949

Additional Course Requirements:

Unit 3: The French Revolution of 1789
Unit 4: The Russian Revolution of 1917

French Revolution

The Accession of Louis XVI to the throne (1774) to the night of August 4 1789

Russian Revolution

The Coronation of Tsar Nicholas (1896) to the announcement of Soviet Government 26 October 1917

Area of Study 1: Causes of the Revolution

In this area of Study, students explore and analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements. Students analyse significant events and how particular conditions contributed to the revolution, such as the calling of the Estates-General in France, or World War 1 in Russia. Revolutionary ideologies emerged in opposition to the existing order, such as Leninism in Russia, or how Enlightenment thinking influenced the promotion of change in France. Key individuals, and their intended or unintended actions who shape the course of the revolution are investigated, including Tsar Nicholas II in Russia, and King Louis XVI in France.

French Revolution

The August Decrees (1798) to the Dissolution of the National Convention Year III (1795)

Russian Revolution

Early Sovnarkom decrees (Oct 1917) to the end of the New Economic Policy (1927)

Area of Study 2: Consequences of the Revolution

In this area of study students analyse the consequences of the revolution and evaluate the extent to which it brought to society. Furthermore, students evaluate the success of the new regime's responses to these challenges and the extent to which the consequence of revolution resulted in dramatic and wide reaching social, political, economic and cultural change, progress or decline.

Consequences of revolution sometimes resulted in a compromise in revolutionary ideologies, such as Terror in both Russia and France. Individuals, such as Trotsky in Russia and Robespierre in France, attempt to create significant change. In analysing the past, the experiences of those living through the revolutions are investigated, such as the Sans-Culotte in France, and the peasants in Russia.

Legal Studies



Scope of Study:

In Australian society there is a range of complex laws that exist to protect the rights of individuals and to achieve social cohesion. VCE Legal Studies examines the institutions and principles which are essential to Australia's legal system. This includes the study of the key principle of justice - fairness, equality and access. Students develop an understanding of the rule of law, the role of lawmakers and the adversary system. They have the opportunity to investigate the criminal justice system as well as aspects of civil law. Reforms to the system are investigated. The course has a strong focus on real examples.

The study of VCE Legal Studies enables students to become active and informed citizens by providing them with valuable insights into their relationship with the law and the legal system. The subject equips students with the ability to research and analyse legal information and apply legal reasoning and decision making skills and fosters critical thinking. Further study in the legal field can lead to a broad range of career opportunities such as lawyer, paralegal secretary and careers in the court and parliamentary systems.

Additional Course Requirements:

Unit 1: The presumption of innocence

Criminal law aims to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order and infringing criminal law can result in charges. In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused.

Area of Study 1: Legal Foundations

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

Area of Study 2: Proving Guilt

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

Area of Study 3: Sanctions

On completion of this outcome the student should be able to explain the purposes and key concepts in the determinations of a criminal case.

Unit 2: Wrongs and Rights

Civil law aims 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 key concepts in civil law as well as their enforcement. Students learn about the methods and institutions that may be used to resolve civil dispute, and the purposes and types of remedies and their effectiveness. 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 the protection of rights in Australia.

Area of Study 1: Civil liability

On completion of this unit the student should be able to explain key concepts and purposes of civil law and apply these to cases.

Area of Study 2: Remedies

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

Area of Study 3 Rights

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

Unit 3: Rights and Justice

Students examine the methods and institutions of the justice system and consider their appropriateness in determining criminal cases. They investigate the extent to which the principles of justice are upheld.

Area of Study 1: The Victorian criminal justice system

Explain the rights of the accused and victims. Evaluate the ability of the system to achieve the principles of justice.

Area of Study 2: The Victorian civil justice system

Analyse the initiation of a civil claim and discuss the institutions used to resolve civil disputes. Evaluate the ability of the system to achieve the principles of justice.

Unit 4: The people, the law and reform

Students explore how the Australian Constitution establishes the law-making powers of parliaments and protects the people through structures that put a check on Parliament. They investigate parliament and the courts and the relationship between them. Finally, they consider the role of the individual, media and law reform bodies.

Area of Study 1: The people and the law makers

Students consider the ability of parliament and the courts to make law and evaluate the ways the Constitution acts as a check on law making by parliament.

Area of Study 2: The people and reform

Students explain the reasons for legal and Constitutional reform, discuss the ability of individuals to change the law and evaluate the ability of law reform bodies to change the law.

Literature



Scope of Study:

VCE Literature focuses on the meanings derived from texts, the relationships between texts, the contexts in which texts are produced, and how readers' experiences shape their responses to texts. Students concentrate on developing and refining their ability to:

- offer an interpretation of a whole text (or a collection of texts)
- write a close analysis of passages or extracts from a text
- understand and explore multiple interpretations of a text
- respond creatively to a text.

The study of VCE Literature fosters students' enjoyment and appreciation of the artistic and aesthetic merits of stories and storytelling, and enables students to participate more fully in the cultural conversations that take place around them. By reading and exploring a diverse range of established and emerging literary works, students become increasingly empowered to discuss texts. As both readers and writers, they extend their creativity and high-order thinking to express and develop their critical and creative voices.

Throughout this study, students deepen their awareness of the historical, social and cultural influences that shape texts, and their understanding of themselves as readers. They expand their frameworks for exploring literature by considering literary forms and features, engaging with language, and refining their insight into authorial choices. In this subject, students immerse themselves in challenging fiction and non-fiction texts, discovering and experimenting with a variety of interpretations in order to develop their own understanding and responses.

Additional Course Requirements:

Students who select Literature Units 1 & 2 must also select English Units 1 & 2.

Unit 1

Area of Study 1: Reading practices

In this area of study, students consider how language, structure, and stylistic choices are used in different literary forms and types of text. They consider both print and non-print texts, reflecting on the contribution of form and style to meaning. Students reflect on the degree to which points of view, experiences and contexts shape their own and others' interpretations.

Students closely examine the literary forms, features, and language of texts. They begin to identify and explore textual details, including language and features, to develop close written analysis.

On completion of this unit, students should be able to respond to a range of texts through close analysis.

Area of Study 2: Exploration of literary movements and genres

In this area of study, students explore the concerns, ideas, style, and conventions common to a distinctive type of literature seen in literary movements or genres. Examples of these groupings include: modernism, epic, tragedy, and magic realism, as well as more popular, or mainstream, genres and subgenres such as crime, romance, and science fiction.

Students explore texts from the selected movement or genre, identifying and examining attributes, patterns, and similarities that locate each text within that grouping. They engage with the ideas and concerns shared by the texts through language, settings, narrative structures and characterisation, and they experiment with the assumptions and representations embedded in the texts.

On completion of this unit, students should be able to explore conventions common to a selected movement or genre, and engage with the ideas, concerns, and representations from at least one complete text alongside multiple samples of other texts considered characteristic of the selected movement or genre.

Unit 2

Area of Study 1: Voices of Country

In this area of study, students explore the voices, perspectives, and knowledge of Aboriginal and Torres Strait Islander authors and creators. They consider the interconnectedness of place, culture, and identity through the experiences, texts, and voices of Aboriginal and Torres Strait Islander peoples, including connections to Country, the impact of colonisation and its ongoing consequences, and issues of reconciliation and reclamation.

Students examine representations of culture and identity in Aboriginal and Torres Strait Islander peoples' texts and the ways in which these texts present voices and perspectives that explore and challenge assumptions and stereotypes arising from colonisation.

They acknowledge and reflect on a range of Australian views and values (including their own) through text(s), and within that exploration, students consider stories about the Australian landscape and culture.

On completion of this unit, students should be able to explore and reflect on the voices, perspectives, and knowledge in the texts of Aboriginal and Torres Strait Islander authors and creators.

Area of Study 2: The text in its context

In this area of study, students focus on the text and its historical, social, and cultural context. They reflect on representations of a specific time-period and/or culture within a text.

Students explore the text to understand its point of view and what it reflects or comments on. They identify the language and the representations in the text that reflect the specific time-period and/or culture, its ideas and concepts. Students develop an understanding that contextual meaning is already implicitly or explicitly inscribed in a text, and that textual details and structures can be scrutinised to illustrate the text's significance.

Students further develop their ability to analyse language closely, recognising that words have historical and cultural import.

On completion of this unit, students should be able to analyse and respond to the representation of a specific time period and/or culture explored in a text, and reflect or comment on the ideas and concerns of individuals and groups in that context.

Unit 3

Area of Study 1: Adaptations and transformations

In this area of study, students focus on how the form of a text contributes to its meaning. They explore a set text by constructing a close analysis of that text, and then reflect on the extent to which adapting the text to a different form, often in a new or reimagined context, affects its meaning, comparing the original with the adaptation.

By exploring an adaptation, students also consider how creators of adaptations may emphasise or minimise viewpoints, assumptions, and ideas present in the original text.

On completion of this unit, students should be able to analyse aspects of a text, drawing on close analysis of textual detail, and then discuss the extent to which meaning changes when that text is adapted to a different form.

Area of Study 2: Developing interpretations

In this area of study, students explore the different ways we can read and understand a text by developing, considering, and comparing interpretations of a set text.

Students first develop their own interpretations of a set text, analysing how ideas, views, and values are presented, and the ways these are endorsed, challenged, and/or marginalised. These student interpretations also consider the historical, social, and cultural context in which a text is written and set, and evolve with awareness of their own views and values as readers.

They then explore a supplementary reading that can enrich, challenge, and/or contest the ideas and the views, values, and assumptions of the set text to further enhance their understanding. Examples of a supplementary reading can include writing by a teacher, a scholarly article, or an explication of a literary theory.

Informed by the supplementary reading, students develop a second interpretation of the same text. This should reflect an enhanced appreciation and understanding of the text and apply their developed understanding to key moments from the text, supporting their work with considered textual evidence.

On completion of this unit, students should be able to develop interpretations of a set text informed by the ideas, views, and values of both the text itself and a supplementary reading.

Unit 4

Area of Study 1: Creative responses to texts

With a focus on the imaginative techniques used for creating and recreating a literary work, students use their knowledge of how the meaning of texts can change as context and form change to construct their own creative transformations of texts. They learn how authors develop representations of people and places, and develop an understanding of language, voice, form, and structure. In their adaptation of the tone and the style of the original text, they draw inferences from the original text and develop an understanding of the views and values it explores.

Students develop an understanding of the various ways in which authors craft texts. They reflect critically a text, and discuss their own responses as they relate to the text, including the purpose and context of their creations.

On completion of this unit, students should be able to respond creatively to a text and comment critically on both the original text and their creative response.

Area of Study 2: Close analysis of texts

In this area of study, students focus on a detailed scrutiny of the language, style, concerns, and construction of texts. They attend closely to textual details to examine the ways specific passages in a text contribute to their overall understanding of the whole text.

Students consider literary forms, features and language, and the views and values of the text. They write expressively to develop a close analysis, using detailed references to the text.

On completion of this unit, students should be able to analyse literary forms, features, and language to present a coherent view of a whole text.



Scope of Study:

General Mathematics Units 1 and 2 cater for a range of student interests, provide preparation for the study of VCE General Mathematics at the Units 3 and 4 level and contain assumed knowledge and skills for these units.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams and geometric constructions, algorithms, algebraic manipulation, recurrence relations, 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.

Additional Course Requirements:

Students **must** have the textbook. They are strongly urged to purchase the CASIO CAS Calculator for this and Further Maths courses. Students who have **no intention** of continuing maths beyond this year must have, at the very least, a scientific calculator (see booklist).

Unit 1

The areas of study for Unit 1 of General Mathematics are 'Data analysis, probability and statistics', 'Algebra, number and structure', 'Functions, relations and graphs' and 'Discrete mathematics'.

Area of Study 1: Data analysis, probability and statistics

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

Area of Study 2: Algebra, number and structure

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

Area of Study 3: Functions, relations and graphs

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

Area of Study 4: Discrete Mathematics

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

Unit 2

The areas of study for Unit 2 of General Mathematics are 'Data analysis, probability and statistics', 'Discrete mathematics', 'Functions, relations and graphs' and 'Space and measurement'.

Area of Study 1: Data analysis, probability and statistics

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

Area of Study 2: Discrete mathematics

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

Area of Study 3: Functions, relations and graphs

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

Area of Study 4: Space and measurement

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

Units 3 and 4

Unit 3 comprises *Data analysis* and *Recursion and financial modelling*, and Unit 4 comprises *Matrices* and *Networks and decision mathematics*.

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

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

Area of Study 2: Discrete mathematics **Recursion and financial modelling**

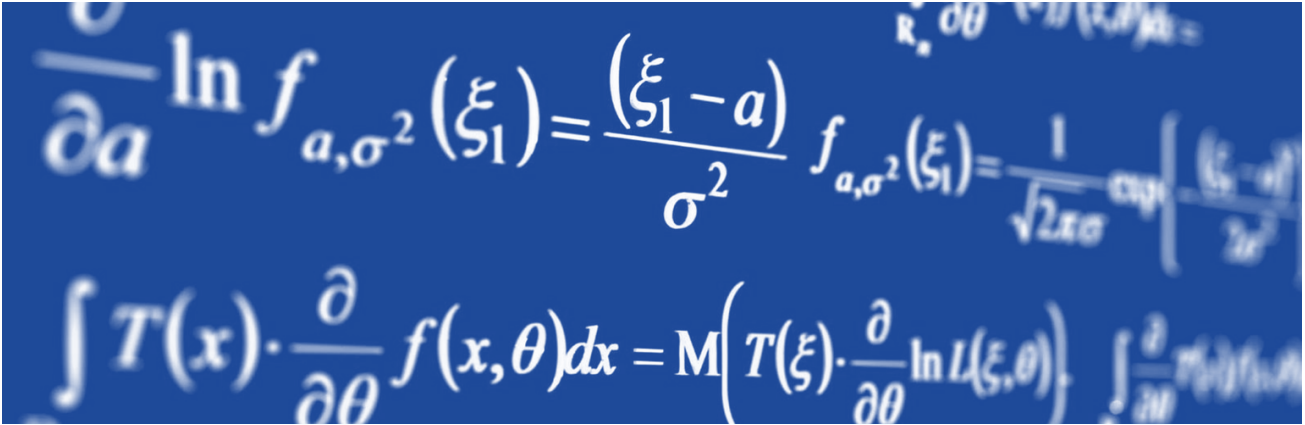
Students cover the use of first-order linear recurrence relations and the time value of money (TVM) to model and analyse a range of financial situations, and using technology to solve related problems involving interest, appreciation and depreciation, loans, annuities and perpetuities.

Matrices

Students cover the definition of matrices, different types of matrices, matrix operations, transition matrices and the use of first-order linear matrix recurrence relations to model a range of situations and solve related problems.

Networks and decision mathematics

Students cover the definition and representation of different kinds of undirected and directed graphs, Eulerian trails, Eulerian circuits, bridges, Hamiltonian paths and cycles, and the use of networks to model and solve problems involving travel, connection, flow, matching, allocation and scheduling.



Scope of Study:

Mathematical Methods is a math pathway for students with strong Math skills. A good understanding of algebra and high achievement in Year 10 studies are essential to study this unit. The subject covers skills and knowledge required for Units 3 & 4 Mathematical methods.

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. The units are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units

In undertaking these units course, 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, algorithms, 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.

Mathematical Methods Units 3 and 4 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 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Calculus', and 'Functions, relations and graphs', 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 key skills for the outcomes of Mathematical Methods Units 3 and 4.

Additional Course Requirements:

Students must have a CASIO Classpad Calculator and textbook to undertake this subject.

Unit 1

The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, 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, number and structure' which extends across Units 1 and 2.

Area of Study 1: Functions, relations and graphs

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

Area of Study 2: Algebra, number and structure

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

Area of Study 3: Calculus

Covers constant & average rates of change & an introduction to instantaneous rate of change of a function in familiar contexts, including graphical & numerical approaches to estimating & approximating these rates of change.

Area of Study 4: Data analysis, probability and statistics

The concepts of experiment (trial), outcome, event, frequency, probability & representation of finite sample spaces & events using various forms such as lists, grids, Venn diagrams & tables. Introductory counting principles & techniques & their application to probability.

Unit 2

The focus of Unit 2 is the study of simple transcendental functions, the calculus of polynomial functions and related modelling applications. The areas of study are 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'. At the end of Unit 2, students are expected to have covered the content outlined in each area of study.

Area of Study 1: Functions, relations and graphs

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

Area of Study 2: Algebra, number and structure

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

Area of Study 3: Calculus

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

Area of Study 4: Data analysis, probability and statistics

In this area of study students cover the use of lists, tables and diagrams to calculate probabilities, including consideration of complementary, mutually exclusive, conditional and independent events involving one, two or three events (as applicable), including rules for computation of probabilities for compound events.

For Unit 3 a selection of content would typically include the areas of study 'Functions, relations and graphs' and 'Algebra, number and structure', 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, a corresponding selection of content would typically consist of remaining content from 'Functions, relations and graphs', 'Algebra, number and structure' and 'Calculus' areas of study, and the study of random variables, discrete and continuous probability distributions, and the distribution of sample proportions from the 'Data analysis, probability and statistics' area of study.

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, including to probability distributions of continuous random variables.

Area of Study 1: Functions, relations and graphs

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

Area of Study 2: Algebra, number and structure

In this area of study students cover the algebra of functions, including composition of functions, inverse functions and the solution of equations. They also study the identification of appropriate solution processes for solving equations, and systems of simultaneous equations, presented in various forms. Students also cover recognition of equations and systems of equations that are solvable using inverse operations or factorisation, and the use of graphical and numerical approaches for problems involving equations where exact value solutions are not required, or which are not solvable by other methods. This content is to be incorporated as applicable to the other areas of study.

Area of Study 3 continued: Calculus

In this area of study students cover graphical treatment of limits, continuity and differentiability of functions of a single real variable, and differentiation, anti-differentiation and integration of these functions. This material is to be linked to applications in practical situations.

Area of Study 4: Data analysis, probability and statistics

In this area of study students cover discrete and continuous random variables, their representation using tables, probability functions (specified by rule and defining parameters as appropriate); the calculation and interpretation of central measures and measures of spread; and statistical inference for sample proportions. The focus is on understanding the notion of a random variable, related parameters, properties and application and interpretation in context for a given probability distribution.

Media



Scope of Study:

The media is ubiquitous in today's world. Working on a personal, local, national and global level, media is deeply embedded within life and culture. It entertains, teaches, informs, and shapes audiences' perception of their lives and the worlds in which they live.

Media audiences are no longer constrained by physical, social and political boundaries. Audiences are consumers, users, creative and participatory producers and product. This has created a dramatic increase in communicative, cultural and creative possibilities. The greater involvement of audiences has generated enormous changes in the media economy and issues of content control. Students examine how and why the media constructs and reflects reality and how audiences engage with, consume, read, create and produce media products.

Additional Course Requirements:

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 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.

Area of Study 1: Media representations

On completion of this unit the student should be able to explain how media representations in a range of media products and forms, and from different periods of time, locations and contexts, are constructed, distributed, engaged with, consumed and read by audiences.

Area of Study 2: Media forms in production

On completion of this unit the student should be able to use the media production process to design, produce and evaluate media representations for specified audiences in a range of media forms

Area of Study 3: Australian stories

On completion of this unit the student should be able to analyse how the structural features of Australian fictional and non-fictional narratives in two or more media forms engage, and are consumed and read by, audiences.

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.

Area of Study 1: Narrative, style and genre

On completion of this unit the student should be able to analyse the intentions of media creators and producers and the influences of narratives on the audience in different media forms.

Area of Study 2: Narratives in production

On completion of this unit the student should be able to apply the media production process to create, develop and construct narratives.

Area of Study 3: Media and change

On completion of this unit the student should be able to discuss the influence of new media technologies on society, audiences, the individual, media industries and institutions.

Unit 3: Media narratives and pre-production

In this unit students explore stories that circulate in society through media narratives and 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 use the pre-production stage of the media production process to design the production of a media product for a specified audience.

Area of Study 1: Narrative and ideology

On completion of this unit the student should be able to analyse how narratives are constructed and distributed, and how they engage, are consumed and are read by the intended audience and present day audiences.

Area of Study 2: Media production development

On completion of this unit the student should be able to research aspects of a media form and experiment with media technologies and media production processes to inform and document the design of a media production.

Area of Study 3: Media production design

On completion of this unit the student should be able to develop and document a media production design in a selected media form for a specified audience.

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. 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.

Area of Study 1: Media production

On completion of this unit the student should be able to produce, refine and resolve a media product designed in Unit 3.

Area of Study 2: Agency and control in and of the media

On completion of this unit the student should be able to discuss issues of agency and control in the relationship between the media and its audience.

Music Performance



Scope of Study:

VCE Music is based on active engagement in all aspects of music. Students develop and refine musicianship skills and knowledge and develop a critical awareness of their relationship with music as listeners, performers, creators and music makers. Students explore, reflect on and respond to the music they listen to, create and perform. They analyse and evaluate live and recorded performances, and learn to incorporate, adapt and interpret musical practices from diverse cultures, times and locations into their own learning about music as both a social and cultural practice. Students study and practise ways of effectively communicating and expressing musical ideas to an audience as performers and composers, and respond to musical works as an audience. The developed knowledge and skills provide a practical foundation for students to compose, arrange, interpret, reimagine, improvise, recreate and critique music in an informed manner.

In this study students are offered a range of pathways that acknowledge and support a variety of student backgrounds and music learning contexts, including formal and informal.

Instruments you can study in Unit 1 and 2.

Singing, Clarinet, Saxophone, Trumpet, Trombone, Bass Guitar, Guitar (electric and acoustic), Ukulele, Drum Kit, Piano, Flute, Digital Music making.

Additional Course Requirements:

There are no prerequisites for Unit 1, 2, and 3 music. However, it is highly recommended that students have at least 6 months to a year experience playing and practicing an instrument. Instrumental lessons are also highly recommended.

Unit 1 Organisation of music

Students explore & develop their understanding of how music is organised. By performing, creating, analysing & responding to music works that exhibit different approaches, students explore & develop their understanding of the possibilities of musical organisation. They prepare & perform ensemble &/or solo musical works to develop technical control, expression & stylistic understanding on their chosen instrument/sound source. At least two works should be associated with their study of approaches to music organisation. They create (arrange, compose or improvise) short music exercises that reflect their understanding of the organisation of music & processes they have studied. They develop knowledge of music language concepts as they analyse & respond to a range of music, becoming familiar with the ways music creators treat elements of music & concepts & use compositional devices to create works that communicate their ideas.

Area of Study 1:

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

Area of Study 2: Creating: On completion of this unit the student should be able to create short music works/responses that demonstrate their understanding of different approaches to musical organisation, and reflect on the creative process.

Area of Study 3: Analyzing and Responding: On completion of this unit the student should be able to describe how music is organised in at least two music examples, responding to music characteristics in a range of music excerpts and identifying how music is organised, and identifying, recreating and documenting music language concepts presented in context and in isolation.

Unit 2: Effect in Music

Students focus on the way music can be used to create an intended effect. By performing, analysing & responding to music works/examples that create different effects, students explore & develop understanding of the possibilities of how effect can be created. Through creating their own music, they reflect this exploration & understanding. They prepare & perform ensemble and/or solo musical works to develop technical control, expression & stylistic understanding using their chosen instrument/sound source. They should perform at least one work to convey a specified effect & demonstrate this in performance. They create short exercises that reflect their understanding of the organisation of music & the processes they have studied. As they analyse & respond to a wide range of music, they become familiar with the ways music creators treat elements and concepts of music & use compositional devices to create works that communicate their ideas.

Area of Study 1: Performing. On completion of this unit the student should be able to rehearse and present planned performances using technical control, expression and stylistic understanding in at least two works (solo and/or group), describing how they intend to convey specific musical effect(s).

Area of Study 2: Creating. On completion of this unit students should be able to create short music works/responses that exhibit their understanding of different approaches to musical effects and reflect on the creative process.

Area of Study 3: Analyzing and Responding. On completion of this unit the student should be able to identify the ways performers and creators convey effect in music, and they should be able to identify, recreate and document music language concepts in context and isolation.

Unit 3: Music Performance

Students begin developing the program they will present in Unit 4. Students should refer to the examination specifications to make sure that the works selected allow them to best meet the requirements and conditions of this task. They use music analysis skills to refine strategies for developing their performances.

Students analyse interpretation in a wide range of recorded music, responding to and analysing music elements, concepts, compositional devices and music language. Students also learn how to recognise and recreate music language concepts such as scales, melodies, chords, harmony and rhythmic materials that relate to contemporary music.

Area of Study 1: Performing

On completion of this unit the student should be able to perform a selection of works in preparation for end of year examination. Demonstrating understanding of style, performance conventions and techniques using a Performer's Statement of Intent to explain choice.

Area of Study 2: Analysing for performance

On completion of this unit the student should be able to demonstrate and discuss performance development techniques and approaches and an intended approach to a reimagined existing work.

Area of Study 3: Responding

On completion of this unit the student should be able to discuss a performer's interpretation and manipulation of music elements and concepts in works and identify, recreate and notate music language concepts from examples presented both in context and isolation.

Unit 4: Music Performance

Students continue to work towards building a performance program they will present at their end-of-year examination in line with their Statement of Intent. The program will contain at least one performance that is a reimagined version of an existing work and an original work created by an Australian artist since 1990. Students continue to study the work of other performers and their approaches to interpretation and personal voice in performing music works. They refine selected strategies to optimise their own approach to performance. Students further develop strategies to address the technical, expressive and stylistic challenges relevant to works they are preparing for performance. Students listen and respond to a further range of recorded music by a variety of performers in contemporary styles. They continue to study music language concepts that relate to contemporary music.

Area of Study 1: Performance

On completion of this unit the student should be able to perform a program of works, including one demonstrating reimagining of an existing work relevant to their performer's Statement of Intent.

Area of Study 2: Analysing for performance

On completion of this unit the student should be able to demonstrate and discuss performance development techniques and reimagining approaches relevant to the selected works.

Area of Study 3: Responding

On completion of this unit the student should be able to discuss a performer's interpretation and manipulation of music elements and concepts of works, identifying and transcribing short examples of music using appropriate notation.



Outdoor and Environmental Studies

Scope of Study:

VCE Outdoor and Environmental Studies is concerned with the ways humans interact with and relate to outdoor environments. 'Outdoor environments' covers environments that have minimum influence from humans, as well as those environments that have been subject to different levels of human intervention. The study enables students to make critically informed comment on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts. In this study both passive and active outdoor activities provide the means for students to develop experiential knowledge of outdoor environments. Such knowledge is then enhanced through the theoretical study of outdoor environments from perspectives of environmental history, ecology and the social studies of human relationships with nature.

The study also examines the complex interplay between outdoor environments and humans. Outdoor experiences suited to this study are: a range of guided activities in areas such as farms, mining/ logging sites, interpretation centres, coastal areas, rivers, mountains, bushland, forests, urban parks, and state or national parks. Activities undertaken could include bushwalking, cross-country skiing, canoe touring, cycle touring, conservation and restoration activities, marine exploration, and participation in community projects. Outdoor experiences that use weapons or motorised devices to replace human effort are not suitable for this study.

Additional Course Requirements:

Unit 1: Connections with outdoor environments

This unit examines some of the ways in which Indigenous peoples and non-Indigenous peoples understand and relate to nature through experiencing outdoor environments.

Students are provided with the opportunity to explore the many ways in which nature is understood and perceived. Students develop a clear understanding of the range of motivations for interacting with outdoor environments.

Area of Study 1: Our place in outdoor environments

On completion of this unit the student should be able to analyse motivations for experiencing outdoor environments and plan to safely participate in specific outdoor experiences.

Area of Study 2: Exploring outdoor environments

On completion of this unit the student should be able to explain factors that influence personal responses and access to outdoor experiences and interact sustainably with outdoor environments.

Area of Study 3: Safe and sustainable participation in outdoor experiences

On completion of this unit the student should be able to evaluate strategies for safe and sustainable participation in outdoor experiences.

Unit 2: Discovering outdoor environments

This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments.

Area of Study 1: Understanding outdoor environments

On completion of this unit the student should be able to describe the characteristics of different outdoor environments and analyse a range of understandings of these environments, with reference to specific outdoor experiences.

Area of Study 2: Observing Impacts on outdoor environments

On completion of this unit the student should be able to evaluate the impacts of humans on outdoor environments and analyse practices for promoting positive impacts, with reference to specific outdoor experiences.

Area of Study 3: Independent participation in outdoor environments

On completion of this unit the student should be able to participate in a range of outdoor experiences safely and sustainably in an independent manner.

Unit 3: Relationships with outdoor environments

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of a range of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia.

Area of Study 1: Changing human relationships with outdoor environments

On completion of this unit the student should be able to analyse the changing nature of relationships with outdoor environments between Indigenous and non-Indigenous Australians at a local and state level over time, and evaluate the impact of environmentalism on political parties and/or policies.

Area of Study 2: Relationships with Australian environments since 1990

On completion of this unit the student should be able to analyse and evaluate the factors influencing societal relationships with outdoor environments since 1990, with reference to specific outdoor experiences.

Unit 4: Sustainable outdoor relationships

In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues relating to the capacity of outdoor environments to support the future needs of the Australian population.

Area of Study 1: The importance of healthy outdoor environments

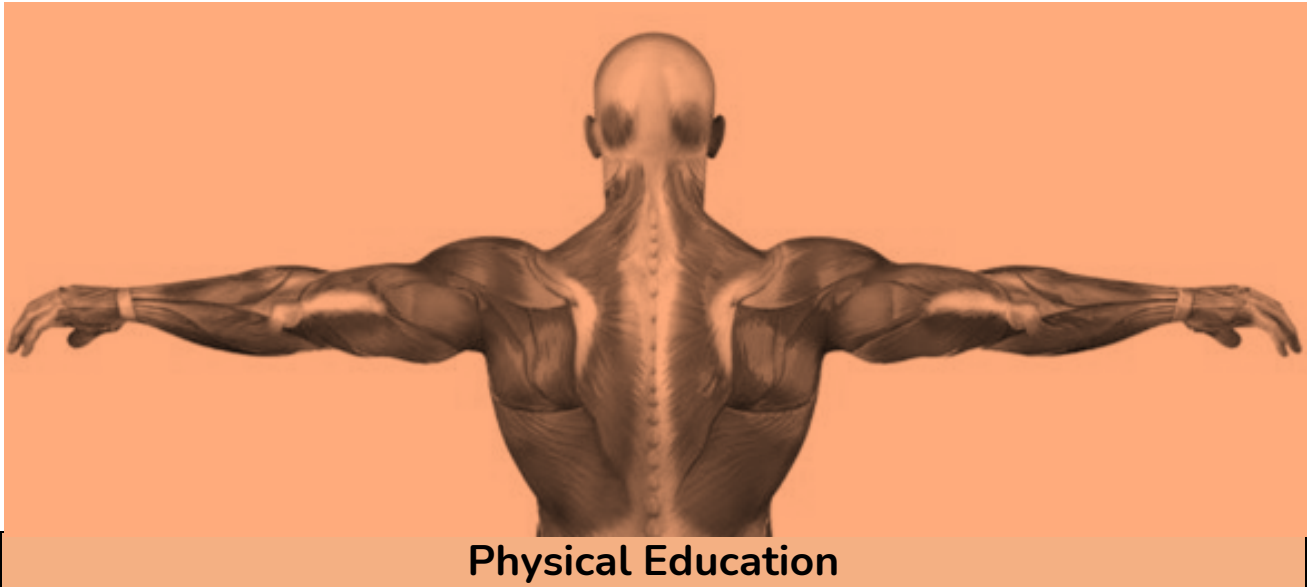
On completion of this unit the student should be able to describe a range of environmental sustainability measures, analyse threats to outdoor environments and justify the importance of healthy outdoor environments for individuals and society, with reference to specific outdoor experiences.

Area of Study 2: The future of outdoor environments

On completion of this unit the student should be able evaluate practices and strategies for sustaining outdoor environments, with reference to specific outdoor experiences.

Area of Study 2: Investigating outdoor environments

On completion of this unit the student should be able to plan and conduct an independent investigation that evaluates selected outdoor environments.



Scope of Study:

VCE Physical Education explores the complex interrelationships between anatomical, biomechanical, physiological and skill acquisition principles to understand their role in producing and refining movement, and examines behavioural, psychological, environmental and sociocultural influences on performance and participation in physical activity. The assimilation of theoretical understanding and practice is central to the study of VCE Physical Education. Students participate in practical activities to examine the core concepts that underpin movement and that influence performance and participation in physical activity, sport and exercise. Through integrated physical, written, oral and digital learning experiences, students apply theoretical concepts and reflect critically on factors that affect all levels of performance and participation in sport, exercise and physical activity.

Additional Course Requirements:

Unit 1: The human body in motion

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity.

Area of Study 1: How does the musculoskeletal system work to produce movement?

On completion of this unit students should be able to collect and analyse information from, and participate in, a variety of practical activities to explain how the musculoskeletal system functions and its limiting conditions, and evaluate the ethical and performance implications of the use of practices and substances that enhance human movement.

Area of Study 2: How does the cardiorespiratory system function at rest and during physical activity?

On completion of this unit students should be able to collect and analyse information from, and participate in, a variety of practical activities to explain how the cardiovascular and respiratory systems function and the limiting conditions of each system, and discuss the ethical and performance implications of the use of practices and substances to enhance the performance of these two systems.

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.

Area of Study 1: What are the relationships between physical activity, sport, health and society?

On completion of this unit the student should be able to collect and analyse data related to individual and population levels of participation in physical activity and sedentary behaviour to create, undertake and evaluate an activity plan that meets the physical activity and sedentary behaviour guidelines for an individual or a specific group.

Area of Study 2: What are the contemporary issues associated with physical activity and sport?

On completion of this unit the student should be able to apply a social-ecological framework to research, analyse and evaluate a contemporary issue associated with participation in physical activity and/or sport in a local, national or global setting.

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.

Area of Study 1: How are movement skills improved?

On completion of this unit the student should be able to collect and analyse information from, and participate in, a variety of physical activities to develop and refine movement skills from a coaching perspective, through the application of biomechanical and skill acquisition principles.

Area of Study 2: How does the body produce energy?

Outcome 2: On completion of this unit the student should be able to use data collected in practical activities to analyse how the major body and energy systems work together to enable movements to occur, and explain the factors causing fatigue and suitable recovery strategies.

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.

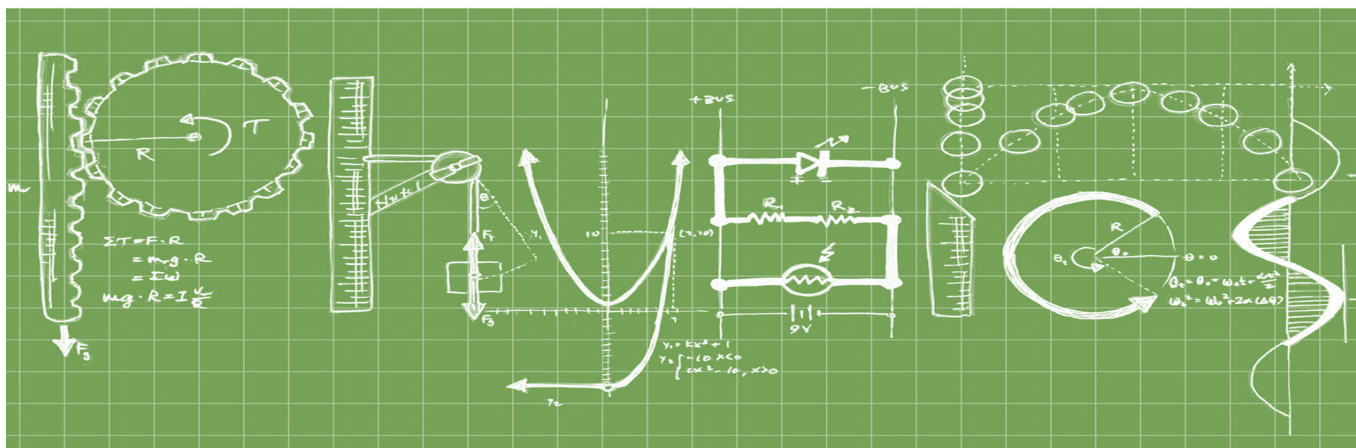
Area of Study 1: What are the foundations of an effective training program?

On completion of this unit the student should be able to analyse data from an activity analysis and fitness tests to determine and assess the fitness components and energy system requirements of the activity

Area of Study 2: How is training implemented effectively to improve fitness?

On completion of this unit the student should be able to participate in a variety of training methods, and design and evaluate training programs to enhance specific fitness components.

Physics



Scope of Study:

The study of VCE Physics involves investigating, understanding and explaining the behaviour of physical phenomena in the Universe. Models, including mathematical models, are used to explore, simplify and predict how physical systems behave at varying scales from the very small (quantum and particle physics) through to the very large (astronomy and cosmology). Beginning with classical ideas and considering their limitations, and then being introduced to more modern explanations of the world, provides a novel lens through which students experience the world around them, drawing on their natural curiosity and wonder.

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

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

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

Additional Course Requirements:

Unit 1: How is energy useful to society?

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

Area of Study 1: How are heat and light explained?

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

Area of Study 2: How is energy from the nucleus utilised?

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

Area of Study 3: How can electricity be used to transfer energy?

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

Unit 2: How does physics help us to understand the world?

In this unit students explore the power of experiments in developing models & theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments.

Students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary and apply these concepts to a chosen case study of motion.

Students choose one of eighteen options related to climate science, nuclear energy, flight, structural engineering, biomechanics, medical physics, bioelectricity, optics, photography, music, sports science, electronics, astrophysics, astrobiology, Australian traditional artefacts and techniques, particle physics, cosmology and local physics research. The selection of an option enables students to pursue an area of interest through an investigation and using physics to justify a stance, response or solution to a contemporary societal issue or application related to the option.

Area of Study 1: How is motion understood?

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

Area of Study 2: How does physics inform contemporary issues and applications in society?

On completion of this unit the student should be able to investigate and apply physics knowledge to develop and communicate an informed response to a contemporary societal issue or application related to one of eighteen options.

Area of Study 3: How do physicists investigate questions?

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

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. They explore the interactions, effects and applications of gravitational, electric and magnetic fields including the design and operation of particle accelerators. Students use Newton's laws and Einstein's theories to investigate and describe motion.

Area of Study 1: How do physicists explain motion in two dimensions?

Students should be able to investigate motion and related energy, transformations experimentally, and analyse motion using Newton's laws of motion.

Area of Study 2: How do things move without contact?

Students should be able to analyse gravitational, electric and magnetic fields and apply these to the operation of motors and particle accelerators and the orbits of satellites.

Area of Study 3: How are fields used in electricity generation?

Students analyse and evaluate an electricity generation system.

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

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 analyse its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour.

Students design and undertake investigations involving at least two continuous independent variables. A student-designed practical investigation related to light, fields or motion is undertaken either in Unit 3 or Unit 4. The findings of the investigation are presented in a scientific poster format.

Area of Study 1: How has understanding about the physical world changed?

Students should be able to analyse and apply models that explain the nature of light and matter.

Area of Study 2: How is scientific inquiry used to investigate fields, motion or light?

Students should be able to design and conduct a scientific investigation related to fields, motion or light and present an aim, methodology and method, results, discussion and conclusion in a scientific poster.

Psychology



Scope of Study:

Psychology is a multifaceted discipline that seeks to describe, explain, understand and predict human behaviour and mental processes. VCE Psychology applies a biopsychosocial approach to the systematic study of mental processes and behaviour. Within this approach, different perspectives, models and theories are considered. Each of these has strengths and weaknesses yet considered together they allow students to develop their understanding of human behaviour and mental processes and the interrelated nature of biological, psychological and social factors. Biological perspectives focus on how physiology influences individuals through exploring concepts such as hereditary and environmental factors, nervous system functioning and the role of internal biological mechanisms. Psychological perspectives consider the diverse range of cognitions, emotions and behaviours that influence individuals. Within the social perspective, factors such as cultural considerations, environmental influences, social support and socioeconomic status are explored. The biopsychosocial approach can be applied to understand a variety of mental processes and behaviours.

Students study contemporary research, models and theories to understand how knowledge in psychology has developed and how this knowledge continues to change in response to new evidence and discoveries in an effort to solve day-to-day problems and improve psychological wellbeing. Where possible, engagement with Aboriginal and Torres Strait Islander ways of doing, being and knowing has been integrated into the study, providing students with the opportunity to contrast the Western paradigm of psychology with Indigenous psychology.

An important feature of undertaking a VCE science study is the opportunity for students to engage in a range of scientific investigation methodologies, to develop key science skills and to interrogate the links between knowledge, theory and practice. Students work collaboratively as well as independently on a range of scientific investigations including controlled experiments, case studies, correlational studies, modelling, simulations and literature reviews. Knowledge and application of the research, ethical and safety guidelines associated with psychological investigations is integral.

Additional Course Requirements:

Unit 1: How are behaviour and mental processes shaped?

In this unit students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples, has made to an understanding of psychological development and to the development of psychological models and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the structure and functioning of the human brain and the role it plays in mental processes and behaviour and explore brain plasticity and the influence that brain damage may have on a person's psychological functioning.

Area of Study 1: What influences psychological development?

On completion of this unit the student should be able to discuss complexity of psychological development over the life span, and evaluate ways of understanding and representing psychological development.

Area of Study 2: How are mental processes and behaviour influenced by the brain?

On completion of this unit the student should be able to analyse the role of the brain in mental processes and behaviour and evaluate how brain plasticity and brain injury can change biopsychosocial functioning.

Area of Study 3: How does contemporary psychology conduct and validate psychological research?

On completion of this unit the student should be able to identify, analyse and evaluate the evidence available to answer a research question relating to contemporary psychology.

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

In this unit students evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of individuals and groups, recognising that different cultural groups have different experiences and values. Students are encouraged to consider Aboriginal and Torres Strait Islander people's experiences within Australian society and how these experiences may affect psychological functioning.

Area of Study 1 How are people influenced to behave in particular ways?

On completion of this unit the student should be able to analyse how social cognition influences individuals to behave in specific ways and evaluate factors that influence individual and group behaviour.

Area of Study 2: What influences a person's perception of the world?

On completion of this unit the student should be able to explain the roles of attention and perception, compare gustatory and visual perception and analyse factors that may lead to perceptual distortions.

Area of Study 3: How do scientific investigations develop understanding of influences on perception and behaviour?

On completion of this unit the student should be able to adapt or design and then conduct a scientific investigation related to internal and external influences on perception and/or behaviour and draw an evidence-based conclusion from generated primary data.

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

In this unit students investigate the contribution that classical and contemporary research has made to the understanding of the functioning of the nervous system and to the understanding of biological, psychological and social factors that influence learning and memory.

Students investigate how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider stress as a psychobiological process, including emerging research into the relationship between the gut and the brain in psychological functioning.

Students investigate how mechanisms of learning and memory lead to the acquisition of knowledge and the development of new and changed behaviours. They consider models to explain learning and memory as well as the interconnectedness of brain regions involved in memory. The use of mnemonics to improve memory is explored, including Aboriginal and Torres Strait Islander peoples' use of place as a repository of memory.

Area of Study 1: How does the nervous system enable psychological functioning?

On completion of this unit the student should be able to analyse how the functioning of the human nervous system enables a person to interact with the external world, and evaluate the different ways in which stress can affect psychobiological functioning.

Area of Study 2: How do people learn and remember?

On completion of this unit the student should be able to apply different approaches to explain learning to familiar and novel contexts and discuss memory as a psychobiological process.

Unit 4: How is wellbeing developed and maintained?

In this unit students explore the demand for sleep and the influences of sleep on mental wellbeing. They consider the biological mechanisms that regulate sleep and the relationship between rapid eye movement (REM) and non-rapid eye movement (NREM) sleep across the life span. They also study the impact that changes to a person's sleep-wake cycle and sleep hygiene have on a person's psychological functioning and consider the contribution that classical and contemporary research has made to the understanding of sleep.

Students consider ways in which mental wellbeing may be defined and conceptualised, including social and emotional wellbeing (SEWB) as a multidimensional and holistic framework to wellbeing. They explore the concept of mental wellbeing as a continuum and apply a biopsychosocial approach, as a scientific model, to understand specific phobia. They explore how mental wellbeing can be supported by considering the importance of biopsychosocial protective factors and cultural determinants as integral to the wellbeing of Aboriginal and Torres Strait Islander peoples.

Area of Study 1: How does sleep affect mental processes and behaviour?

On completion of this unit the student should be able to analyse the demand for sleep and evaluate the effects of sleep disruption on a person's psychological functioning.

Area of Study 2: What influences mental wellbeing?

On completion of this unit the student should be able to discuss the concept of mental wellbeing, apply a biopsychosocial approach to explain the development and management of specific phobia, and discuss protective factors that contribute to the maintenance of mental wellbeing.

Area of Study 3: How is scientific inquiry used to investigate mental processes and psychological functioning?

On completion of this unit the student should be able to design and conduct a scientific investigation related to mental processes and psychological functioning, and present an aim, methodology and method, results, discussion and conclusion in a scientific poster.

Sociology



Scope of Study:

Sociology focuses on the study of human behaviour and social interaction to understand how societies are organised, develop and change. There is no single sociological perspective, rather, there are several theories that offer different ways of understanding human society. Sociologists use these theories and frameworks in a complementary way to attempt to objectively examine social issues and explain concepts. In VCE Sociology students examine key theories regarding family, deviance, ethnicity, community and social movements.

Understanding society from a sociological perspective involves the use of what the sociologist Charles Wright Mills (1959) described as a sociological imagination, that is, a constantly critiquing mindset. In VCE Sociology students learn about and apply the sociological imagination by questioning their assumptions and reflecting on their understandings and ideas about social relations.

Sociology draws on scientific method in the exploration of social relationships and the outcomes of social activities. The scientific method is a systematic process applied to research questions and problems in an attempt to achieve objective observation, collection and analysis of data. Sociologists work to develop a reliable and valid body of knowledge based on research. In doing so, they adhere to various ethical codes of conduct. The primary goal of research ethics is to protect the wellbeing of the groups and individuals with whom sociologists work. There are many different ways that students can gather information for analysis in the course of their study, such as case studies, surveys and participant observation. As students gather and use sources of evidence, they explore and apply the Australian Sociological Association's guidelines for conducting research.

Additional Course Requirements:

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: Category and experience of youth

On completion of this unit the student should be able to describe the nature of sociological inquiry and discuss, in an informed way, youth as a social category.

Area of Study 2: The family

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

Unit 2: Social Norms – Breaking the Code

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.

Area of Study 1: Deviance

On completion of this unit the student should be able to analyse a range of sociological theories explaining deviant behaviour and the impact of moral panic on those considered deviant.

Area of Study 2: Crime

On completion of this unit the student should be able to discuss crime in Australia and evaluate the effectiveness of methods of punishment in the judicial system for shaping human behaviour.

Unit 3: Culture & Ethnicity

This unit explores expressions of culture and ethnicity within Australian society in two different contexts – Australian Indigenous cultures, and ethnicity in relation to migrant groups. 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.

Area of Study 1: Australian Indigenous cultures

On completion of this unit the student should be able to analyse and evaluate changes in public awareness and views of Australian Indigenous culture.

Area of Study 2: Ethnicity

On completion of this unit the student should be able to identify and analyse experiences of ethnicity within Australian society.

Unit 4: Community, Social Movements & Social Change

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.

Area of Study 1: Community

On completion of this unit the student should be able to analyse the experience of community generally and analyse and evaluate a specific community.

Area of Study 2: Social movements and social change

On completion of this unit the student should be able to analyse the nature and purpose of social movements and evaluate their influence on social change



STRIVE is a compulsory part of VCE VM Studies at Yarra Hills Secondary College. Students completing an additional VCE subject do not participate in STRIVE.

Year 11 and 12 students in the Vocational Major program will undertake two periods of Strive a week. This will include a combination of the following -

- Educlick Modules - Year 12
- Structured Workplace Learning Recognition program - Year 11
- Resilience Program- all levels
- Work place and Tafe Log Books – all levels
- Catch up time for class work and assessment tasks – all levels
- Educlick delivery of certificates – all levels
- Headstart and SWL coordinator check in's

Systems Engineering



Scope of Study:

VCE Systems Engineering involves the design, creation, operation and evaluation of integrated systems, which mediate and control many aspects of human experience. Integral to Systems Engineering is the identification and quantification of systems goals, the development of alternative system designs concepts, trial and error, design trade-offs, selection and implementation of the best design, testing and verifying that the system is well built and integrated, and evaluating how well the completed system meets the intended goals.

This study can be applied to a diverse range of engineering fields such as manufacturing, land, water, air and space transportation, automation, control technologies, mechanisms and mechatronics, electrotechnology, robotics, pneumatics, hydraulics, and energy management. Systems Engineering considers the interactions of these systems with society and natural ecosystems. The rate and scale of human impact on the global ecology and environment demands that systems design and engineering take a holistic approach by considering the overall sustainability of the systems throughout their life cycle. Key engineering goals include using a project management approach to attain efficiency and optimisation of systems through innovation. Lean engineering and lean manufacturing concepts and systems thinking are integral to this study.

Additional Course Requirements:

Unit 1: Mechanical Systems

This unit focuses on engineering fundamentals as the basis of understanding underlying principles and the building blocks that operate in simple to more complex mechanical devices.

Students apply their knowledge to design, construct, test & evaluate operational systems. The focus of the system should be mechanical; however, it may include some components. The constructed operational systems demonstrate selected theoretical principles studied in this unit.

Area of Study 1: Mechanical system design

In this area of study students learn about the fundamental mechanical engineering principles and the components and parts required to produce an operational system. Students learn the fundamental principles of how mechanisms and simple mechanical systems provide movement and mechanical advantage, and how the specific parts of a system or an entire mechanical system can be represented diagrammatically.

Area of Study 2: Producing and evaluating mechanical systems

This area of study provides students with the opportunity to produce, test and evaluate an operational mechanical system. The operational system students produce will contain mechanical components and elements, but may integrate some electro technology components or subsystems.

Unit 2: Electro technology systems

In this unit students study fundamental electrotechnology engineering principles. Through the application of their knowledge and the Systems Engineering Process, students produce operational systems that may also include mechanical components. In addition, students conduct research and produce technical reports. While this unit contains fundamental physics and theoretical understanding of electrotechnology systems and how they work, student focus remains on the construction of electrotechnology systems. The construction process draws heavily upon design and innovation. Electrotechnology is experiencing rapid developments and changes through technological innovation. The contemporary design and manufacture of electronic equipment involves increased levels of automation and inbuilt control through the inclusion of microcontrollers. In this unit students explore some of these new and emerging technologies.

Area of study 1: Electrotechnological systems design

On completion of this unit the student should be able to investigate, represent, describe and use basic electrotechnology and basic control engineering concepts, principles and components, and using selected relevant aspects of the Systems Engineering Process, design and plan an electrotechnology system.

Area of study 2: Producing and evaluating electrotechnology systems

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

Unit 3: Integrated and controlled systems

In this unit students study the engineering principles that are used to explain the physical properties of integrated systems and how they work. Through the application of their knowledge, students design and plan an operational, mechanical-electrotechnology integrated and controlled system. They learn about the technologies used to harness energy sources to provide power for engineered systems.

Students commence work on the design, planning and construction of one substantial controlled integrated system. This project has a strong emphasis on designing, manufacturing, testing and innovation. Students manage the project throughout the Systems Engineering Process, taking into consideration the factors that will influence the design, planning, production and use of their integrated system.

Area of Study 1: Integrated and controlled systems design.

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

Area of Study 2: Clean energy technologies

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

Unit 4: Systems control

In this unit students complete the creation of the mechanical and electrotechnological integrated and controlled system they researched, designed, planned and commenced production of in Unit 3. Students investigate new and emerging technologies, consider reasons for their development and analyse their impacts. Students continue producing their mechanical and electrotechnological integrated and controlled system using the systems engineering process. They effectively document the use of project and risk management methods throughout the creation of the system. They use a range of materials, tools, equipment and components. Students test, diagnose and analyse the performance of the system.

Area of Study 1: Producing and evaluating integrated and controlled systems

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

Area of Study 2: New and emerging technologies

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



Scope of Study:

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

Additional Course Requirements:

Unit 1: Introduction to Visual Communication Design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves using design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practise drawing 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. Designers are researched along with methods used to generate ideas. Design knowledge is applied to folio work and a range of drawing skills are used to develop concepts.

Area of Study 1: Introduction to visual communication design

On completion of this unit the student should be able to create drawings for different purposes using a range of drawing methods, media and materials.

Area of Study 2: Design elements and design principles

On completion of this unit the student should be able to select and apply design elements and design principles to create visual communications that satisfy stated purposes.

Area of Study 3: Visual communication design in context

On completion of this unit the student should be able to describe how a visual communication has been influenced by past and contemporary practices, and by social and cultural factors.

Unit 2: Applications of Visual Communication Design

This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields. Students use drawing methods that use technical drawing conventions to communicate ideas associated with environmental or industrial fields of design. Typography and imagery and how they are used are also investigated. Students further develop an understanding of the design process which helps to organise their thinking in relation to solving design problems. They present ideas in response to a brief which lead to final visual communications being made.

Area of Study 1: Technical drawing in context

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

Area of Study 2: Type and imagery

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

Area of Study 3: Applying the design process

On completion of this unit the student should be able to engage in stages of the design process to create a visual communication appropriate to a given brief.

Unit 3: Design Thinking and Practice

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media, materials and the application of design elements and design principles can create effective visual communications for specific audiences and purposes. Students establish a brief and apply design thinking skills through the design process. A client is identified and two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need are investigated. The brief and investigation work underpin the developmental and refinement work undertaken in Unit 4. Design from a variety of historical and contemporary design fields is considered by students to provide directions, themes or starting points for investigation and inspiration for their own work.

Area of Study 1: Analysis and practice in context

On completion of this unit the student should be able to create visual communications for specific contexts, purposes and audiences that are informed by their analysis of existing visual communications.

Area of Study 2: Design industry practice

On completion of this unit the student should be able to describe how visual communications are designed and produced in the design industry and explain factors that influence these practices.

Area of Study 3: Developing a brief and generating ideas

On completion of this unit the student should be able to apply design thinking skills in preparing a brief, undertaking research and generating a range of ideas relevant to the brief.

Unit 4: Design Development and Presentation

The focus of this unit is the development of design concepts and two final presentations of visual communications to meet the requirements of the brief completed in Unit 3. Students continue the design process by developing and refining concepts for each need stated in the brief. A range of digital and manual two- and three-dimensional methods, media and materials are used. They investigate how the application of design elements and design principles creates different communication messages with their target audience. Ongoing reflection and evaluation of design solutions against the brief assists students with keeping their ideas focused. Students refine and present two visual communications within the parameters of the brief. They reflect and evaluate their visual communications and devise a pitch to communicate their design thinking and decision making to the client.

Area of Study 1: Development of design concepts

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

Area of Study 2: Final presentations

On completion of this unit the student should be able to produce final visual communication presentations that satisfy the requirements of the brief.

Area of Study 3: Evaluation and explanation

On completion of this unit the student should be able to devise a pitch to present and explain their visual communications to an audience and evaluate the visual communications against the brief.

Victorian Certificate of Education (Vocational Major)

The Victorian Certificate of Education [VM] provides a pathway for Year 11 and 12 students seeking vocationally orientated career options or employment.



It aims to give students practical work-related experience and a qualification that will be recognised by TAFE institutes and employers. This is the pathway for students looking to undertake apprenticeships, traineeships or further study in TAFE upon completion of year 12.

VCE VM at Yarra Hills:

Students undertake a study program that suits their interests. Yarra Hills is offering students the following ways to complete the VCE VM:

- By Structured Work Placement (SWL)
Or
- By a VCE Pathway – where students will study traditional VCE subjects in addition to the VM subjects and VET.

Scope of Study & Structure:

Students will complete four core areas of study:

- Literacy
- Numeracy
- Work Related Skills
- Personal Development Skills

Vocational Education and Training (VET):

Student will need to participate in 180 nominal hours of a VET training program:

- Student can choose from a wide range of VET programs offered by TAFEs and participating schools around our local area.
- Please view VET section for more information.

VCE subject:

Student choosing VCE pathway will complete one VCE subject as part of their VCE-VM program. This pathway allows students to explore an additional VCE subject of their choice.

- Due to timetable scheduling students will be limited to the VCE subjects they can choose from in this pathway.

For more information about this new and exciting option, we recommend families attend our VCE Information Evening.

VCE-VM students complete the following subjects:

Literacy

Unit 1

Area of Study 1: Literacy for personal use

Focuses on the structures and features of a range of texts and the personal reasons readers may have for engaging with them. Students will use a range of strategies to develop understanding of purpose and key ideas. They will be able to demonstrate their understanding of how text types are constructed for different purposes and audience.

Area of Study: Understanding and creating digital texts

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

Unit 2

Area of Study 1: Understanding issues and voices

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

Area of Study 2: Responding to opinions

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

Numeracy

Units 1 & 2 will develop student's numeracy practices to make sense of their personal, public and vocational lives. The unit provides fundamental mathematical knowledge and skills, understandings and dispositions to solve problems in real contexts. In unit 1 students will focus on number; shape; quantity and measures and relationships. In unit 2 they will investigate dimension and direction; data; uncertainty and systematics.

Personal Development Skills

Unit 1: Healthy individuals

This unit focuses on the development of personal identity and individual pathways to optimal health and wellbeing. They will use this knowledge to enhance an understanding of community cohesion, community engagement and how a sense of identity may affect outcomes in different contexts. They will investigate local health-promoting organisations and resources and play an active role in designing and implementing activities or mechanisms to improve health and wellbeing.

Area of Study 1: Personal identity and emotional intelligence

On completion of this unit students should be able to explain and discuss key concepts relating to personal identity and emotional intelligence in different contexts. They will develop and apply strategies related to personal identity and emotional intelligence.

Area of Study 2: Community health and wellbeing

On completion of this unit students should be able to plan and implement an individual or group activity to promote health and wellbeing, and evaluate the effectiveness of the activity by using learnt tools and techniques for monitoring progress.

Area of Study 3: Promoting a healthy life

On completion of this unit students should be able to analyse the impact of technology on health and wellbeing at an individual and community level and apply knowledge and skills to plan, implement and evaluate an individual or group health promotion activity.

Unit 2: Connecting with community

The unit focuses on the benefits of community participation and how people can work together effectively to achieve a shared goal. They will look at the relationships between community issues, social cohesion and health and wellbeing. Students will investigate how communities support individual members and identify effective strategies for creating positive community change. They will plan, implement and evaluate an active response to an individual's need for community support.

Area of Study 1: What is a community

On completion of this unit students should be able to describe concepts relating to citizenship and community, analyse the factors that influence the formation of community and apply strategies to promote community participation in an individual or group activity.

Area of Study 2: Community cohesion

On completion of this unit students should be able to identify issues and challenges within the community, analyse different perspectives and apply problem solving strategies when working independently or collaboratively on a community-based activity.

Area of Study 3: Engaging and supporting community

On completion of this unit students should be able to discuss the concept of engagement as an approach to address community issues, analyse features of effective community engagement and work to design, implement and evaluate a community engagement activity.

Work Related Skills

Unit 1: Careers and Learning for the future

Students will investigate information related to future employment, including entry-level pathways, emerging industries and trends.

Area of Study 1: Future careers

Students will evaluate information related to employment. They will apply strategies to improve planning and decision-making related to gaining employment. They will develop research skills and collate evidence and artefacts relating to future employment prospects.

Area of Study 2: Presentation of career and education goals

On completion of this unit students should be able to forecast the potential of employment possibilities and evaluate several education pathways that would support the acquisition of skills and knowledge required for a selected industry area.

Unit 2: Workplace skills and capabilities

As the nature of work changes so do the skills and capabilities needed for success. In this unit students will consider the distinction between essential employability skills, specialist and technical work skills and personal capabilities. This will assist them to understand the importance of training and development to support the attainment and transferability of skills. They will collect evidence and artefacts relating to their personal skills and capabilities and promote them through resumes, cover letters and interview preparation.

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

On completion of this unit students should be able to identify and evaluate individual aptitudes and interests as they relate to broad industry groups and identify evidence of personal core skills, attributes and capabilities required by an industry of choice.

Area of Study 2: Transferable skills and capabilities

On completion of this unit students should be able to demonstrate knowledge of the recruitment and interview process and of the essential and technical skills required by broader industry groups.

Students completing the second year of their VCE VM studies in 2024 will complete the following subjects:

Work Related Skills

Unit 3: Industrial relations, workplace environment and practice

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

Area of Study 1: Workplace wellbeing and personal accountability

On completion of this unit the student should be able to analyse and evaluate the characteristics of a healthy, collaborative, cooperative and harmonious workplace and identify and explain strategies to contribute to a healthy workplace environment.

Area of Study 2: Workplace responsibilities and rights

On completion of this unit the student should be able to outline the National Employment Standards and methods for determining pay and conditions, explain the characteristics of workplace bullying, discrimination

and sexual harassment, and outline the processes and legal consequences for breaches and analyse the personal ramifications that may follow.

Area of Study 3: Communication and collaboration

On completion of this unit the student should be able to apply a variety of appropriate questioning and listening techniques within a workplace or simulated workplace, and understand how to develop networks, professional relationships and work effectively in diverse teams.

Unit 4: Portfolio preparation and presentation

Portfolios are a practical and tangible way for a person to communicate relevant skills, experiences and capabilities to education providers and future employers. In this unit students will develop and apply their knowledge and skills relating to portfolios, including the features and characteristics of a high-quality physical and/or digital portfolio.

Area of Study 1: Portfolio development

On completion of this unit the student should be able to analyse the limitations and advantages of the features and uses of physical and digital and/or hybrid portfolios as they relate to potential employment in a chosen industry area or application to higher education.

Area of Study 2: Portfolio presentation

On completion of this unit the student should be able to communicate personal skills and attributes, evaluate evidence and analyse presentation skills for future enhancement relevant to employment or study.

Structured Work Placement (SWL)

SWL offer a unique program for students who wish to undertake industry-based training as they complete their VCE. Students combine their senior school studies with training and employment in industries where they are likely to seek future employment or apprenticeships.

Under this scheme, students spend two days per week at school, **one** day per week at **VET** (TAFE course) and two days per week in the workplace. Students will be responsible for industry training costs which vary from industry to industry. Occupational Health and Safety studies are completed prior to commencing work.

Yarra Hills will work with an industry partner to provide work-based opportunities in a range of industries including but not limited to: Automotive, Cabinet Making, Hospitality, Engineering and Horticulture, Hairdressing. Where training is available, and the student can provide the employment, other industry areas can be included in this program.

This program is the stepping block for many students looking to obtain an apprenticeship or traineeship. If students are offered a school based apprenticeship (SBAT) through their SWL placement Yarra Hills will work with Head Start to help student secure an apprenticeship program that can allow students to remain at school while commencing their training within industry.

School-Based VCE VM

Students who do not wish to complete their VCE VM concurrently with a work placement can choose to undertake one VCE subject at school. This pathway is ideally suited for students who in the following areas:

- Are not yet ready to juggle work with school and want to focus on school base learning more.
- Are interested in industry that may not be able to accommodate student work placement due to legal reasons (such as tattoo parlour)
- Interested in broadening their skills through VCE subject such as Visual Communication and Health and Human Development. Students should note that the full range of subjects may not be available.

Students undertaking this pathway will be expected to attend school four days a week with one day in VET.

School Based Apprenticeship (SBAT)

An SBAT program runs under a contract with an employer and has a training plan registered with the Victorian Registration and Qualifications Authority (VRQA). The training must lead to a nationally recognised qualification. This training generally takes 2-4 years to complete.

The vocational training components of SBATs also contribute credit towards a senior secondary certificate. Many SBATs move on to a full-time contract with their employer after leaving school, while others choose to continue their education and training at a registered training organisation (RTO) or university.

Students that show initiative and able to establish good relationship with their SWL placement will be offered interview opportunity with SBAT coordinator (HeadStart). This may change their program into two days of school, one day of VET and two days' work week.

Vocational Education & Training



Scope of Study:

A Vocational Education and Training (VET) program enables students to widen horizons and study with a vocational, hands-on focus. On successful completion students will gain two qualifications instead of one, a VCE along with a nationally recognised VET Certificate in one of a wide range of industry areas.

VET programs are fully integrated into the VCE. Students are able to include a VET Unit 3/4 sequence as one of three studies other than English needed to gain the VCE. Most VET programs with a Unit 3/4 examination component make a direct contribution to the ATAR.

A VET program combines general and vocational studies and may be delivered through a cluster school. VET programs are an integral part of the VCE and contribute to the 16 units required for satisfactory completion of the Certificate. Therefore, they can be fully integrated into the VCE, and students can include a VET Unit 3/4 sequence as one of their three studies other than English to gain their VCE. Some programs are scored, have an end of year exam and contribute directly to the student's ATAR score, whilst others will include a 10% bonus, calculated through averaging the Study Scores of the students other subject.

VET courses will be delivered through a Yarra Valley VET Cluster school.

On successful completion students will receive:

- VCE Certificate and a nationally recognised VET Certificate
- Enhanced training pathways and employment opportunities

Further study or work opportunities include:

- Degree courses at university
- Diploma and certificate courses at TAFE and other training organisations
- Further on job training as an apprentice or trainee or as an employee
-

Through the cluster VET courses may change and new course will be offered by the cluster group. This is a two-year commitment and students are expected to travel to the specific VET provider to attend courses.

For further information go to the: <https://yhscpathways.com/vce-info/vet/yarra-hills-sc-vet-information>
Some VET Industry areas offered through Yarra Hills Secondary College:

- Acting
- Applied Fashion
- Allied health
- Animal Care
- Automotive
- Beauty Services

- Building and Construction (Carpentry)
- Building and Construction (Brick Laying)
- Business
- Creative Industries (Media)
- Community Services
- Cookery
- Dance
- Electrotechnology
- Engineering
- Horticulture
- Hospitality
- Information Technology
- Landscaping
- Laboratory Skills
- Music Industry (Performance / sound performance)
- Plumbing
- Salon Assistant
- Sport and Recreation
- Retail Services

Students should speak to the Pathways Leader for more information regarding individual VET Courses.