Artwork produced by Isaac Lee, Year 10, 2022

YEAR 11 AND 12

SUBJECT AND COURSE SELECTION

HANDBOOK

2023

Box Hill Senior
Secondary College

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VCE SUBJECT SELECTION PROCESS:

Year 10 and 11 students will have the opportunity to begin their subject selection process during Advocacy sessions at school during term 3. This will involve students using the attached planner and selecting subjects from the list of VCE Units available at Box Hill Senior Secondary College.

Once students have made their preferences, the college will decide based on interest, which studies will run in any given year. Effort and commitment will always be made to offer students who are in year 11 an opportunity to continue with their subjects into year 12.

Students will select subjects based on their desired pathway and career. Ensuring that by the end of year 12 they have met the required Pre-requisites for their chosen course of study and future.

Once course selection has been complete and parents will be required to attend a **Course Confirmation Interview** at the school. These interviews allow students to finalise their choices, ensure that their pathway is correct based on needs and interests and to discuss future directions

Please note that students should select reserve subjects in case there is an irresolvable class or insufficient interest to offer the subject. I n discussion with the College, students may have the option of undertaking a subject through enrolment at Virtual Schools Victoria.

A VCE program at Box Hill Senior Secondary College will generally consist of 20 to 24 units taken over two to three years. **Year 11 students should select a minimum of 6 VCE units each semester which may include an accelerated subject (if approved). Year 12 students will normally undertake 5-unit 3/4 sequences in their final year of schooling.**

Students can gain credit for any VCE studies that are satisfactorily completed at an approved VCE provider. This is usually a VCE Language Other Than English (LOTE) at community schools.

Students who choose to include their external study within their program must study at an approved VCE provider. Approved providers may be the Victorian School of Languages (VSL) and community LOTE schools. Please include the details of this subject on your Course Selection form, along with the course you have selected for Box Hill Senior Secondary College.

Changing Subjects and Sequences:
Depending on timetable options and available spaces in classes, changing from a Unit 1 study in Semester 1 to a different Unit 2 study in Semester 2 might be possible for students who realise that a particular subject does not suit their interests, strengths and aspirations. However, changes will only take place through application and attending a 'change in subject' interview with Student Services.

To Qualify for the Victorian Certificate of Education, students must complete all units as a sequence in Units 3 and 4.

GENERAL ADVICE ON CHOOSING A VCE COURSE

Choosing the right course can be challenging for many students. BHSSC provides information and course counselling advice to students throughout the subject selection and Course Confirmation process, However, the decision of what to study is ultimately your choice. When choosing a VCE course you should consider the following:

Interests: What subjects do I like?
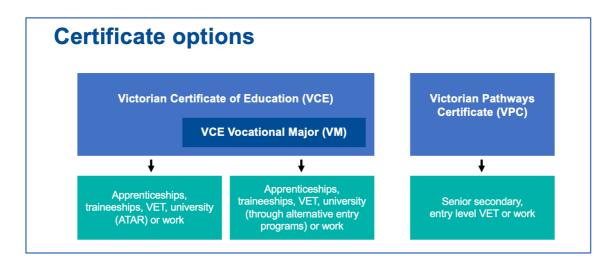**Strengths:** What subjects am I good at?
Pathways: What subjects do I need for future courses? | Am I aspiring to College in the US?
Breadth: Choose a course of subjects that keep career options open.
Sequence: It's important to study each unit in order (Units 1 to 4)

SENIOR SCHOOL CERTIFICATES AND THEIR REQUIREMENTS

Choosing the correct VCE certification pathway is individualised and dependent on the aspirations of the individual student. At Box Hill Senior Secondary we offer a variety of options for students dependent on their chosen program, pathway, and career interests. The diagram below highlights ways in which students are able to gain their Victorian Certificate of Education.

Certificate options

Victorian Certificate of Education (VCE)	Victorian Pathways Certificate (VPC)
VCE Vocational Major (VM)	

Apprenticeships, traineeships, VET, university (ATAR) or work	Apprenticeships, traineeships, VET, university (through alternative entry programs) or work	Senior secondary, entry level VET or work

THE VICTORIAN CERTIFICATE OF EDUCATION

VCE is usually completed over two years. At Box Hill Senior Secondary College students must ensure that they meet the following conditions in order to be eligible for the Victorian Certificate of Education

- In **Year 11** you will undertake six (6) Units in Semester 1 and six (6) Units in Semester 2 making a total of twelve (12) units across the year.
- In **Year 11**, you must undertake at least two (2) Units from the English group (**English**; **EAL**; **Literature**)
- In **Year 12** you will undertake five (5) Unit 3 and 4 sequences making a total of ten (10) units.
- In **Year 12** one of the sequences of units MUST be from the English group (**English**; **EAL**; **Literature**).

The Victorian Certificate of Education requires a student to have satisfactorily met at least 16 units which must include:

- Three (3) units of an English subject from the English Group (English, English Language, Literature and EAL) including the satisfactory completion of the Unit 3 and 4 sequences.
- At least three (3) sequences of Units 3 & 4 studies in addition to the Unit 3 & 4 sequence from the English group, which may include any number of English sequences once the English requirement has been met.

VCE VOCATIONAL MAJOR (VM) AND VOCATIONAL PATHWAYS CERTIFICATE (VPC)

All students must complete an expression of interest and attend an interview to ensure vocational units of study are aligned to their desired pathway. The decision to undertake the VCE VM or VPC should consider the student's:
- Strengths and interests
- Vocational goals and envisaged pathways
- Preferred learning style
- Readiness for participation in structured workplace learning
- Ability to secure and satisfactorily complete formal vocational education and
- Leadership capabilities

Structure
Students will attend formal classes at school three days per week, complete their VETiS course either on site or externally one day per week and undertake a day of structured workplace learning one day per week. Students that elect to enrol in an additional subject, VCE subject or an elite sport program will undertake structured workplace learning in a two-week block.

Integrated curriculum with an applied learning focus
Students will apply the appropriate literacy, numeracy, personal development and work-related skills to a variety of community-based projects. Students will have some agency to negotiate the topics they will focus on relevant to their vocational goals and envisaged pathways. Topics may include; health and wellbeing, sustainability, travel and tourism, the world of work and future finances for example.

Satisfactory achievement
To achieve a VCE VM students must satisfactorily complete 16 units including:
- Three Literacy units or VCE English units, two of which must be a Unit 3 and 4 sequence
- At least three additional Unit 3 and 4 sequences
- Two Numeracy units or VCE Mathematics units
- Two Work Related Skills units
- Two Personal Development Skills units and
- 180 hours of VET at Certificate II level or above

Students may include other VCE units timetable permitting. Students should refer to the VCE and VCE VM subject descriptions for further detail about each unit.
Year 11 and 12 students that may not be able to participate in the VCE VM may undertake the VPC. To achieve a VPC students must complete at least 12 units including:
- 2 Literacy units
- 2 Numeracy units
- 2 Work Related Skills units and
- 2 Personal Development Skills units

The VPC will not be suitable for all students and should be undertaken by students on an as-needs basis. Students who complete a VPC will be awarded a Victorian Pathways Certificate and not a VCE.

Application forms for VM and VPC are available from the college by contacting either Ms. Catherine Manning (VCAL Coordinator) or Mr Chris Christofidis (VET Innovation Leader)

HEADSTART APPRENTICSHIPS AND TRAINEE SHIPS

Head Start is a new model for apprenticeships and traineeships for school students.
Head Start students spend more time doing important, paid, on-the-job training while completing their VCE or VCAL at school.

The program helps students to develop skills and experience that employers value. Head Start helps students to get the best start in their career.

Students interested in this pathway are encouraged to speak to their coordinator or our careers coordinator.

VCE STUDIES OFFERED AT BHSSC IN 2023

Learning Area	Subject	Unit 1	Unit 2	Unit 3	Unit 4
ENGLISH	English	●	●	●	●
	EAL	●	●	●	●
MATHEMATICS	Foundation Maths	●	●		
	General Maths	●	●	●	●
	Mathematical Methods	●	●	●	●
	Applied Computing	●	●		
	Specialist Mathematics	●	●	●	●
HUMANITIES	Accounting	●	●	●	●
	Business Management	●	●	●	●
	Modern History	●	●		
	History Revolutions			●	●
	Auslan (Language Study)	●	●		
	Legal Studies	●	●	●	●
HEALTH AND PHYSICAL EDUCATION	Health and Human Development	●	●	●	●
	Outdoor and Environmental Studies	●	●	●	●
	Physical Education	●	●	●	●
TECHNOLOGIES	Food Studies	●	●	●	●
	Product Design and Technology (Materials)	●	●	●	●
SCIENCE	Biology	●	●	●	●
	Chemistry	●	●	●	●
	Physics	●	●	●	●
	Psychology	●	●	●	●
VISUAL AND PERFORMING ARTS	Art Making and Exhibiting	●	●	●	●
	Media	●	●	●	●
	Art Creative Practice	●	●	●	●
	Music Performance	●	●	●	●

VET (Vocational Education and Training)

Box Hill Senior Secondary has a proud tradition of being innovative in the Vocational Education and Training space. At present we offer the following VET subjects to students on site and delivered by our highly trained and accredited teaching staff.

VET Subject	CERT II	CERT III
Building and Construction	●	
Sport and Recreation		●

Based on interest we are also able to offer a range of other VET subjects. Please discuss your interests with Chris Christofidis and Catherine Manning.

We recognise that our students have aptitude and interest in a wide variety of VET offerings that may not yet be offered or delivered onsite here at the college. As a result, we encourage our students to access the VET of their choice through one of our community providers.

Vocational Education and Training Offered Through the Mullum Mullum Cluster and Other Tertiary Providers

Students can also apply to take a different VET subject at a TAFE institution. Students considering doing a VET study should contact Ms Catherine Manning or Mr Chris Christofidis as soon as possible to ensure a timely enrolment / secure a place.

The closest TAFE is Box Hill Institute a 10-minute walk away. Students interested in VET offerings for Secondary Students should navigate to https://www.boxhill.edu.au and search for "VET Delivered to Secondary School Students"

Please refer to the Mullum Vet Cluster handbook for details of VET subjects on offer. https://www.mullumvetcluster.com.au/ an snapshot on what is on offer for 2022 can be found on the final pages of this booklet.

VCE VET Contribution to the VCE

Upon successful completion of the VCE VET Year 11 and 12 program students will be eligible for up to four units of credit towards their VCE: Two units at Units 1 and 2, and a Units 3 and 4 sequence.

VCE VET and the ATAR

Students wishing to receive an ATAR contribution for the Units 3 & 4 sequence must undertake scored assessment for the purposes of gaining a study score. This study score can contribute directly to the ATAR, either as one of the student's best four studies (the primary four) or as a fifth or sixth study.

Where a student elects not to receive a study score for the scored units 3 and 4 sequence of their VCE VET study, no contribution to the ATAR will be available.

VCE STUDIES AT A GLANCE

For detailed elaborations on each study, the types of assessment and content covered, please refer to the relevant learning area leader and the VCAA Study Design specific to that VCE study: https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Pages/vce-study-designs.aspx

ENGLISH

Unit 1
Reading and exploring texts – Students engage in reading and viewing texts with a focus on personal connections with the texts. They contemplate the ways that a text can present and reflect human experiences. Students will develop and strengthen inferential reading and viewing skills, and explore how vocabulary, text structures and language features create story and meaning. Students will plan and develop personal and analytical writing through reflection, editing and feedback.

Crafting texts - Students apply, extend and challenge their understanding and use of imaginative, persuasive and informative text through a growing awareness of situated contexts, stated purposes and audience. Students read and engage imaginatively and critically with mentor texts that can include short stories, speeches, monologues, essays, podcasts, poetry/songs, feature articles, memoir and biography. They craft their own texts, and can articulate their writing processes through a reflective commentary.

Unit 2
Reading and exploring texts – Students read or view a text, engaging with the ideas, concerns and tensions, and recognise ways vocabulary, text structures, language features and conventions of text work together to create meaning. They examine they ways readers understand text considering its historical context, and social and cultural values. They also explore the text through the prism of their own cultural knowledge, experiences and understanding of the world and extend their observations into analytical and abstracted explorations.

Exploring argument – Students consider the way arguments are developed and delivered in many forms of media. Through the prism of a contemporary and substantial local and/or national issue, students read, view and listen to a range of texts that attempt to position an intended audience. Students analyse persuasive texts through formal, analytical writing and construct a point of view text for oral presentation.

Unit 3

Reading and creating texts- Students identify, discuss and analyse how the features of selected texts create meaning and how they influence interpretation. Students write formal analytical and creative responses to selected texts, demonstrating their understanding of the explicit and implied ideas and values in texts and develop a credible and effective voice and style.

Analysing Argument- Students analyse and compare the use of argument and texts that debate a topical issue in the media. Students develop critical analyses of the use of argument in written, spoken and multimodal texts and compare different texts presenting argument on similar ideas or issues.

Listening to Texts (EAL Only) - Students 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. Students develop skills to understand spoken texts on a literal and inferential level, demonstrating an understanding of how spoken texts construct meaning for a variety of listeners.

Unit 4
Reading and comparing texts- Students explore the meaningful connections between two texts. By comparing texts, they gain a deeper understanding of the ideas, issues and themes that reflect the world and human experiences. Students produce a written analysis comparing important ideas, issues, themes and values encountered in both texts.

Presenting argument- Students use their understanding of argument and language as a basis to construct their own oral presentation that attempts to influence audiences in relation to a topical issue that has appeared in the media since 1 September of the previous year. Students reflect on their intentions in positioning the audience and consider how their use of language and oral conventions allows them to present their point of view.

LITERATURE

Unit 1: Approaches to literature

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

Unit 2: Context and connections

In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Students consider the relationships between authors, audiences and contexts and analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based.

MATHEMATICS

Students electing studies in Mathematics are encouraged to consider the following sequences

Units 1 and 2		Units 3 and 4
Foundation Mathematics*	$\longrightarrow$	Further Mathematics
General Mathematics	$\longrightarrow$	General Mathematics
Mathematical Methods	$\longrightarrow$	Mathematical Methods or Further Mathematics
General Mathematics and Mathematical Methods	$\longrightarrow$	Mathematical Methods and/or Further Mathematics
Mathematical Methods**	$\longrightarrow$	Mathematical Methods and Specialist Mathematics
Mathematical Methods and General Mathematics	$\longrightarrow$	Mathematical Methods and Specialist Mathematics
General Mathematics or Specialist Mathematics and Mathematical Methods	$\longrightarrow$	Further Mathematics, Mathematical Methods and Specialist Mathematics

* For this combination of units, students wishing to progress to Further Mathematics Units 3 and 4 will need to undertake some supplementary study with respect to assumed knowledge and skills for Area of Study 1.

** For this combination of units, students will need to undertake some supplementary study with respect to assumed knowledge and skills for Specialist Mathematics Units 3 and 4

FOUNDATION MATHEMATICS 1 & 2

Unit 1 & 2
In Foundation Mathematics there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study. The areas of study for Units 1 and 2 of Foundation Mathematics are 'Space, shape and design', 'Patterns and number', 'Data' and 'Measurement'.

All four areas of study are to be completed over the two units. The content should be developed using contexts present in students' other studies, work and personal or other familiar situations.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

GENERAL MATHEMATICS 1 & 2

Units 1 and 2
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. 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'. 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.

Units 3 and 4

It is highly recommended that students intending to undertake this subject in Units 3 & 4, should have successfully completed and passed General Maths Units 1 & 2 prior.

General Mathematics Units 3 and 4 focus on real-life application of mathematics and consist of the areas of study 'Data analysis, probability and statistics' and 'Discrete mathematics'.

Unit 3 comprises Data analysis and Recursion and financial modelling, and Unit 4 comprises Matrices and Networks and decision mathematics. Assumed knowledge and skills for General Mathematics Units 3 and 4 are contained in General 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 of General Mathematics Units 3 and 4. 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, networks, algorithms, algebraic manipulation, recurrence relations, equations and graphs. 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.

MATHEMATICAL METHODS 1 & 2

Unit 1
Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. They are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units. The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra' which extends across Units 1 and 2. This content should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units 1 and 2. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric

constructions, algebraic manipulation, equations, graphs and differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

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

SPECIALIST MATHEMATICS 1 & 2

Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem solving and reasoning. Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4.

The areas of study for Units 1 and 2 of Specialist Mathematics are 'Algebra and structure', 'Arithmetic and number', 'Discrete mathematics', 'Geometry, measurement and trigonometry', 'Graphs of linear and non-linear relations' and 'Statistics'. For Units 1 and 2, to suit the range of students entering the study, and cover the four prescribed topics, content must be selected from the six areas of study using the following rules:

- For each unit, content covers four or more topics in their entirety, selected from at least three different areas of study.

- Each unit must include two of the prescribed topics: Number systems and recursion; Vectors in the plane; Geometry in the plane and proof; and Graphs of non-linear relations.

- Other topics can be selected from those included in the areas of study for Specialist Mathematics Units 1 and 2 and/or General Mathematics Units 1 and 2 courses intended as preparation for study at the Units 3 and 4 level, should include selection of content from areas of study that provide a suitable background for these studies.

- Content from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable

MATHEMATICAL METHODS 3 & 4

It is highly recommended that students intending to undertake this subject in Unit 3 & 4, should have successfully completed Mathematical Methods Unit 1 & 2 prior.

Units 3 & 4
Units 3 and 4 consist of the areas of study 'Functions and graphs', 'Calculus', 'Algebra' and 'Probability and statistics', which must be covered in progression from Unit 3 to Unit 4, with an appropriate selection of content for each of Unit 3 and Unit 4. Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and skills for the outcomes of Mathematical Methods Units 3 and 4.

For Unit 3 a selection of content would typically include the areas of study 'Functions and graphs' and 'Algebra', and applications of derivatives and

differentiation, and identifying and analysing key features of the functions and their graphs from the 'Calculus' area of study. For Unit 4, this selection would typically consist of remaining content from the areas of study: 'Functions and graphs', 'Calculus' and 'Algebra', and the study of random variables and discrete and continuous probability distributions and the distribution of sample proportions. For Unit 4, the content from the 'Calculus' area of study would be likely to include the treatment of anti-differentiation, integration, the relation between integration and the area of regions specified by lines or curves described by the rules of functions, and simple applications of this content. The selection of content from the areas of study should be constructed so that there is a development in the complexity and sophistication of problem types and mathematical processes used (modelling, transformations, graph sketching and equation solving) in application to contexts related to these areas of study. There should be a clear progression of skills and knowledge from Unit 3 to Unit 4 in each area of study.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation, anti-differentiation, integration and inference with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

SPECIALIST MATHEMATICS 3 & 4

It is highly recommended that students intending to undertake this subject in Unit 3 & 4, should have successfully completed Mathematical Methods Unit 1 & 2 and Specialist Maths Unit 1 & 2 prior.

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

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

Applied Computing 1 & 2

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

VCE Applied Computing is underpinned by four key concepts: digital systems, data and information, approaches to problem solving, and interactions and impact.

Unit 1:
In this unit students are introduced to the stages of the problem-solving methodology. Students focus on how data can be used within software tools such as databases and spreadsheets to create data visualisations, and the use of programming languages to develop working software solutions.

In Area of Study 1, as an introduction to data analytics, students respond to a teacher-provided analysis of requirements and designs to identify and collect data to present their findings as data visualisations. They present work that includes database, spreadsheet, and data visualisations solutions. In Area of Study 2 students select and use a programming language to create a working software solution. Students prepare, document, and monitor project plans and engage in all stages of the problem-solving methodology.

Unit 2:
In this unit students focus on developing innovative solutions to needs or opportunities that they have identified and propose strategies for reducing security risks to data and information in a networked environment.

In Area of Study 1 students 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. Students engage in all areas of the problem-solving methodology. In Area of Study 2, as an introduction to cybersecurity, students investigate networks and the threats, vulnerabilities and risks to data and information. They propose strategies to protect the data accessed using a network.

Students interested in this subject should speak with Mr. Joseph Lim

THE HUMANITIES

ACCOUNTING

Unit 1: Establishing and operating a service business
This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of accounting information by internal and external users. The cash basis of recording and reporting is used throughout this unit. Using single entry recording of financial data analysis of accounting information, students will examine the role of accounting in the decision-making process for a sole proprietor of a service business.

Unit 2: Accounting for 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 performance of the business using financial and non-financial information. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business. Students develop their understanding of the importance of ICT in the accounting process by using a commercial accounting software package to establish a set of accounts, record financial transactions and generate accounting reports

It is highly recommended that students intending to undertake this subject in Unit 3 & 4, should have successfully completed and passed Accounting Unit 2 prior.

Unit 3: Recording and reporting for trading business
This unit focuses on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting. The perpetual method of stock recording with the First In, First Out (FIFO) method is used.

Unit 4: Control and analysis of business performance
This unit provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process. The unit I based on the double entry accounting system and the accrual method of reporting for a single

activity trading business using the perpetual inventory recording system.

BUSINESS MANAGEMENT

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.

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.

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 through the use of contemporary Australian and global business case studies from the past four years.

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.

MODERN HISTORY UNITS 1 & 2

Unit 1: Change and conflict
In this unit students investigate the nature of social, political, economic and cultural change in the later part of the 19th century and the first half of the 20th century. 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.

Unit 2: The changing world order
In this unit students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century.

HISTORY (REVOLUTIONS) 3 & 4

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

Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror. In these units' students develop an understanding of the complexity and multiplicity of causes and consequences in the revolutionary narrative. They construct an argument about the past using primary sources as evidence and evaluate the extent to which the revolution

brought change to the lives of people. They consider how perspectives of the revolution give an insight into the continuity and change experienced by those who lived through dramatic revolutionary moments. Students evaluate historical interpretations about the causes and consequences of revolution and the effects of change instigated by the new order. The two Revolutions studied in 2022 include: The American Revolution of 1776 and The Russian Revolution of October 1917.

LEGAL STUDIES

Unit 1: Guilt and liability
Criminal law and civil law aim 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. Civil law deals with the infringement of a person's or group's rights and breaching civil law can result in litigation. In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

Unit 2: Sanctions, remedies and rights
Criminal law and civil law aim to protect the rights of individuals. When rights are infringed, a case or dispute may arise which needs to be determined or resolved, and sanctions or remedies may be imposed. This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness. Students undertake a detailed investigation of two criminal cases and two civil cases from the past four years to form a judgment about the ability of sanctions and remedies to achieve the principles of justice. 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.

Unit 3: Rights and justice
Students examine the institutions that adjudicate criminal cases and civil disputes. They also investigate methods of dispute resolution that can be

used as an alternative to civil litigation. Students investigate the processes and procedures followed in courtrooms and develop an understanding of the adversary system of trial and the jury system, as well as pre-trial and post-trial procedures that operate in the Victorian legal system. Using the elements of an effective legal system, students consider the extent to which court processes and procedures contribute to the effective operation of the legal system. They also consider reforms or changes that could further improve its effective operation. Throughout this unit, students examine current or recent cases to support their learning and apply legal principles to these illustrative cases.

Unit 4: The people and the law
In this unit students develop an understanding of the institutions that determine our laws, and their law-making powers and processes. They undertake an informed evaluation of the effectiveness of law-making bodies and examine the need for the law to keep up to date with changes in society. Students develop an appreciation of the complex nature of law-making by investigating the key features and operation of parliament, and influences on law-making, with a focus on the role of the individual. Central to the investigation of law-making is the role played by the Commonwealth Constitution. Students develop an understanding of the importance of the Constitution in their lives and on society as a whole, and undertake a comparative analysis with another country.

They learn of the importance of the role played by the High Court of Australia in interpreting and enforcing the Constitution, and ensuring that parliaments do not act outside their areas of power nor infringe protected rights. Students investigate the nature and importance of courts as law-makers and undertake an evaluation of their effectiveness as law-making bodies. They also investigate the relationships that exist between parliaments and courts. Throughout this unit, students examine relevant cases to support their learning and apply legal principles to these cases.

AUSLAN 1 & 2 (Language Study)

The study of Auslan contributes to the overall education of students, particularly in the areas of communication, cross-cultural understanding, literacy and general knowledge. It provides access to the culture of a unique Australian cultural community. The study promotes understanding of different attitudes and values within the wider Australian community and beyond and promotes the language, and cross-cultural understanding. Increased learning of Auslan by deaf and hearing students facilitates communication between deaf and hearing communities, and helps maintain and share the cultural and linguistic heritage of deaf and hearing Australians.

Unit 1 and 2: The Individual, Deaf and Hearing Communities and The Changing World.
Students refine their signing skills in the following ways:
- Scripted conversation about the self, including social conventions from the Deaf Community
- Observe the conversations of others to gain specific information
- Interpret: retell and rephrase in English and Auslan using both creative and informative structures
- Research The impact of technology on Deafness

HEALTH AND PHYSICAL EDUCATION

HEALTH AND HUMAN DEVELOPMENT

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. For the purposes of this study, students should consider wellbeing to be an implicit element of health. In this unit students identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs and practices, including those among Aboriginal and Torres Strait Islanders. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health and wellbeing and the indicators used to measure and evaluate health status. With a focus on youth, students consider their own health as individuals and as a cohort. They build health literacy through interpreting and using data, through investigating the role of food, and through extended inquiry into one youth health focus area.

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. Students enquire into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

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. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). They use this knowledge as a background to their analysis and evaluation of variations in the health status of Australians. Area of Study 2 focuses on health promotion and improvements in population health over time. Students look at various public health approaches and the interdependence of different models as they research health improvements and evaluate successful programs. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

Unit 4: 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. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Area of Study 2 looks at global action to improve health and wellbeing and human development, focusing on the United Nations' (UN's) Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO). Students also investigate the role of non-government organisations and Australia's overseas aid program. Students evaluate the effectiveness of health initiatives and programs in a global context and reflect on their capacity to take action.

OUTDOOR AND ENVIRONMENTAL STUDIES

Unit 1: Exploring outdoor experiences
In this area of study students examine motivations for and responses to nature and outdoor experiences. They investigate a range of contemporary uses and meanings of the term 'nature', and examine a variety of different types of outdoor environments. Students are introduced to a cultural perspective on the way's humans relate to outdoor environments. Students learn to participate safely in outdoor experiences and develop relevant practical skills including first aid to enable safe participation in practical experiences. Students use these experiences as the basis for reflection.

This area of study focuses on planning and participating in outdoor experiences. Students evaluate how their personal responses are influenced by media portrayals of outdoor environments and perceptions of risk involved in outdoor experiences. Practical outdoor experiences

provide students with the opportunity to observe and experience various ways of encountering and understanding outdoor environments. Students consider factors that affect access to outdoor experiences and explain the effect of different technologies on outdoor experiences, examining how all of these influence the ways humans understand nature.

Unit 2: Discovering outdoor environments
This area of study introduces students to the characteristics of a variety of outdoor environments, including those visited during practical outdoor experiences. Students investigate different types of outdoor environments from a number of perspectives. Students undertake case studies of different types of outdoor environments to observe and experience how changes to nature affect people. They develop appropriate practical skills for safe and sustainable participation in outdoor experiences and for investigations into various outdoor environments. Students use these experiences as the basis for reflection and analysis of theoretical knowledge of natural environments.

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. Students consider a number of factors that influence relationships with outdoor environments. They also examine the dynamic nature of relationships between humans and their environment. Students are involved in one or more experiences in outdoor environments, including in areas where there is evidence of human interaction. Through these practical experience's students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop theoretical knowledge and skills about specific natural environments.

Unit 4: Sustainable outdoor relationships
In this unit students 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. Students examine the importance of developing a balance between human needs and the conservation of outdoor environments and consider the skills needed to be environmentally responsible citizens. They investigate current acts and conventions as well as management strategies for achieving and maintaining healthy and sustainable environments in

contemporary Australian society. Students engage in one or more related experiences in outdoor environments. They learn and apply the practical skills and knowledge required to sustain healthy outdoor environments, and evaluate the strategies and actions they employ. Through these practical experience's students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop and apply theoretical knowledge about outdoor environments.

PHYSICAL EDUCATION

Unit 1: The human body in motion
In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. Students investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. They explore how the capacity and functioning of each system acts as an enabler or barrier to movement and participation in physical activity. Students consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms. They also recommend and implement strategies to minimise the risk of illness or injury to each system.

Unit 2: Physical activity, sport and society
This unit develops students' understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in health and wellbeing of different population groups. Through a series of practical activities, students experience and explore different types of physical activity that can be promoted in different groups. They gain an appreciation of the level of physical activity required for health benefits. They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various groups. Students then create and participate in an activity plan that meets the physical activity and sedentary behaviour guidelines relevant to the particular population group being studied. Students focus on a range of contemporary issues associated with physical activity and/or sport at the local, national and global level. They investigate in detail one issue relevant to physical activity and/ or sport. Using a social-ecological perspective, they

evaluate the effect of individual, social, policy and physical environmental factors on participation in physical activity. Students form conclusions in relation to the impact these factors have on physical activity and sport in society.

Unit 3: Movement skills and energy for physical activity

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

Unit 4: Training to improve performance

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

TECHNOLOGIES

FOOD STUDIES

Unit 1: Food origins
In this unit students focus on food from historical and cultural perspectives, and investigate the origins and roles of food through time and across the world. Students explore how humans have historically sourced their food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food. Students consider the origins and significance of food through inquiry into one food-producing region of the world. Students look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine. Students also consider the influence of innovations, technologies and globalisation on food patterns. Throughout this unit they complete topical and contemporary practical activities to enhance, demonstrate and share their learning with others.

Unit 2: Food makers
In this unit students investigate food systems in contemporary Australia. Students focus on commercial food production industries, they also look at food production in domestic and small-scale settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers. Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. They consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life. In demonstrating their practical skills, students design new food products and adapt recipes to suit particular needs and circumstances. They consider the possible extension of their role as small-scale food producers by exploring potential entrepreneurial opportunities.

Unit 3: Food in a daily life
In this unit students investigate the many roles and everyday influences of food. Students explore the science of food: our physical need for it and how it nourishes and sometimes harms our bodies. Students investigate the science of food appreciation, the physiology of eating and digestion, and the role of diet on gut health. They analyse the scientific evidence, including nutritional rationale, behind the healthy eating recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating (see www.eatforhealth.gov.au), and develop their understanding of diverse nutrient requirements. Students also focus on influences on food choices: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments. 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. They investigate behavioural principles that assist in the establishment of lifelong, healthy dietary patterns.

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. They also consider the relationship between food security, food sovereignty and food citizenship. Students consider how to assess information and draw evidence-based conclusions, and apply this methodology to navigate contemporary food fads, trends and diets. They practise and improve their food selection skills by interpreting food labels and analysing the marketing terms used on food packaging.

Students also focus on issues about the environment, climate, ecology, ethics, farming practices, including the use and management of water and land, the development and application of innovations and technologies, and the challenges of food security, food sovereignty, food safety and food wastage. They research a selected topic, seeking clarity on current situations and points of view, considering solutions and analysing work undertaken to solve problems and support sustainable futures. The focus of this unit is on food issues, challenges and futures in Australia.

PRODUCT DESIGN AND TECHNOLOGY

Unit 1: Sustainable product redevelopment
This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. It is common for designers in Australia to use products from overseas as inspiration when redeveloping products for the domestic market. Sustainable redevelopment refers

to designers and makers ensuring products serve social, economic and environmental needs. Generating economic growth for design and manufacturing in Australia can begin with redeveloping existing products so they have positive social and minimal environmental impact. In this unit students examine claims of sustainable practices by designers. Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. They consider how a redeveloped product should attempt to solve a problem related to the original product. Where possible, materials and manufacturing processes used should be carefully selected to improve the overall sustainability of the redeveloped product.

In Area of Study 1 students consider the sustainability of an existing product and acknowledge the intellectual property (IP) rights of the original designer. Working drawings (also known as flats, trade sketches, assembly or technical drawings) are used to present the preferred design option. In Area of Study 2, students produce a redeveloped product using tools, equipment, machines and materials, taking into account safety considerations. They compare their product with the original design and evaluate it against the needs and requirements outlined in their design brief.

Unit 2: Collaborative design
In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution. Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also use digital technologies to facilitate teams to work collaboratively online. In this unit students gain inspiration from an historical or a contemporary design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics. In Area of Study 1, students work both individually and as members of a small design team to address a problem, need or opportunity and consider user-centred design factors. They design a product within a range, based on a theme, or a component of a group product. They research and refer to a chosen design style or movement. In Area of Study 2 the finished product is evaluated.

Unit 3: Applying the product design process
In this unit students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology.

Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a one-off situation in a small cottage industry or a school setting. Although a product design process may vary in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the product design process as they design for an end-user/s. Students identify methods which could be used in a low-volume or mass/high-volume production setting to manufacture a similar product to their design.

Unit 4: Product development and evaluation
In this unit students engage with an end-user/s to gain feedback throughout the process of production. Students make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the product design factors.

SCIENCES

BIOLOGY

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.

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

Unit 2: How does inheritance impact on diversity?

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

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

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

Unit 3: How do cells maintain life

In this unit students investigate the workings of the cell from several perspectives. They explore the relationship between nucleic acids and proteins as key molecules in cellular processes. Students analyse the structure and function of nucleic acids as information molecules, gene structure and expression in prokaryotic and eukaryotic cells and proteins as a diverse group of functional molecules. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies. Students explore the structure, regulation and rate of biochemical pathways, with reference to photosynthesis and cellular respiration. They explore how the application of biotechnologies to biochemical pathways could lead to improvements in agricultural practices. Students apply their knowledge of cellular processes through investigation of a selected case study, data analysis and/or a bioethical issue. A student-designed scientific investigation related to cellular processes and/or responses to challenges over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4. The design, analysis and findings of the investigation are presented in a scientific poster format.

Unit 4: How does life change and respond to challenges

In this unit students consider the continual change and challenges to which life on Earth has been, and continues to be, subjected to. They study the human immune system and the interactions between its components to provide immunity to a specific pathogen. Students consider how the application of biological knowledge can be used to respond to bioethical issues and challenges related to disease. Students consider how evolutionary biology is based on the accumulation of evidence over time. They investigate the impact of various change events on a population's gene pool and the biological consequences of changes in allele frequencies. Students examine the evidence for relatedness between species and change in life forms over time using evidence from paleontology, structural morphology, molecular homology and comparative genomics. Students examine the evidence for structural trends in the human fossil record, recognising that interpretations can be contested, refined or replaced when challenged by new evidence. Students demonstrate and apply

their knowledge of how life changes and responds to challenges through investigation of a selected case study, data analysis and/or bioethical issue. A student-designed scientific investigation involving the generation of primary data related to cellular processes and/or how life changes and responds to challenges is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The design, analysis and findings of the investigation are presented in a scientific poster format.

CHEMISTRY

Unit 1: How can the diversity of materials be explained?
The development and use of materials for specific purpose is an important human endeavour. In this unit students investigate the chemical properties and practical applications of a range of materials including metals, crystals, polymers, nanomaterials and giant lattices. They explore and explain the relationships between properties, structure and bonding focus within and between particles that vary in size from the visible through to nanoparticles, molecules and atoms. Students are introduced to quantitative concepts in chemistry.

Unit 2: What makes water such a unique chemical?
Water is the most widely used solvent on earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students examine the structure and bonding within and between water molecules in order to investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. They are introduced to stoichiometry and to analytical techniques and instrumental procedures analysis, and apply these to determine concentrations of different species in water samples, including chemical contaminants. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water.

It is highly recommended that students intending to undertake this subject in Unit 3 & 4, should have successfully completed and passed Chemistry Unit 1 & 2 prior.

Unit 3: How can chemical processes be designed to optimise efficiency?
The global demand for energy and materials is increasing with the growth of world population. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources and investigate the combustion of fuels. They consider the purpose, design and operating of principles of galvanic cells, fuel cells and electrolytic cells and calculate quantities in electrolytic reactions. Students analyse manufacturing processes with reference to factors that influence their reaction rates and extent. They apply the equilibrium law and Le Chatelier's principle to predict and explain the conditions that will improve the efficiency and percentage yield of chemical processes.

Unit 4: How are organic compounds categorised, analysed, and used?
Carbon is the basis of the diverse compounds found in living tissues and in the fuels, foods, medicines and many of the materials we used in everyday life. In this unit students investigate the structural features, bonding, reactions and uses of the major families of organic compounds including those found in food. Students process data from instrumental analyses to confirm or deduce organic structures, and perform volumetric analyses to determine the concentrations of organic chemicals in mixtures. They predict the products of reaction pathways and design pathways to produce particular compounds from given starting materials. Students investigate key food molecules including carbohydrates proteins, lipids and vitamins and use calorimetry to determine the energy released in the combustion of food.

PHYSICS

Unit 1: What ideas explain the physical world?
In this unit students explore some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. They consider thermal concepts by investigating heat and assessing the impact of human use of energy on the environment. Students evaluate common analogies used to explain electricity and investigate how electricity can be manipulated and utilised. They examine current scientifically accepted theories that explain how matter and energy have changed since the origins of the Universe.

Unit 2: What do experiments reveal about the physical world?
This unit requires that students undertake a core study related to motion, one option from a choice of twelve options, and a student-designed investigation related to motion and/or one of the twelve options. In this unit, students explore the power of experiments in developing models and theories. They make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored including through indirect observations. Students investigate the ways in which forces are involved both in moving objects

and in keeping objects stationary. They choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science.

It is highly recommended that students intending to undertake this subject in Unit 3 & 4, should have successfully completed and passed Physics Unit 1 & 2 prior.

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.

Unit 4: How can two contradictory models explain both light and matter?
In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and analyse its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students are challenged to think beyond the concepts experienced in everyday life to study the physical world from a new perspective.

PSYCHOLOGY

Unit 1: How are behaviour and mental processes shaped?
In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected.

Unit 2: How do external factors influence behaviour and mental processes?
A person's thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups.

Unit 3: How does experience affect behaviour and mental processes?
The nervous system influences behaviour and the way people experience the world. In this unit students examine the functioning of the nervous system to explain how a person can interact with the world around them. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved.

Unit 4: How is wellbeing developed and maintained?
Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. In this unit, students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors.

VISUAL AND PERFORMING ARTS

ART MAKING AND EXHIBITING

VCE Art Making and Exhibiting introduces students to the methods used to make artworks and how artworks are presented and exhibited.

Unit 1 Explore, Expand and Investigate
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 researching, viewing and analysis of artworks by other artists.

Unit 2 Understand, develop and resolve -
Students will understand how to work independently and collaboratively to develop ideas and an understanding of the sources that inform and influence art making. They will investigate the practices of artists from different periods of time and cultures and their use of materials, techniques and processes, and how these contribute to the making of their Artworks. Students will develop, refine and resolve their personal themes, aesthetic qualities and style.

Unit 3 Collect, extend and connect
Students will collect inspiration, influences and images develop an understanding of the sources that inform their art making. Their knowledge and skills will evolve through the experience of making and presenting their own artworks and through the viewing and analysis of artworks by other artists. 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.

Unit 4 Consolidate, Present and Conserve
Students will refine and resolve their artworks by further developing their knowledge and skills. They will understand how exhibitions are planned and produced by galleries, museums, other exhibition spaces and site-specific spaces and how artworks are curated and displayed for audiences. Students will understand the methods used and considerations involved in the preparation, presentation and conservation of artworks.

MEDIA

Unt 1: Media representations
Students are introduced to the concept of audience and what it entails. They consider how audiences engage with the media to construct and negotiate understandings of the world and themselves through their participation in the consumption, reception, production, curation, and distribution of media products. Notions of identity and self are implicit in the ways audiences select, create, share, engage with and read media products. Through the examination of a range of media forms and products, students consider how representations of self and identity are constructed, distributed, engaged with, consumed and read. Students consider different readings of media products and how meaning is suggested through the complex relationships between content creators and producers, media forms and 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.

Unit 3: Media narratives and pre-production
In this unit students explore stories that circulate in society through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological and institutional contexts of production, distribution, consumption and reception. Students assess how audiences from different periods of time and contexts are engaged by, consume and read narratives using appropriate media language. Narratives are defined as the depiction of a chain of events in a cause and effect relationship occurring in physical and/or virtual space and time in non-fictional and fictional media products.

Students use the pre-production stage of the media production process to design the production of a media product for a specified audience. They investigate a media form that aligns with their interests and intent, developing an understanding of the media codes and conventions appropriate to audience engagement, consumption, and reception within the selected media form. They explore and experiment with media technologies to develop skills in their selected media form, reflecting on and documenting their progress. Students undertake pre-production processes appropriate to their selected media form and develop written and visual documentation to support the production and post-production of a media product in Unit 4.

Unit 4: Media production and issues in media
In this unit students focus on the production and post-production stages of the media production process, bringing the media production design created in Unit 3 to its realisation. They refine their media production in response to feedback and through personal reflection, documenting the iterations of their production as they work towards completion. Students explore the relationship between the media and audiences, focusing on the opportunities and challenges afforded by current developments in the media industry. They consider the nature of communication between the media and audiences, explore the capacity of the media to be used by governments, institutions, and audiences, and analyse the role of the Australian government in regulating the media.

ART CREATIVE PRACTICE

In the study of VCE Art Creative Practice, research and investigation inform art making. Through the study of artworks, the practices of artists and their role in society, students develop their individual art practice, and communicate ideas and meaning using a range of materials, techniques and processes.

Unit 1
Inquiry learning- Students use inquiry learning as an active process of exploration and experimentation where the end result is not fixed or known. Through making and Responding, students acquire experimental and analytical skills to develop their art practice.
Experiential learning – will guide the students through a series of experiences in Making and Responding to art. Student reflect on their experiences and conceptualise the ideas evoked by their experiences. They will experiment with and expand upon these ideas in their art practice.

Unit 2
Inquiry learning- Students use inquiry learning to understand how the practices of artists and artworks reflect the values, beliefs and traditions of their own and other cultures. Students will develop personal ideas and expression through Making and Responding in creative art practice and

collaboration. Students will discuss, reflect and evaluate their own work and the work of others.

Unit 3
Project-based learning- Students will focus on specific projects that engages the students in problem solving, decision- making and reflection using their art practice. they will develop personal ideas and expression through Making and Responding in art practice. This will include research and investigation of Artists and artworks, developing ideas and issues, exploration and presentation of artworks. They will employ practical skills in art making and develop conceptual understanding to inform aesthetic awareness and creative art practice. Students will develop creative and critical thinking skills in individual responses to artworks and art practice.

Unit 4 Project-based learning- Students will continue their specific projects through creative art practice, documentation, reflection, evaluation and critique. They will refine and resolve a body of work for presentation.
Inquiry learning- Students will continue their inquiry learning of artists and understand how the practices of artists and artworks reflect the values, beliefs and traditions of their own and other cultures using the support of the Interpretive lenses.

VISUAL COMMUNICATION AND DESIGN

Unit 1: Introduction to visual communication design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to create messages, ideas and concepts, both visible and tangible. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications. Through experimentation and exploration of the relationship between design elements and design principles, students develop an understanding of how they affect the visual message and the way information and ideas are read and perceived. Students review the contextual background of visual communication through an investigation of design styles.

This research introduces students to the broader context of the place and purpose of design. Students are introduced to the importance of copyright and intellectual property and the conventions for acknowledging sources of inspiration. In this unit students are introduced to four stages of the design process: research, generation of ideas, and

development of concepts and refinement of visual communications.

Unit 2: Applications of visual communication within design fields

This unit focuses on the application of visual communication design knowledge, design thinking and drawing methods to create visual communications to meet specific purposes in designated design fields.

Students use presentation drawing methods that incorporate the use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design. They also investigate how typography and imagery are used in these fields as well as the communication field of design.

They apply design thinking skills when exploring ways in which images and type can be manipulated to communicate ideas and concepts in different ways in the communication design field. In response to a brief, students engage in the stages of research, generation of ideas and development and refinement of concepts to create visual communications.

Unit 3: Visual communication design practices

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media and materials, and the application of design elements and design principles, can create effective visual communications for specific audiences and purposes. They investigate and experiment with the use of manual and digital methods, media and materials to make informed decisions when selecting suitable approaches for the development of their own design ideas and concepts. Students use their research and analysis of the process of visual communication designers to support the development of their own designs. They establish a brief for a client and apply design thinking through the design process. They identify and describe a client, two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need.

Unit 4: Visual communication design development, evaluation and presentation

The focus of this unit is on the development of design concepts and two final presentations of visual communications to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated communication needs. Having completed their brief and generated ideas in Unit 3, students continue the design process by developing and refining concepts for each

communication need stated in the brief. They utilise a range of digital and manual two- and three-dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages and conveys ideas to the target audience. As students revisit stages to undertake further research or idea generation when developing and presenting their design solutions, they develop an understanding of the iterative nature of the design process. Ongoing reflection and evaluation of design solutions against the brief assists students with keeping their endeavours focused.

MUSIC PERFORMANCE

Unit 1
Music Performance Unit 1 focuses on building students' performance and musicianship skills to present performances of selected group and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimise their own approach to performance work to address technical, expressive and stylistic challenges relevant to works they are preparing for performance. Students also develop their listening, aural, theoretical and analytical musicianship skills.

Unit 2
Music Performance Unit 2 focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They continue to develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Unit 3:
This unit focuses on building and refining performance and musicianship skills. Students focus on either group or solo performance and begin preparation of a performance program they will present in the end-of-year examination. As part of their preparation, students will also present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to

address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Unit 4:
This unit focuses on further development and refinement of performance and musicianship skills. Students focus on either group or solo performance and continue preparation of a performance program they will present in the end-of-year examination. All students present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. Through analyses of other performers' interpretations and feedback on their own performances, students refine their interpretations and optimise their approach to performance. They continue to address challenges relevant to works they are preparing for performance and to strengthen their listening, aural, theoretical and analytical musicianship skills.

DRAMA

Unit 1: Dramatic storytelling
This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. This unit also involves analysis of a student's own performance work and of a performance by professional drama practitioners. In this unit students use performance styles from a range of contexts associated with naturalism and non-naturalism. Students examine storytelling through the creation of solo and/or ensemble devised performance/s. They manipulate expressive skills in the creation and presentation of characters and develop awareness and understanding of how characters are portrayed in naturalistic and non-naturalistic performance styles and document the processes they use. Students also gain an awareness of how performance is shaped and given meaning. They investigate a range of stimulus material and learn about stagecraft, conventions and performance styles from a range of contexts.

Unit 2: Non-naturalistic Australian drama
This unit focuses on the use of documentation of the processes involved in constructing a devised solo or ensemble performance that uses non-naturalistic performance styles. 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 of historical Australian context. Students use a range of stimulus material in

creating the performance and examine non-naturalistic performance styles from a range of contexts relevant to Australia and Australians. Conventions appropriate to the selected performance styles are also explored. Students' knowledge of how dramatic elements can be enhanced or manipulated through performance is further developed in this unit. Students analyse their own performance work as well as undertake the analysis of a performance of an Australian work by other actors.

Unit 3: Devised non-naturalistic ensemble performance

This unit focuses on non-naturalistic devised ensemble drama. Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions and work collaboratively to devise, develop and present an ensemble performance. Students use and manipulate dramatic elements, conventions, performance and expressive skills, performance styles and stagecraft in non-naturalistic ways to shape and enhance the performance. Students also document and evaluate stages involved in the creation, development and presentation of the ensemble performance.

Unit 4: Non-naturalistic solo performance

Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions. They develop skill in extracting dramatic potential from a stimulus material and use dramatic elements, conventions, performance styles and expressive skills to develop and present a short solo performance. These skills are further developed as students create a devised solo performance in response to a prescribed structure.

VCE VM Unit Descriptions

VCE VM LITERACY

Unit 1: Literacy for personal use including digital literacy

In this unit, students will develop their reading and viewing skills and expand their responses beyond the Victorian Curriculum F–10: English, Victorian Pathways Certificate: Literacy and EAL Pathway C (Level 3).

Students read texts that serve a variety of purposes, from everyday content written to convey information, to texts written for specific workplaces or educational settings. They build on and work to consolidate their digital literacy skills. Students develop their capacity to critically assess digital texts, including webpages for vocational and workplace settings, podcasts and social media. As a part of this exploration of the digital world, students participate and engage in learning practices that will equip them to deal safely and respectfully with others in the digital and virtual world.

Unit 2: Issues, voices and opinions

In this unit, students consider the values and beliefs that underpin different perspectives and how these values create different biases and opinions, including thinking about how these issues might arise in particular vocational or workplace settings. Students read, view and listen to a range of texts and content that demonstrate diverse opinions on a range of local and global issues, that may impact on their community or be of particular concern to a vocational or workplace group.

Students consider their own perspectives on issues and develop reasoned and logical responses in a respectful and thoughtful manner. In developing written responses, students draft, revise, check and edit their writing to improve the clarity and meaning of their work and learn to accurately reference and acknowledge evidence used.

Unit 3 (to be offered in 2024): Informational, organisational and procedural texts

In this unit, students become familiar with and develop confidence in understanding and accessing texts of an informational, organisational or procedural nature. These texts reflect real-life situations encountered by students and are representative of the sorts of texts students will encounter in a vocational setting or workplace, or for their health and participation in the community.

Students will develop their confidence to deal with a range of technical content that they will encounter throughout adulthood, such as safety reports, public health initiatives, tax forms and advice, contracts, promotional videos and vocational and workplace texts.

This unit focuses on texts about an individual's rights and responsibilities within organisations, workplaces and vocational groups. Students read and respond to a variety of technical content from a vocational, workplace or organisational setting of their choice, demonstrating understanding of how these texts inform and shape the organisations they interact with.

Unit 4 (to be offered in 2024): Literacy for advocacy

In this unit, students investigate, analyse and create content for the advocacy of self, a product or a community group of the student's choice, in a vocational or recreational setting. Students will research the differences between texts used for more formal or traditional types of advocacy, influence or promotion, as well as some of the forms that are increasingly being used in the digital domain for publicity and exposure.

Students will consider which elements are important for creating a 'brand' (including personal branding) and how different texts, images, products and multimedia platforms work together to produce one, central message to influence an audience. Students will compare and contrast the ways in which same message can be presented through different platforms and participate in discussions that consider the effectiveness of these messages, considering their purpose and the social and workplace values associated with them.

Students will use their knowledge and understanding of language, context and audience to complete an oral presentation that showcases their learning. The presentation needs to be developed in consultation with the teacher and should focus on an area of student interest with a clearly stated vocational or personal focus.

VCE VM NUMERACY

Units 1 – 4 (units 3 and 4 to be offered in 2024)

VCE Vocational Major Numeracy focuses on enabling students to develop and enhance their numeracy skills to make sense of their personal, public and vocational lives. Students develop mathematical skills with consideration of their local, national and global environments and contexts, and an awareness and use of appropriate technologies.
It allows students to explore the underpinning mathematical knowledge of number and quantity, measurement, shape, dimensions and directions, data and chance, the understanding and use of systems and processes, and mathematical relationships and thinking. This mathematical knowledge is then applied to tasks which are part of the students' daily routines and practices, but also extends to applications outside the immediate personal environment, such as the workplace and community.
These numeracies are developed using a problem-solving cycle with four components: formulating; acting on and using mathematics; evaluating and reflecting; and communicating and reporting.

VCE VM Personal Development Skills

Unit 1: Healthy individuals

In this unit, students are introduced to the concepts of personal identity and emotional intelligences in differing contexts. Students explore the elements of emotional intelligence (self-awareness, self-regulation, motivation, empathy and social skills), and develop and apply strategies relating to personal identity and emotional intelligence.
Students explore concepts of health and wellbeing for individuals and groups, the factors that affect wellbeing and the characteristics of inclusive and cohesive communities. They investigate activities and support services that aim to improve individual and group wellbeing within the community.
Students analyse the impact of technology on health and wellbeing at an individual and community level, and apply their knowledge and skills to plan, implement and evaluate an individual or group health promotion activity.

Unit 2: Connecting with community

In this unit, students explore the concept of community at a local, national and global level. They investigate community participation and recognise that there are a range of ways to participate in community life.

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

Students consider the concept of community engagement and recognise the benefits and challenges of community engagement to address a range of issues. Students work individually or in teams to identify a community engagement issue and undertake an activity to address that issue.

Unit 3 (to be offered in 2024): Leadership and teamwork

In this unit, students examine the characteristics of social awareness and a range of interpersonal skills to facilitate respectful interactions with others. Students examine the characteristics of effective leaders and reflect on how leadership qualities and styles can be applied in a range of contexts. They will look at contexts in which people become leaders, a range of leadership styles, and the ethics and

expectations of leaders in a democratic society. Students will consider how effective leaders foster innovation and creativity to solve problems and achieve goals.

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

Implicit to this unit is that leadership begins with them, develops to leadership of others and then to communities.

Unit 4 (to be offered in 2024): Community project
In this unit, students will complete an extended community project that addresses an environmental, cultural, economic or social issue. They will conduct research to identify a range of relevant issues in the community and justify the selection of a focus for the project. Students will seek to understand the issue's significance to the community, develop a project focus, and investigate previous or current responses to the area of concern. They will explore opportunities to build awareness of the chosen issue in the community. Students will implement a detailed plan for the selected community project and consider the key elements and key considerations when implementing a plan of action through to completion. They will consider the possible health, safety and ethical risks of a project, document evidence and make decisions on how findings will be organised, analysed and presented.
Students will evaluate the outcomes of the completed community project. They will become familiar with strategies to effectively communicate reflections and findings, and engage with audiences. Students will determine a suitable audience to present findings, identify and practise appropriate presentation skills, and make decisions about how a community project will be evaluated.

VCE VM WORK-RELATED SKILLS

Unit 1: Careers and learning for the future
In this unit, students evaluate information relating to employment. They will consider the reliability and credibility of information sources and the scope of labour market information available, including skills shortages and industry growth areas, emerging industries and current and future trends. Students will apply strategies to improve planning and decision-making related to gaining employment. They will develop research skills and collate evidence and artefacts relating to their future employment prospects.

Students consolidate their knowledge and understanding of future careers and their personal aspirations, skills and capabilities. Students conduct research and present their research findings, seek feedback and refine their goals through self-reflection.

Unit 2: Workplace skills and capabilities
In this unit, students consider the changing nature of work and the impact this has on future career pathways. They will distinguish between transferable skills that are valued across industries and specialist and technical work skills required for specific industries. They will be able to recognise how personal capabilities contribute to future success, and demonstrate their own skills and capabilities through artefacts and evidence.

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

Unit 3 (to be offered in 2024): Industrial relations, workplace environment and practice
In this unit, students are introduced to the features and characteristics of a healthy, collaborative and harmonious workplace. They will examine the concept of culture and consider the characteristics of work–life balance. Students will analyse the interconnection between employee and employer expectations and understand the importance of diversity and inclusion in the workplace. They will apply their understanding of workplace wellbeing to simulated workplace scenarios and real-life case studies.

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

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

Unit 4 (to be offered in 2024): Portfolio preparation and presentation

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

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

VPC Unit Descriptions

VPC LITERACY

Unit 1: Literacy for personal use including digital texts

This unit enables students to develop their knowledge and skills to read and write simple or short texts. Texts are chosen from a range of local and global perspectives including First Nations peoples' and multi-cultural perspectives and include film, TV, online videos, song, poetry, biographies, digital content and social media, and other texts of interest to the cohort. Students read, view and listen to texts produced for a variety of purposes, from everyday texts written for enjoyment or information to texts written for specific workplaces or educational settings.

Students engage with, understand and respond to digital texts, including webpages for vocational and workplace settings, podcasts and social media. As a part of this exploration of the digital world, they will participate and engage in learning practices that will equip them to deal safely and respectfully with others in the digital and virtual world.

Unit 2: Exploring and understanding issues and voices with informed discussion

This unit enables students to engage in issues that create discussion and debate in a community of which they are part. Students will consider the values that underpin different communities and how these values create different opinions and perspectives. They read, view and listen to a range of diverse opinions and consider the language and purpose of the content, and how these change depending on the audience and context.

Students engage with a range of content from print, visual, aural and multimodal sources. The selection of suitable material takes into consideration the interests and abilities of the student cohort and responds to the content that students typically read, including social media, and content from vocational and workplace settings. They practice and participate in debate, either in print, orally or via a digital platform. Students consider personal perspectives of community and workplace issues and develop logical responses to these debates in a respectful and thoughtful manner, supported by evidence.

Unit 3 (To be offered in 2024): Literacy for civic participation, pathways and further Learning

This unit enables students to develop the skills and knowledge required to understand and complete a range of familiar and less familiar activities for civic participation purposes. The selection of texts takes into consideration the interests and abilities of the student cohort and the information that students typically need for learning, employment and vocational activities. Students engage with a range of texts and information including timetables, forms, government documentation and contracts, in print and digital forms.

Students develop the skills and knowledge to investigate pathway options and plan skill development in order to move into further training or employment. They research and identify possible pathways and plan, document and monitor progress towards achieving personal goals.

Unit 4 (To be offered in 2024): Negotiated project

In this unit, students develop a range of written and oral communication skills through practical application in an activity around a specific content area. Content for the unit will be drawn from any area of learner interest or aspirations. Students will be encouraged to connect this area of study to learning in Unit 4 of Work-Related Skills. This project needs to be developed in consultation with the teacher and should focus on an area of student interest with a clearly stated vocational or personal focus. The project must have an actionable goal.

The project can be completed either individually or as a member of a group focusing on the following areas of skill development: collaboration, problem solving, communication, self-management, planning and organising, initiative and learning.

VPC NUMERACY

Unit 1 and 2

These units focus on supporting and enabling students to develop their numeracy skills and practices to make sense of their daily personal, public, and future vocational lives, and in their local community.

The focus is on the four numeracies where foundational mathematical skills are situated and embedded: personal, financial, health & recreational and civic. The numeracy contexts are highly familiar and relevant to students and reflect their personal interests and lives.

VPC WORK RELATED SKILLS

Unit 1: The Workplace - employment, conditions and opportunities
This unit examines the skills, capabilities and personal attributes required within the workplace. Students will develop an understanding of how employability skills and capabilities can be applied in a variety of settings, discuss how technical skills and capabilities are applied in a specific setting and explore how personal interests can be aligned with pathway opportunities.

Students explore the employment opportunities that exist within a workplace and how qualifications and further study can increase the opportunities that may be available. They identify and describe employee and employer rights and responsibilities in the workplace relating to pay and conditions within a selected setting. Students interview an employee about training and employment experiences and present findings supported by appropriate technology.

Students identify an employment opportunity and write a resume and cover letter that includes information relevant to the opportunity. They develop practical skills associated with drafting and finalising a resume and cover letter and use feedback to improve their resume and cover letter.

Unit 2: Small- scale work-related activity
Working in teams, students identify an achievable small-scale work-related activity and collaboratively plan for the activity. They apply a range of skills when implementing the plan and will engage in a process of reflection and evaluation about it and its application to other work contexts.

This unit develops students' communication and technology skills as they report on their small-scale work-related activity. Students learn about the structure and conventions of writing a report and will apply this format to describe the planning, implementation and evaluation of the small-scale work-related activity. Students will reflect on how they can improve future work-related outcomes.

Unit 3 (To be offered in 2024): Your physical, mental health and safety in the workplace
This unit introduces students to the role of physical and mental health in the workplace. Students examine how employees can contribute to the physical and mental health of self and colleagues, and discuss how employers can contribute to the physical and mental health of employees and customers/clients, including the implementation of policies.
Students distinguish between a safe and an unsafe workplace and explore how they can address unlawful practices. They describe strategies to reduce harm in a workplace or environment that is familiar to them, including processes to assess risk, analyse safety, report hazards and harms and make recommendations to improve safety in the workplace.

Unit 4 (To be offered in 2024): Pathway plan, resume and mock Interview
This unit provides students with an overview of potential employment and educational pathway options, to support the development and refinement of their future pathway plan.
Students explore strategies to apply when collecting and assessing information about employment opportunities. They apply knowledge and skills by preparing a job application in response to a job advertisement, including a resume and cover letter. Students plan suitable responses and prepare relevant questions to ask a potential employer and participate in a mock interview. They apply strategies to reflect on and evaluate their performance to improve future employment prospects.

VPC PERSONAL DEVELOPMENT SKILLS

Unit 1: Self, health and wellbeing
This unit explores personal development through self-reflection and self-care. It makes connections between self-awareness, purposefulness, goal setting and resilience.

Focusing on four skills: teamwork, communication, time management and problem-solving, students participate in an activity that investigates how personal development can help them achieve their goals. They investigate influences on motivation, and relationships between purposefulness and health and wellbeing. Students identify their personal strengths, abilities and potential and apply this understanding to the task of setting personal goals and reflecting on pathways to action and achievement.

Students examine how the development of personal skills can enhance health and wellbeing and increase opportunities for setting and achieving goals. They will consider a variety of influences on personal health and wellbeing. Students will investigate key pillars of physical, social, emotional health and wellbeing, and how to practise self-care in a range of contexts – including relationships and online environments – in order to protect and improve their own health and wellbeing. Students will explore concepts of consent, equity and access, and how to express themselves in safe, assertive and effective ways.

Unit 2: Connecting and participating with community

This unit takes a broad approach to the concept of community, and to the types of communities to which individuals may belong. There is an emphasis on personal and emotional growth through active group participation and membership or belongingness, and an introduction to the significance of community engagement. Through the example of a democratic society, students will explore community-related concepts, including rights and responsibilities, with a focus on how young people can participate and engage.

Students explore how communities provide support to members. They consider various ways of expressing community belongingness. They look at how communities are structured through investigation of community leaders and organisations. Students will identify and explore options and opportunities for connecting with their local community.

VET STUDIES AT A GLANCE

OFFERED ONSITE @ BHSSC in 2022

Certificate II Building and Construction (Pre-apprenticeship)

Certificate II in Building and Construction provides students with the knowledge and skills to enhance their employment prospects in the building and construction industry. This is a full carpentry pre-apprenticeship program and will, if completed, provide some credit towards the study component of an apprenticeship. All students undertake basic first aid and Work Safe training and receive their 'white card' enabling them to complete work placements on building sites.

VET Building and Construction is offered as a packaged program with students gaining additional skills and knowledge delivered through VCE Product Design and Technology (Wood) and VCE Visual Communication Design (Trade Drawing). Structured Workplace Learning is a required component in Year 1. Training is delivered in a computer equipped classroom, carpentry workshop, building barn and school grounds for Unit skills.

Certificate III in Sport and Recreation

VCE VET Sport and Recreation provides students with the opportunity to acquire and develop the skills, knowledge and confidence to work in the areas of sport and recreation and fitness. Leadership, organisational and specialist activity skills such as fitness will be developed throughout the program.

Completion of the Certificate may provide pathways into the sport and recreation industry in areas such as maintaining grounds, providing customer service, administrative service or working in a fitness centre, outdoor sporting ground or centre. Potential job roles may include recreation activities assistant or gymnasium assistant. The Sport and Recreation qualification could allow students to undertake further training or study to enable them to be employed in roles such as personal trainer, gym instructor, event/promotions manager, facilities manager, coach.

Vocational Education and
Training in Schools

Course	Location/Provider	Cert II	Cert III	Cert IV
Creative Industry				
Acting (Screen)	Australian College of Dramatic Arts		●	
Applied Fashion	Donvale Christian College	●		
Creative Industries (Media)	Swinburne University of Technology	●		
Dance	Fairhills High School	●		
Design Fundamentals (Visual Arts)	Box Hill Institute		●	
Design Fundamentals	Swinburne University of Technology		●	
Music Industry (Performance)	Scoresby Secondary College Sherbrooke Community School		●	
Music Industry (Sound Production)	Aquinas College Upwey High School		●	
SERVICE INDUSTRY				
Allied Health Assistance	Box Hill Institute Swinburne University of Technology		●	
Animal Studies	Box Hill Institute Donvale Christian College	●		
Beauty Services	Box Hill Institute Inspiring Beauty & Massage Academy The Masters Institute of Creative Ed.		●	
Business	Fairhills High School Swinburne University of Technology	●		
Christian Ministry	Waverley Christian College		●	
Community Services	Box Hill Institute Cire Services Swinburne University of Technology	●	●	
Early Childhood	Box Hill Institute Cire Services		●	
Equine Studies	Box Hill Institute		●	
Hospitality	Aquinas College Mater Christi	●		
Interior Decoration	Box Hill Institute		●	
Kitchen Operations	Aquinas College	●		

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	Belgrave Heights Christian School				
Make-up	Box Hill Institute		●		
Retail Cosmetics	Box Hill Institute Inspiring Beauty & Massage Academy	●			
Retail Services	Swinburne University of Technology	●			
Salon Assistant	Box Hill Institute Inspiring Beauty & Massage Academy The Masters Institute of Creative Ed.	●			
Outdoor Recreation	Box Hill Institute Fairhills High School	●			
Sport and Recreation (Outdoor focus)	Norwood Secondary College		●		
Sport and Recreation (General)	Aquinas College		●		
Sport and Recreation (Personal Fitness Industry Focus)	Scoresby College Sherbrooke Community College		●		
TECHNOLOGY INDUSTRY					
Aviation (Remote Pilot)	National Drones Institute		●		
Information Technology (Networking/Cyber Security)	Ringwood Training		●		
Information Technology (Virtual Reality & Game Design)	Ringwood Training		●		
Information Technology (Game Art & Animation)	Swinburne University of Technology		●		
Integrated Technologies (CISCO)	Ringwood Training			●	
Laboratory Skills	Box Hill Institute Swinburne University of Technology		●		
TRADE INDUSTRY					
Automotive Studies	Box Hill Institute Ringwood Training	●			
Building & Construction (Carpentry)	Aquinas College St Joseph's College Wantirna College	●			
Electrotech (Career Start)	Swinburne University of Technology	●			
Electrotechnology	Box Hill Institute St Joseph's College	●			
Engineering Studies	Ringwood Training Swinburne University of Technology	●			
Horticulture	Swinburne University of Technology	●			
Landscaping	Swinburne University of Technology	●			
DUAL Horticulture & Landscaping	Swinburne University of Technology	●			
Plumbing	Swinburne University of Technology	●			

KEY CONTACTS

Need to know more about a particular subject or pathway, please feel free to contact the following staff at the College. *Timetabling and scheduling queries should be directed to the Director of Student Services or the relevant Student Manager.*

LEARNING AREA	STAFF	EMAIL
The Arts	Susan Kent	susan.kent@bhssc.vic.edu.au
Careers and Pathways	Frank De Melis	frank.demelis@bhssc.vicedu.au
English & Humanities	Julia Nasser	julia.niamh@bhssc.vic.edu.au
Headstart	Frank De Melis Damian Dwyer	frank.demelis@bhssc.vicedu.au damian.dwyer@bhssc.vic.edu.au
Health and Physical Education	Joel Octigan	joel.octigan@bhssc.vic.edu.au
Mathematics & Science	Damon Edgar Ritika Mahajan	Damon.edgar@bhssc.vic.edu.au Ritika.Mahajan@bhssc.vic.edu.au
Sport Academies	Sam Hill	Sam.Hill@bhssc.vic.edu.au
Technology	Dave Fulton	david.fulton@bhssc.vic.edu.au
Vocational Major	Cath Manning Chris Christofidis	catherine.manning@bhssc.vic.edu.au Christopher.christofidis@bhssc.vic.edu.au
VET Innovation	Chris Christofidis	Christopher.christofidis@bhssc.vic.edu.au
Director of Student Services	Damian Dwyer	Damian.dwyer@bhssc.vic.edu.au
Head of Curriculum	Julia Niamh	julia.niamh@bhssc.vic.edu.au
International Students	Lizzie Liu	Lizzie.Liu@bhssc.vic.edu.au