KOONUNG
Secondary College

Excellence through Endeavour



VCE HANDBOOK

2025

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PROCESS

This information handbook is designed to help Year 10 and Year 11 students and their parents/carers make appropriate and informed choices about VCE units and program selection for 2025.

Students select a program over two or three years that satisfies the requirements of the Victorian Curriculum Assessment Authority (VCAA). There is provision for students to take longer to complete their studies and to change direction during that time. Students need to be aware of choosing a meaningful course of study, which will provide pathways into further study and employment.

When selecting subjects, students should carefully check pre-selection requirements for any courses or career paths they may be considering. All students should check the current VTAC Guide and the publications on university and TAFE entrance requirements before making final selections. The following questions should also help guide subject choices:

- Am I interested in this study?
- Is it a study containing the right level of difficulty for me?
- Do my teachers and parents think it is a wise choice?

Subjects will only run if there is sufficient demand from students. The feasibility of a class running is dependent on many variable constraints: the timetable, the minimum class size, and the physical and human resources available at the College. Many of these issues cannot be dealt with until late in the year when results are known and the program for the rest of the College is determined. We will always endeavour to satisfy the choices and requirements of as many students as possible. Unfortunately, there can be situations where students may not receive their first choice of subject.

Take time to select your subjects, as this will form the basis for the arrangements for the next year's VCE program.

ACCELERATED PATHWAYS

There will be an opportunity for some Year 10 and Year 11 students to undertake an accelerated pathway in their program. Students will attend classes with Year 11 and Year 12 students. It is expected that students accessing an accelerated pathway will possess very good organisational skills, a desire to complete a Unit 3 & 4 subject as well as an excellent general academic record. Students with the requisite skills are encouraged to apply to enrol in an accelerated pathway. This can ultimately provide students with a sixth subject that contributes to their Australian Tertiary Admission Rank (ATAR).

Please read the College's Acceleration Policy if you are considering this option.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

This is information regarding excursions, other activities, and any additional costs that may be required to complete the study.

REQUIREMENTS FOR SATISFACTORY COMPLETION OF THE VCE

At Koonung Secondary College, a VCE student generally undertakes 20 to 24 units of study. To meet the graduation requirements of the VCE, each continuing student (other than students returning to study) must satisfactorily complete no fewer than 16 units. A unit is usually one semester (two terms) in length.

Please see the VCE Senior School Manual available on Compass for more information about the requirements for VCE.

Students usually undertake 12 units (6 subjects) in Year 11 and 10 units (5 subjects) in Year 12.
The VCE is flexible, and students can undertake the VCE over two or more years.

The 16 units may include units of Vocational Education and Training (VET).

Students must include:

- At least three units of an English or EAL
- A sequence of Unit 3 & 4 in three studies in addition to compulsory English.

VCE SUBJECTS

Accounting

Applied Computing Software Development

Art Creative Practice

Biology

Business Management

Chemistry

Drama

English

English as an Additional Language

Environmental Science

Food Studies

Geography

Health & Human Development

History

Language: French, Japanese

Legal Studies

Literature

Mathematics

Media

Music

Philosophy

Physical Education

Physics

Product Design Technology

Psychology

Visual Communication Design

ASSESSMENT AND REPORTING

SATISFACTORY COMPLETION OF THE VCE

To gain credit for a unit within the VCE, students must achieve satisfactory completion of a unit. All units will be assessed with Satisfactory (S) or Not Satisfactory (N) for the learning outcomes.

LEVELS OF PERFORMANCE

Units 1 & 2

In addition to an S or N, certain assessment tasks will be graded to determine the level of performance. Performance will be reported using the grades: A+, A, B, C+, C, D+, D, E and UG. Where a student does meet the criteria of the task, this will be reported as "Ungraded" (UG). Unsatisfactory completion of the learning outcomes will lead to students receiving a Not Satisfactory (N) for the unit.

Units 3 & 4

All units will be assessed with Satisfactory (S) or Not Satisfactory (N) for the completion of learning outcomes. Performance in Unit 3 & 4 subjects consist of a combination of school assessed coursework or school assessed tasks and external examination(s).

Student will receive a "raw score" for their coursework assessment; this will form the basis of the graded assessment. Performance in the coursework will be moderated against the student's performance in the external exams and the GAT. Students will receive feedback from teachers for all school assessed coursework. Students are awarded a grade on a scale of A+ - E at the completion of the course. These are then translated to a study score for the subject.

TERTIARY ENTRANCE REQUIREMENTS

The Victorian Tertiary Admission Centre (VTAC) administers applications and offers of most Tertiary courses, university, TAFE and private training providers.

Each student will have one to one counselling with the Careers/Pathways team and be given information during assemblies in Year 12. All students will attend a tertiary Information Service session, where the process of applying, Change of Preference and Course Offers is explained.

VCE VOCATIONAL MAJOR (VCE VM)

What is the VCE Vocational Major (VM)?

The VCE Vocational Major is the replacement for the Intermediate and Senior VCAL that sits within the VCE. It is a two-year program over Year 11 and 12. Only students who enrol in the full program can choose the VCE VM studies. The VCE VM has a strong applied learning focus which teaches skills and knowledge in the context of 'real life' experiences that relates directly to their own future. Students apply what they have learnt by doing, experiencing, and relating acquired skills to the real-world within an environment where they feel safe and respected.

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

How is the VCE VM structured?

The VCE Vocational Major has specific subjects designed to prepare students for a vocational pathway. The subjects are VCE VM Literacy, VCE VM Numeracy, VCE VM Work Related Skills, and VCE VM Personal Development Skills (and 180 hours of VET at Certificate II level or above).

Each subject has four units, and each unit has a set of outcomes which are assessed through a range of learning activities and tasks. Students will apply knowledge and skills in practical settings and also undertake community-based activities and projects that involve working in a team.

What do I have to do to get my VCE VM?

Students must successfully finish at least 16 units, including:

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

Most students will undertake between 16-20 units over the two years. Students can also do other VCE subjects, and structured workplace learning.

Who decides if I have satisfactorily completed a VCE or VCE VM unit?

The result of Satisfactory or Not Satisfactory is determined at a school level for each unit. This decision is based on the work submitted and must follow the VCAA, and school, rules and procedures.

Can I combine VCE subjects with VCE VM subjects?

Subject to availability. Students may access and gain credit for any VCE subject in addition to the mandatory requirements of the VCE VM.

Can I participate in Structured Workplace Learning (SWL) or a School Based Apprenticeship or Traineeship (SBAT) as a part of the VCE VM?

It is possible that SWL or an SBAT may be included in the VCE VM. Students may be able to receive credit for time in the workplace via Structured Workplace Learning Recognition.

ENHANCEMENT STUDIES THROUGH UNIVERSITY SUBJECTS

There is an opportunity for very able Year 12 students to complete a first-year university subject while in their final year at school. The university study counts as a student's sixth VCE subject and students who complete the program receive a bonus of 10% of the maximum score possible for a sixth VCE subject. This bonus is calculated by VTAC. (Please note: There are restrictions on the number of subjects in the same "Study Area Groupings" which can count towards a student's ATAR. Please check these restrictions carefully before committing to studying a university enhancement subject).

Students attend classes at selected schools (including Monash, Melbourne and Deakin Universities) after school hours for one to three hours per week for two 13-week semesters. For further details on available subjects, please contact the Director of Learning -Senior School.

CAREERS/PATHWAYS INFORMATION

The Careers/Pathways team has current information about tertiary courses and applying for jobs.
The Careers/Pathways Team is available to help students research their interests and aspiring careers and to support them to understand the course details such as subject prerequisites for entry, costs associated with courses and where to study a course.

VTAC is also available, and this allows students to enter VCE subjects and obtain a printout of all courses that they would be able to access, and the ATAR required for entry.

MyCareerMatch is available to Year 11 and 12 students online. The program provides a list of occupations compatible with the student's interests and work style.

Year 12 students are required to purchase a copy of the VTAC Guide which is available from news agencies or download the free app. In June, all students are expected to attend a TIS (Tertiary Information Service) seminar. They can speak to representatives from universities and institutes and collect current course information.

All Year 12 students attend two Career Interviews, one in Term 1 and the second in Term 3. Year 11 students attend one career interview during the year. These will be held over Terms 2, 3, and 4. Year 10 students participate in discussion about the options post Year 12 during their Pathways classes.

ACCELERATION POLICY

Introduction:
At Koonung Secondary College we recognise the diverse learning needs of our students. As a result, the College has established a range of programs and pathways to cater for the needs of each of our students. Our SEE@K program 7-9 offers an academic enrichment program which aims to broaden student learning opportunities with a focus on enhancing higher order thinking while supporting students to collaborate with others to further strengthen opportunities for a rigorous, relevant, and engaging education. SEE@K is not an accelerated learning program, rather a differentiated course in all core subjects reflecting self-directed inquiry learning.

In addition, at Year 9, identified students may be offered an accelerated program in Mathematics. In Years 10 and 11, the College provides the opportunity for suitably qualified students to study up to two VCE subjects from the following year level curriculum.

Rationale:

The College wishes to provide the option of accelerated pathways to extend particularly capable students. Acceleration can provide opportunities for students to maximise their ATAR by undertaking a 6th VCE Unit 3/4 or VET subject and/or provide access to University enhancement subjects.

Aims:
· To establish a transparent process for students wishing to undertake accelerated studies
· To ensure that a students' performance in all other subjects is not unduly impacted by enrolment in accelerated studies.

Definition:

Acceleration: the process whereby a student undertakes a course of study beyond their current year.

Implementation:

1.Acceleration in **Year 9 Maths:** (students undertake Year 10 Pre Methods)
Access to the accelerated program in mathematics in Year 9 will be by invitation only.
The Mathematics Domain Leader, in consultation with the mathematics teachers at Year 8 will identify students who they deem mathematically capable of undertaking an accelerated program in mathematics. This decision will be based on a range of factors including PAT maths testing, performance in problem solving and other enrichment tasks including competitions and assessment grades of 85% or higher on all tasks.
A list of students deemed eligible will be referred to a panel for consideration. This panel will comprise the Director of Middle Years, an Assistant Principal, and the Director of Curriculum.
Eligible students will have a consistent record of success in all subjects and demonstrate outstanding organisational skills and work practices at their current year level so that studying an accelerated subject will not be detrimental to their performance in other subjects (C+ average across all subjects).
Acceleration in Year 9 maths does not guarantee a student access to further acceleration in mathematics.

2. Acceleration in **Year 10 and 11**
Students in Year 9 may apply to enrol in a VCE unit 1/2 in Year 10, or an appropriate VET course.
Students in Year 10 may apply to enrol in a VCE unit 3/4 in Year 11, or an appropriate VET course.
A panel comprising Head of Senior Years, an Assistant Principal and the Leading Teacher Curriculum will review applications for acceleration, they may consult with subject teachers and Domain Leaders.
Students who have completed the accelerated Year 9 maths program may apply to undertake an accelerated maths pathway and, where deemed appropriate by the selection panel, an additional accelerated VCE pathway in one other subject.
Students who have completed an accelerated Unit 1/2 in Year 10 will be required to reapply for access to the subsequent accelerated Unit 3/4 in Year 11.

Selection Criteria
To be considered for an accelerated study the student will have a consistent record of success. They will require a B average in the subject in which they wish to accelerate and a C+ average in all other subjects, demonstrate outstanding organisational skills and work practices at their current year level so that studying an accelerated subject would not be detrimental to their performance in other subjects.
Students in Year 9 undertaking the accelerated Maths program will be required to maintain a C+ average in Maths, a B average in the subject that they wish to accelerate in and a C+ average in all other subjects.
Students who have not met these requirements may, by recommendation of the panel, be placed on a probationary acceleration list, pending their Semester 2 results.

Review
Year 10 students studying a Unit 1 subject must maintain a C+ average in the accelerated subject to continue with Unit 2 in this subject.
To be eligible to continue an accelerated Unit 1/2 subject into Unit 3/4, the student will perform consistently well (C+ average) and maintain strong grades (C+ average) in all other subjects.
Acceleration in 2 VCE subjects
We promote high level excellence and extension; a student who is highly motivated and working at an exceptional level may apply to accelerate in 2 VCE subjects.
To be considered for 2 accelerated studies, the student will have a consistently high record of success. They will require an A average in the subjects in which they wish to accelerate and an A average in all other subjects, demonstrate outstanding organisational skills and work practices at their current year level so that studying 2 accelerated subjects would not be detrimental to their performance in other subjects.

Procedures for selection
Access to an accelerated study will only be considered if the application is approved by the appropriate panel
The panel will notify all applicants of the outcome of the selection process.
The decision of the panel is final.
Enrolment in an accelerated study will depend on availability. Students will only be offered the opportunity to undertake a subject at the next year level if there are spaces in the class after all students at that year level have made their choices.
Every effort will be made to offer suitably qualified applicants with an appropriate accelerated pathway, this may require the applicant to consider alternate subjects.

Evaluation:

This policy was reviewed May 2023

ACCOUNTING – Units 1 & 2

Accounting is the process of recording and reporting financial data, then interpreting and evaluating information, which is then communicated to internal and external groups associated with the business. This information plays an integral role in the successful operation and management of a small business.

AREAS OF STUDY

Unit 1

Role of Accounting in Business

This unit explores the establishment of a business and the role of accounting in the determination of business success or failure. In this, it considers the importance of accounting information to stakeholders. Students analyse, interpret and evaluate the performance of the business using financial and non-financial information. They use these evaluations to make recommendations regarding the suitability of a business as an investment.

Unit 2

Accounting and decision-making for a Trading Business

In this unit students develop their knowledge of the accounting process for sole proprietors operating a trading business, with a focus on inventory, accounts receivable, accounts payable and non-current assets. Students use manual processes and ICT, including spreadsheets, to prepare historical and budgeted accounting reports.

OUTCOMES

Unit 1

Outcome 1

On completion of this unit student should be able to describe the resources required to establish and operate a business and select and use accounting reports and other information to discuss the success or otherwise of the business.

Outcome 2

On completion of this unit the student should be able to identify and record financial data, report, and explain accounting information for a service business and suggest and apply appropriate financial and non-financial indicators to measure business performance.

Unit 2

Outcome 1

On completion of this unit the student should be able to record and report for inventory and discuss the effect of relevant financial and non-financial factors and ethical considerations, on the outcome of business decisions.

Outcome 2

On completion of this unit, the student should be able to record and report for accounts receivable and accounts payable and analyse and discuss the effect of relevant decisions on the performance of the business including the influence of ethical considerations.

Outcome 3

On completion of this unit, the student should be able to record and report for non-current assets and depreciation

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, practice exam papers
- All students require a scientific calculator.

ACCOUNTING – Units 3 & 4

Accounting is the process of recording, reporting, analysing and interpreting financial data and information which is then communicated to internal and external users of the information. It plays an integral role in the successful operation and management of a small business. Units 3 and 4 are designed to be taken as a sequence.

AREAS OF STUDY

Unit 3: Financial accounting for a trading business

This unit focuses on financial accounting for a trading business owned by a sole proprietor and highlights the role of accounting as an information system. Students use the double entry system of recording financial data.

Unit 4 – Recording, reporting, budgeting, and decision-making

In this unit students further develop their understanding of accounting for a trading business owned by a sole proprietor and 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 and the perpetual method of inventory recording. Both manual methods and ICT are used to record and report.

OUTCOMES

Unit 3:

Outcome 1:

To record financial data using a double entry system; explain the role of the General Journal, General Ledger and inventory cards in the recording process; and describe, discuss and analyse various aspects of the accounting system, including ethical considerations.

Outcome 2:

To record transactions and prepare, interpret and analyse accounting reports for a trading business.

Unit 4:

Outcome 1:

On completion of this unit the student should be able to record financial data and balance day adjustments using a double entry system, report accounting information using an accrual-based system and evaluate the effect of balance day adjustments and alternative methods of depreciation on accounting reports.

Outcome 2:

On completion of this unit the student should be able to prepare budgeted accounting reports and variance reports for a trading business using financial and other relevant information, and model, analyse and discuss the effect of alternative strategies on the performance of a business.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, practice exam papers
- All students require a scientific calculator.

APPLIED COMPUTING – Units 1 & 2

VCE Applied Computing provides students with opportunities to acquire and apply knowledge and skills to use digital systems efficiently, effectively, and innovatively when creating digital solutions. This study equips students with the knowledge and skills required to adapt to a dynamic technological landscape, including the ability to identify emerging technologies, envisage new uses for digital technologies and consider the benefits that these technologies can bring to society at a local and at a global level.

AREAS OF STUDY

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 information.

OUTCOMES

Unit 1

Outcome 1

Students should be able to interpret teacher-provided solution requirements and designs, collect and manipulate data, analyse patterns and relationships, and develop data visualisations to present findings.

Outcome 2

Students should be able to interpret teacher-provided solution requirements to design, develop and evaluate a software solution using a programming language.

Unit 2

Outcome 1

Students should be able to, in collaboration with other students, analyse, design, develop and evaluate an innovative solution to an identified need or opportunity involving a digital system.

Outcome 2

Students should be able to respond to a teacher-provided case study to examine the capabilities and vulnerabilities of a network, design a network solution, discuss the threats to data and information, and propose strategies to protect the security of data and info

APPLIED COMPUTING Software Development – Units 3 & 4

Software Development provides students with the opportunity to solve problems through the creation of apps using a programming language. Students work on a real-world project and build an app that solves a problem. Students develop skills in computational thinking and using a programming language to create algorithms that perform specific tasks. These skills prepare students for further study in software engineering and allow them to create digital solutions such as business apps, websites, and games.

AREAS OF STUDY

Unit 3 Programming practice, analysis and design
This area of study focuses on building fundamental skills in programming to develop working apps that meet specific needs. Students interpret solution requirements and designs and apply a range of functions and programming techniques as they use a programming language to develop working software modules. Students also engage with authentic clients to identify and analyse a need or opportunity for a real-world project, and generate the designs needed to develop an app for that project.

Unit 4 Development, evaluation and cybersecurity
This area of study provides students with an opportunity to complete their real-world project by utilising the fundamentals of programming to develop, test and evaluate their app. Students also examine cybersecurity threats and study physical and software controls used to secure data and protect its integrity, along with hacking techniques used to exploit security vulnerabilities.

OUTCOMES

Unit 3

Outcome 1
Interpret teacher-provided solution requirements and designs and use appropriate features of an object-oriented programming language to develop working software modules.

Outcome 2
Document a problem, need or opportunity, formulate a project plan, document an analysis, and generate design ideas and a preferred design for creating a software solution.

Unit 4

Outcome 1

Develop and evaluate a software solution that meets requirements and assess the effectiveness of the project plan.

Outcome 2

Students should be able to respond to a teacher-provided case study to analyse an organisation's software development practices, identify and evaluate current security controls and threats to software development practices, and make recommendations to improve practices.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials and practice exams

ART CREATIVE PRACTICE – Units 1 & 2

VCE Art Creative Practice introduces students to 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.

In the practice of Making and Responding, students develop their skills in critical and creative thinking, innovation, problem-solving and risk-taking. By combining a focused study of artworks, art practice and practical art making, students recognise the interplay between research, art practice and the analysis and interpretation of art works. Students are provided with an informed context to support an awareness of art as a tool for cultural, social and personal communication, and the stimulus and inspiration to develop their art practice.

AREAS OF STUDY

Unit 1 - Artists, artworks and audiences

In this area of study students are introduced to the Structural and the Personal Lenses by researching and analysing three artists, their practices and their artworks. They analyse one artwork by each artist and interpret meanings and messages using the Structural and Personal Lenses. Students study the practices of at least three artists to examine historical and contemporary artworks and practices.

Unit 2

Interpreting artworks and developing the Creative Practice

In Unit 2 students use Inquiry learning to investigate the artistic and collaborative practices of artists. They use the Cultural Lens, and the other Interpretive Lenses as appropriate, to examine artworks from different periods of time and cultures, and to explore the different ways that artists interpret and communicate social and personal ideas in artworks.

OUTCOMES

Unit 1

Outcome 1

Discuss the practices of three artists and apply the Structural Lens and the Personal Lens to analyse and interpret one artwork by each artist.

Outcome 2

Implement the Creative Practice to develop and make visual responses informed by their exploration of personal interests and ideas.

Outcome 3

Document and evaluate the components of the Creative Practice used to make personal visual responses.

Unit 2

Outcome 1

Use the Cultural Lens, and the other Interpretive Lenses as appropriate, to analyse and compare the practices of artists and artworks from different cultures and times.

Outcome 2

Utilise the Creative Practice to explore social and cultural ideas or issues to make and present at least one finished artwork using collaborative approaches.

Outcome 3

Critically reflect on, evaluate and document their use of the Creative Practice to develop and make collaborative visual responses.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, practice exam papers
- Approximately $135
- Excursions and gallery lectures will incur additional costs.

ART CREATIVE PRACTICE – Units 3 & 4

In this unit students use Inquiry and Project-based learning as starting points to develop a Body of Work. They explore ideas and experiment with materials, techniques and processes using the Creative Practice. The research of historical and contemporary artists is integral to students' use of the Creative Practice and informs the basis of their investigation. Students also investigate the issues that may arise from the artworks they view and discuss, or those evolving from the practice of the artist. Unit 3 commences with students researching the practice of a selected artist as the starting point to develop a finished artwork. The finished artwork will contribute to the Body of Work developed over Units 3 and 4.

AREAS OF STUDY

Unit 3

In Unit 3, the Interpretive Lenses are used in Making and Responding throughout the students' art practice. Students apply Interpretive Lenses to researched artworks and in their reflective analysis and evaluation of their use of the Creative Practice. They use critical and creative thinking skills to explore and develop ideas, and experiment with materials, techniques and processes.

Unit 4

In Unit 4, Areas of Study 1 and 2 are taught concurrently. The critique in Area of Study 1 takes place before the resolution and presentation of the Body of Work. Documentation of the Creative Practice is carried throughout Areas of Study 1 and 2 in the refinement, resolution, and presentation of the student's Body of Work.

Students use the Interpretive Lenses to analyse and interpret the meanings and messages of artworks created by the artists they study and to investigate the practices used to create them. Applied together, these Interpretive Lenses enable students to appreciate how an artwork may interpretations. Students view a range of artworks in different contexts and interpret the ideas and meanings communicated in the artworks.

OUTCOMES

Unit 3

Outcome 1

Develop personal ideas using research that examines one artwork and the practice of an artist and produce at least one finished artwork using the Creative Practice.

Outcome 2

Apply and explore ideas and an area of personal interest using the Creative Practice.

Unit 4

Outcome 1

Document their use of Creative Practice and present a critique to inform the refinement and resolution of a Body of Work.

Outcome 2

Utilise the Creative Practice to resolve and present a Body of Work

Outcome 3

Compare the practices of historical and contemporary artists and use the Interpretive Lenses to analyse and interpret the meanings and messages of selected artworks.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, practice exam papers
- Approximately $170
- Excursions and gallery lectures will incur additional costs.

BIOLOGY – UNITS 1 & 2

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

Students engage in a range of scientific investigation methodologies to develop key science skills. Knowledge and application of the safety and ethical guidelines associated with biological investigations is integral to the study of VCE Biology.

AREAS OF STUDY

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.

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.

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.

OUTCOMES

Unit 1
Outcome 1

Explain and compare cellular structure and function and analyse the cell cycle and cell growth, death and differentiation.

Outcome 2

Explain and compare how cells are specialised and organised in plants and animals and analyse how specific systems in plants and animals are regulated.

Outcome 3

Adapt or design and then conduct a scientific investigation related to function and/or regulation of cells or systems, and draw a conclusion based on evidence from generated primary data.

Unit 2
Outcome 1

Explain and compare chromosomes, genomes, genotypes, and phenotypes, and analyse and predict patterns of inheritance.

Outcome 2

Analyse advantages and disadvantages of reproductive strategies and evaluate how adaptations and interdependencies enhance survival of species within an ecosystem.

Outcome 3

Identify, analyse and evaluate a bioethical issue in genetics, reproductive science or adaptations beneficial for survival.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Dissection specimens and practice exams
- Lab coat - Available from Dobsons Uniform Shop.

BIOLOGY – UNITS 3 & 4

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

AREAS OF STUDY

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.

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.

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 examine the evidence for relatedness between species and change in life forms over time using evidence from palaeontology, structural morphology, molecular homology, and comparative genomics. Students examine the evidence for structural trends in the human fossil record, recognising that interpretations can be contested, refined, or replaced when challenged by new evidence.

OUTCOMES

Unit 3

Outcome 1

Analyse the relationship between nucleic acids and proteins and evaluate how tools and techniques can be used and applied in the manipulation of DNA.

Outcome 2

Analyse the structure and regulation of biochemical pathways in photosynthesis and cellular respiration and evaluate how biotechnology can be used to solve problems related to the regulation of biochemical pathways.

Unit 4

Outcome 1

Analyse the immune response to specific antigens, compare the different ways that immunity may be acquired and evaluate challenges and strategies in the treatment of disease.

Outcome 2

Analyse the evidence for genetic changes in populations and changes in species over time, analyse the evidence for relatedness between species, and evaluate the evidence for human change over time.

Outcome 3

Design and conduct a scientific investigation related to cellular processes and/or how life changes and responds to challenges, and present an aim, methodology and methods, results, discussion, and a conclusion in a scientific poster.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, excursions, and exam papers.
- Approximately $30.
- It is recommended that students cover the content of Units 1 & 2 Biology as to aid in the student's level of understanding of biological techniques and procedures.

BUSINESS MANAGEMENT – UNITS 1 & 2

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. Therefore, how businesses are formed and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. Students focus on the establishment phase of a business's life. This involves complying with legal requirements as well as making decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. Students examine the legal, marketing, and financial and staffing requirements that must be satisfied to establish a business.

AREAS OF STUDY

Unit 1

The Business Idea

Students investigate how business ideas are created and how conditions can be fostered for new business ideas to emerge.

External Environment

The external environment consists of all elements outside a business that may act as pressures or forces on the operations of a business.

Internal Environment

The internal environment affects the approach to and success of business planning such as business models, legal business structures and staffing.

Unit 2

Legal requirements and financial considerations.

Student are introduced to the legal requirements and financial considerations that are vital to establishing a business.

Marketing a Business

Students develop their understanding that marketing encompasses a wide range of management practices.

Staffing a Business

Students examine the staffing requirements that will meet the needs and objectives of the business and contribute to productivity and effectiveness.

OUTCOMES

Unit 1

Outcome 1

Describe how and why business ideas are created and developed and explain the methods by which a culture of business innovation and entrepreneurship may be fostered in a nation.

Outcome 2

Describe the external environment of a business and explain how the macro and operating factors within it may affect business planning.

Outcome 3

Describe the internal business environment and analyse how factors from within it may affect business planning.

Unit 2

Outcome 1

Explain the importance when establishing a business of complying with legal requirements and financial record keeping and establishing effective policies and procedures.

Outcome 2

Explain the importance of establishing a customer base and a marketing presence to achieve the objectives of the business, analyse effective marketing and public relations strategies and apply these strategies to business-related case studies.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, exam papers.

BUSINESS MANAGEMENT – UNITS 3 & 4

Business Management examines the ways in which people manage their resources to achieve organisational objectives. Students develop an understanding of the challenges, complexity and rewards that come from managing businesses. Students develop skills that allow them to become socially responsible and informed consumers, citizens and investors.

AREAS OF STUDY

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 the different types of businesses and their respective objectives and stakeholders. They investigate strategies to manage both staff and business operations to meet objectives and develop an understanding of the complexity and challenge of managing businesses. Students compare theoretical perspectives with current practice using contemporary Australian and global business case studies from the past four years.

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.

OUTCOMES

Unit 3

Outcome 1

Analyse the key characteristics of businesses, their stakeholders, management styles and management skills and corporate culture.

Outcome 2

Explain theories of motivation and apply them to a range of contexts and analyse and evaluate strategies related to the management of employees.

Outcome 3

Analyse the relationship between business objectives and operations management and propose and evaluate strategies to improve the efficiency and effectiveness of business operations.

Unit 4

Outcome 1

Explain the way business change may come about, analyse why managers may take a proactive or reactive approach to change, use key performance indicators to analyse the performance of a business, explain the driving and restraining forces for change and evaluate management strategies to position a business for the future.

Outcome 2

Discuss the importance of effective management strategies and leadership in relation to change, evaluate the effectiveness of a variety of strategies used by managers to implement change, and discuss the effect of change on the stakeholders of a business.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- There may be an excursion at an additional cost.
- Additional course materials, exam papers and guest speakers.

CHEMISTRY – UNITS 1 & 2

In VCE Chemistry, inquiry methodologies can include laboratory experimentation, modelling, site tours, fieldwork, local and remote data-logging, simulations, animations, literature reviews and the use of global databases. Students analyse the limitations of data, evaluate methodologies and results, justify conclusions, make recommendations, and communicate their findings. They investigate and evaluate issues, changes and alternative proposals by considering both short- and longer-term consequences for the individual, environment and society. As well as an increased understanding of scientific processes, students develop capacities that enable them to critically assess the strengths and limitations of science, respect evidence-bases conclusions and gain an awareness of the ethical, social and political contexts of scientific endeavours.

AREAS OF STUDY

Unit 1

Students investigate covalent compounds, metals, ionic compounds and polymers. They are introduced to ways that chemical quantities are measured and consider manufacturing innovations which lead to more sustainable products being produced.

Students conduct practical investigations involving the reactivity series of metals, separation of mixtures by chromatography, use of precipitation reactions to identify ionic compounds, determination of empirical formulas, and synthesis of polymers.

A student-directed research investigation undertaken in Area of Study 3 explores how sustainability factors such as green chemistry principles and the transition to a circular economy are considered in the production of materials to ensure minimum toxicity and impacts on human health and the environment.

Unit 2

In this unit students analyse and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid-base and redox reactions in society.

Students conduct practical investigations involving the specific heat capacity of water, acid-base and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve.

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 production of gases, acid-base or redox reactions, or the analysis of substances in water.

OUTCOMES

Unit 1

Outcome 1

How elements form carbon compounds, metallic lattices, and ionic compounds.

Outcome 2

Calculate mole quantities, use systematic nomenclature to name organic compounds, explain how polymers can be designed for a purpose, and evaluate the consequences for human health.

Outcome 3

Investigate and explain how chemical knowledge is used to create a more sustainable future in relation to the use of a selected material.

Unit 2

Outcome 1

Explain the properties of water in terms of structure and bonding, and experimentally investigate and analyse applications of acid-base and redox reactions in society.

Outcome 2

Calculate solution concentrations and predict solubilities, use volumetric analysis and instrumental techniques to analyse for acids, bases, and salts.

Outcome 3

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

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Lab coat – available from Dobsons Uniform Shop
- Additional chemicals and practice papers.

CHEMISTRY – UNITS 3 & 4

VCE Chemistry enables students to explore key processes related to matter and its behaviour. Students in Units 3 and 4 consider the relationship between useful materials for society and energy through two themes: the efficient production and use of energy and materials and the investigation of carbon-based compounds as important components of body tissues and materials used in society. Students examine classical and contemporary research, models, and theories to understand how knowledge in chemistry has evolved and continues to evolve in response to new evidence and discoveries. Students explore the impact of chemistry on their own lives, and on society and the environment. They develop capacities that enable them to critically assess the strengths and limitations of science, respect evidence-based conclusions and gain an awareness of the ethical contexts of scientific endeavours. Students consider how science is connected to innovation in addressing contemporary chemistry-based challenges.

AREAS OF STUDY

Unit 3

Students compare current and future energy production by examining fossil fuels, biofuels, galvanic cells, and fuel cells, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts, and potential applications.

The also examine how the rate and yield of chemical reactions are optimised by exploring the factors that increase the efficiency and percentage yield of a chemical manufacturing process while reducing the energy demand and associated costs.

Unit 4

Students analyse the general structures and reactions of the major organic families of compounds, design reaction pathways for organic synthesis, and evaluate the sustainability of the manufacture of organic compounds used in society. Students use qualitative and quantitative tests to analyse organic compounds and their structural characteristics, deduce structures of organic compounds using instrumental analysis data, explain how some medicines function, and experimentally analyse how some natural medicines can be extracted and purified.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Lab coat – available from Dobsons Uniform Shop
- Additional chemicals and practice papers
- Approximately $20.

OUTCOMES

Unit 3

Outcome 1

Compare fuels quantitatively with reference to combustion products and energy outputs; apply knowledge of the electrochemical series to design, construct, and test galvanic cells; and evaluate energy resources based on energy efficiency, renewability, and environmental impact.

Outcome 2

Apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimized; and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

Unit 4

Outcome 1

Analyse the general structures and reactions of the major organic families of compounds, design reaction pathways for organic synthesis, and evaluate the sustainability of the manufacture of organic compounds used in society.

Outcome 2

Apply qualitative and quantitative tests to analyse organic compounds and their structural characteristics, deduce structures of organic compounds using instrumental analysis data, explain how some medicines function.

Outcome 3

Design and conduct a scientific investigation related to the production of energy and/or chemicals and/or the analysis or synthesis of organic compounds, and present an aim, methodology and method, results, discussion, and conclusion in a scientific poster.

DRAMA – UNITS 1 & 2

The study of Drama focuses on the development of expressive skills within dramatic structures and development and performance of imagined characters. This is achieved through the refinement of skills, techniques and processes in the creation and presentation of dramatic works and through an understanding and use of a range of content, application of stagecraft elements and the analysis of the development and performance of dramatic works. This study also provides students with the opportunity to examine and explore the ways in which drama gives form to, and makes meaning of, a range of social, political, cultural and historical contexts.

AREAS OF STUDY

Unit 1 - Introducing performance styles

- Creating a devised performance
- Presenting a devised performance
- Analysing a devised performance
- Analysing a professional performance

Unit 2: Australian Identity

- Using Australia as inspiration
- Presenting a devised performance
- Analysing a devised performance
- Analysing an Australian drama performance

Theory work is fundamental to the subject and accurate records of the drama process need to be documented and evaluated.

OUTCOMES

Unit 1

Outcome 1

Demonstrate the use of play-making techniques to devise and develop an ensemble drama work based on stories and/or characters.

Outcome 2

Perform devised drama work that features stories and characters.

Outcome 3

Analyse the drama work created in Outcomes 1 and 2.

Outcome 4

Analyse the portrayal of stories and characters in a drama performance by professional or other drama practitioners.

Unit 2

Outcome 1

Demonstrate the use of play-making techniques to devise and develop a solo drama works based on stories and/or characters.

Outcome 2

Performance a devised solo work to an audience that features stories and characters.

Outcome 3

Analyse the drama work created in Outcomes 1 and 2.

Outcome 4

Analyse and evaluate a performance of a drama work by Australian practitioners.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional general resources $10.
- Professional theatre attendances are compulsory during the year. Heavily discounted tickets are usually made available. At least two theatre visits are essential. Tickets, travel expenses and program costs will also be incurred.

DRAMA – UNITS 3 & 4

The study of Drama focuses on the development of expressive skills within dramatic structures and development and performance of imagined characters. This is achieved through the refinement of skills, techniques and processes in the creation and presentation of dramatic works and through an understanding and use of a range of content, application of stagecraft elements and the analysis of the development and performance of dramatic works.

This study also provides students with the opportunity to examine and explore the ways in which drama gives form to, and makes meaning of, a range of social, political, cultural and historic contexts.

AREAS OF STUDY

Unit 3 – Devised ensemble performance

Devising and presenting ensemble performance.
Analysing a devised ensemble performance.

Analysing and evaluating a professional drama performance.

Unit 4 – Devised Solo Performance

Creating a Solo Performance.

Demonstrating techniques of Solo Performance.

Devising a Solo Performance.

OUTCOMES

Unit 3

Outcome 1

Develop and present characters within a devised ensemble performance that goes beyond a representation of real life as it is lived.

Outcome 2

Analyse the use of processes, techniques, and skills to create and present a devised ensemble performance.

Outcome 3

Analyse and evaluate a professional drama performance.

Unit 4

Outcome 1

Demonstrate, in response to given stimulus material, application of symbol and transformation of character, time and place, and describe the techniques used.

Outcome 2

Create, develop and perform a non-naturalistic drama solo in response to a prescribed structure.

Outcome 3

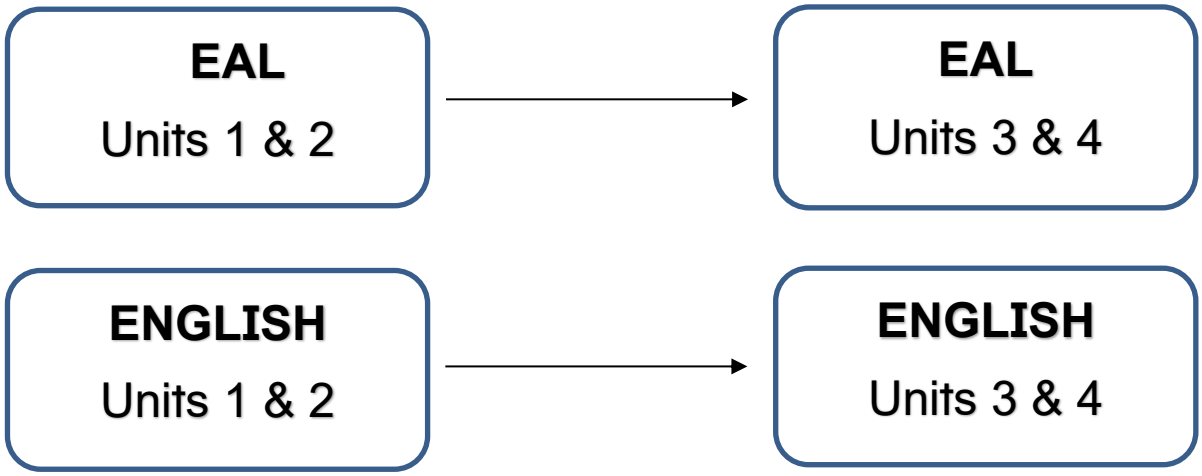
Analyse and evaluate the creation, development and presentation of a solo performance devised in response to a prescribed structure.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

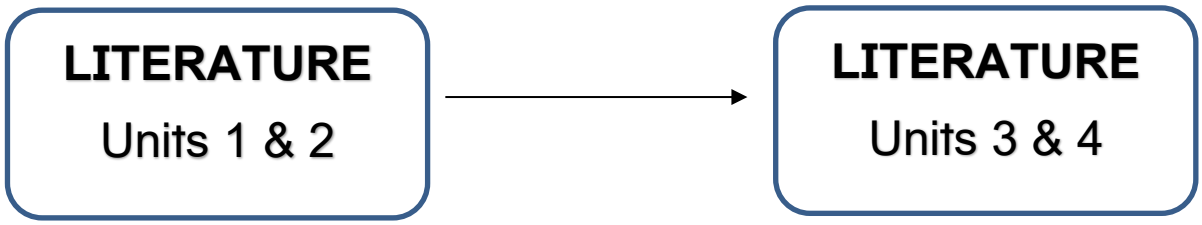
- Compulsory professional theatre attendances are expected during the year. Heavily discounted tickets are usually made available. At least two theatre visits are essential. Tickets, travel expenses and program costs will also be incurred.
- Additional general resources $10.

ENGLISH AT KOONUNG SC

Students must study English or EAL from Units 1 to 4. English or EAL is compulsory.



Strong English students are encouraged to study Literature as a second English subject.



Only students who have successfully enrolled in the Vocational Major course may access VM Literacy.



ENGLISH – UNITS 1 & 2

In VCE English, students focus on how the English language is used to create meaning in print and digital texts of varying complexity. The subject is intended to meet the needs of students with a wide range of expectations and aspirations, empowering them to read, write, speak, and listen in different contexts. In Unit 1, the focus is on making personal connections to texts and crafting their own pieces of writing. In Unit 2, students develop their analytical skills by deepening their capacity for inferential reading and considering the ways arguments are developed and delivered in many forms of media.

AREAS OF STUDY

Unit 1

Reading and exploring texts

In this area of study, students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors and develop and strengthen inferential reading and viewing skills, considering vocabulary, text structures and language features used to create meaning in different ways.

Crafting texts

In this area of study, students engage with and develop an understanding of effective and cohesive writing. Students then apply, extend and challenge their understanding and use of text types and genres through awareness of context, purpose and audience.

Unit 2

Reading and exploring texts

Students develop their reading and viewing skills and further both their understanding of the meanings of texts and their writing in response to text. This study will build on their understandings established in Unit 1.

Exploring argument

In this area of study, students build on their understanding of argument and the use of persuasive language in texts that attempt to influence an audience. They develop an understanding of how texts are constructed for specific persuasive effects by identifying and discussing the impact of argument and persuasive language used to influence an audience. Students apply their knowledge of argument to create a point of view text for oral presentation.

OUTCOMES

Unit 1

Outcome 1

Students make personal connections to a set text and explore the vocabulary, text structures and language features and ideas using reading and viewing strategies to draw out meaning.

Outcome 2

Students craft their own texts and explain their individual decisions about vocabulary and language features used during the writing process.

Unit 2

Outcome 1

Students explore and analyse how the vocabulary, text structures, language features and ideas in a text convey meaning.

Outcome 2

Students explore and analyse persuasive texts in a contemporary issue, including the ways argument and language can be used to position an audience.

Students construct a point of view text for oral presentation.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, exam papers and theatre performances

ENGLISH – UNITS 3 & 4

In Unit 3, students read and respond to texts analytically. They also create their own texts, using the Framework of Ideas and mentor texts to generate ideas for their own writing while reflecting on the processes in the form of a written commentary. Students prepare sustained analytical interpretations of selected texts, discussing how features of the texts create meaning and they use textual evidence to support their responses. They use planning and drafting to test and clarify their ideas and editing to produce clear and coherent expression.

In Unit 4, students further develop their analytical skills through reading and responding to text. They analyse arguments and the use of persuasive language in texts. Students use discussion and writing to clarify their thinking and develop a viewpoint on an issue, assessed as an oral presentation.

AREAS OF STUDY

Unit 3

Reading and responding to texts

Students apply reading and viewing strategies to analyse the ideas, concerns and values presented in a text, considering its dynamics and complexities and reflecting on the motivations of its characters. They refine their application of metalanguage and integrate evidence from a text to support key points.

Creating texts

Students read and engage with three mentor texts to produce their own crafted pieces of writing and reflect on the deliberate choices they have made in the form of a written commentary. They use and experiment with vocabulary, text structures, language features and conventions of language to deepen their understanding of how writing is shaped for different audiences and purposes.

Unit 4

Reading and responding to texts

Students further sharpen their skills of reading and viewing texts, consolidating their capacity for critical analysis. They explore the explicit and implicit ideas and values in a text and how they can be understood by different audiences and position readers in different ways.

Analysing argument

Students analyse the use of argument and language in texts that debate a significant national or international issue. They consider the purpose, context and audience of each text and the ways that written, spoken and visual language are employed for effect.

OUTCOMES

Unit 3

Outcome 1

Students analyse the ideas, concerns and values presented in a text, informed by the vocabulary, text structures and language features and how they make meaning.

Outcome 2

Students produce two (2) written texts constructed in consideration of audience, purpose and context and provide a written commentary reflecting on writing processes.

Unit 4

Outcome 1

Students analyse the explicit and implicit ideas, concerns and values presented in a text, informed by the vocabulary, text structures and language features and how they make meaning.

Outcome 2

Students analyse the use of argument and language in written and audio/visual persuasive texts and develop and present their own point of view text.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, exam papers and theatre performances
- Approximately $25.

ENGLISH AS AN ADDITIONAL LANGUAGE – UNITS 1 & 2

The focus of Units 1 and 2 is on how English language is used to create meaning in written, spoken, and multimodal texts of varying complexity. Literary texts selected for study are drawn from the past and present, from Australia and from other cultures. Other texts are selected for analysis and presentation of argument. The study is intended to meet the needs of students with a wide range of expectations and aspirations, including those for whom English is an additional language.

Eligibility – students must satisfy both of the following conditions:
- Student has been a resident in Australia for a period not more than six calendar years immediately prior to 1 January of the year in which study is taken.
- English has been the student's major language of instruction for a total of not more than six years prior to the commencement of the year in which the study is taken.

AREAS OF STUDY

Unit 1

Reading and exploring texts

Students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify the ideas and values presented by authors and develop and strengthen inferential reading and viewing skills.

Crafting texts

Students engage with and develop an understanding of effective and cohesive writing. Students then apply, extend and challenge their understanding and use of text types and genres through awareness of context, purpose and audience.

Unit 2

Reading and exploring texts

Students develop their reading and viewing skills and further both their understanding of the meanings of texts and their writing in response to text.

Exploring argument

Students build on their understanding of argument and the use of persuasive language in texts that attempt to influence an audience. Students apply their knowledge of argument to create a point of view text for oral presentation.

OUTCOMES

Outcome 1

Students make personal connections to a set text and explore the vocabulary, text structures and language features and ideas using reading and viewing strategies to draw out meaning.

Outcome 2

Students craft their own texts and explain their individual decisions about vocabulary and language features used during the writing process.

Unit 2

Outcome 1

Students identify and develop analysis of how the vocabulary, text structures, language features and ideas in a text convey meaning.

Outcome 2

Students explore and develop analysis of persuasive texts in a contemporary issue, including the ways argument and language can be used to position an audience.

Students construct a point of view text for oral presentation.

ENGLISH AS AN ADDITIONAL LANGUAGE – UNITS 3 & 4

In Unit 3, students read and respond to texts analytically. They also create their own texts, using the Framework of Ideas and mentor texts to generate ideas for their own writing while reflecting on the processes in the form of a written commentary. Students prepare sustained analytical interpretations of selected texts, discussing how features of the texts create meaning and they use textual evidence to support their responses. They use planning and drafting to test and clarify their ideas and editing to produce clear and coherent expression.

In Unit 4, students further develop their analytical skills through reading and responding to text. They analyse arguments and the use of persuasive language in texts. Students use discussion and writing to clarify their thinking and develop a viewpoint on an issue, assessed as an oral presentation.

AREAS OF STUDY

Unit 3

Reading and responding to text

Students listen to and discuss ideas, concerns and values presented in a text, informed by selected vocabulary, text structures and language features and how they make meaning.

Creating texts

Students produce their own texts, designed to respond to a specific context and audience to achieve a stated purpose and comment on the decisions made through writing processes.

Unit 4

Reading and responding to text

Students listen to and discuss ideas, concerns and values presented in a text, informed by selected vocabulary, text structures and language features and how they make meaning.

Analysing Argument

Students build their understanding of both the analysis and construction of texts that attempt to influence audiences. They use their knowledge of argument and persuasive language as a basis for the development of their own persuasive texts in relation to a topical issue that has appeared in the media since 1 September of the previous year.

OUTCOMES

Unit 3

Outcome 1

Students produce an analytical response to text in written form and demonstrate comprehension of an audio/visual text through short answer responses and note form summaries.

Outcome 2

Students create two (2) written texts constructed in consideration of audience, purpose and context and produce a set of annotations reflecting on writing processes.

Unit 4

Outcome 1

Students produce an analytical response to text in written form.

Outcome 2

Students produce an analytical response to argument in written form and a point of view oral presentation.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, exam papers and theatre performances
- Approximately $25.

ENVIRONMENTAL SCIENCE – UNITS 1 & 2

Environmental Science enables students to explore the challenges that past and current human interactions with the environment present for the future by considering how Earth's systems function and are interrelated. Students examine how environmental actions affect and are affected by ethical, social, and political frameworks. Students develop a range of inquiry skills involving practical experimentation and research, analytical skills including critical and creative thinking and communication skills to analyse contemporary issues related to environmental science and communicate their views from an informal position.

AREAS OF STUDY

Unit 1

How are Earth's dynamic systems interconnected to support life?

Students examine the processes and interactions occurring within and between Earth's four interrelated systems – the atmosphere, biosphere, hydrosphere, and lithosphere. They focus on how ecosystem functioning and change over time can influence many local, regional, and global environmental conditions such as plant productivity, soil fertility, water quality and air quality. Students consider a variety of influencing factors in achieving a solutions-focused approach to responsible management of challenges related to natural and human-induced environmental change.

Unit 2

What affects Earth's capacity to sustain life?

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

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, and exam papers
- Field work is a major component of this subject and will include day trips and may include an overnight camp that will incur additional costs.

OUTCOMES

Unit 1

Outcome 1

Describe the movement of energy and nutrients across Earth's four interrelated systems. Analyse how dynamic interactions among biotic and abiotic components of selected ecosystems contribute to their capacity to support life.

Outcome 2

Analyse how time and spatial scale changes influence Earth's characteristics and interrelated systems, and assess the impact of diverse stakeholder values, knowledge, and priorities in the solutions-focused management of a selected regional environmental challenge.

Outcome 3

Draw an evidence-based conclusion from primary data generated from a student-designed investigation related to ecosystem components, ecosystem monitoring and/or change affecting Earth's systems.

Unit 2

Outcome 1

Explain how the chemical and physical characteristics of pollutants impact on Earth's four systems and justify recommendations for managing the local and global impacts of pollution.

Outcome 2

Compare different agricultural systems for achieving regional and global food security, evaluate the use of ecological footprint analysis for assessing future food and/or water security, and justify a range of options for improving food and/or water security for a nominated region.

Outcome 3

Investigate and explain how science can be applied to address the impacts of natural and human activities in the context of the management of a selected pollutant and/or the maintenance of food and/or water security.

ENVIRONMENTAL SCIENCE – UNITS 3 & 4

Students examine strategies to maintain and protect the ecological health of the environment while meeting the needs and desires of human populations. Environmental Science investigates the interactions between natural and human systems. This study examines application of environmental science to ecologically sustainable development and environmental management through the analysis of the processes that threaten biodiversity and evaluate biodiversity management strategies for a selected threatened endemic animal or plant species. They further analyse various factors that are involved in responsible environmental decision-making and consider how science can be used to inform the management of climate change and the impacts of energy production and use.

AREAS OF STUDY

Unit 3

Why is maintaining biodiversity worth a sustained effort?

In this area of study students use biodiversity as a lens through which to investigate the management of a single Earth system – the biosphere. They examine the categories of biodiversity, the role of biodiversity in sustaining ecosystems, the provision of ecosystem services for human well-being and the strategies employed to counteract threats, both natural and human-induced, to maintain biodiversity in the short-, medium- and long-term.

Unit 4

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

Students compare sources, availability, reliability, and efficiencies of renewable and non-renewable energy resources to evaluate the suitability and consequences of their use in terms of upholding sustainability principles. They analyse various factors that are involved in responsible environmental decision-making and consider how science can be used to inform the management of climate change and the impacts of energy production and use. They develop skills in data interpretation, extrapolation and interpolation and test predictions. They recognise the limitations of contradictory, provisional and incomplete data derived from observations and models. They explore relationships and patterns in data and make judgments about accuracy and validity of evidence.

OUTCOMES

Unit 3

Outcome 1

Explain the importance of Earth's biodiversity and how it has changed over time, analyse the threats to biodiversity, and evaluate management strategies to maintain biodiversity in the context of one selected threatened endemic species.

Outcome 2

Assess the environmental impacts and risks associated with the environmental science case study and examine the elements of environmental management and its relationship to sustainability principles.

Unit 4

Outcome 1

Analyse the major factors that affect Earth's climate, explain how past and future climate variability can be measured and modelled, and evaluate options for managing climate change.

Outcome 2

Compare the advantages and disadvantages of using a range of energy sources and evaluate the suitability and impacts of their use in terms of upholding sustainability principles.

Outcome 3

Design and conduct a scientific investigation related to biodiversity, environmental management, climate change and/or energy use, and present an aim, methodology and method, results, discussion, and a conclusion in a scientific poster.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, and exam papers $20
- Field work is a major component of this subject and will include day trips and may include an overnight camp that will incur additional costs

FOOD STUDIES – UNITS 1 & 2

VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills and building individual pathways to health and wellbeing through the application of practical food skills. Students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems and the many physical and social functions and roles of food. They research economic, environmental and ethical dimensions of food and critically evaluate information, marketing messages and new trends. Practical work is integral to Food Studies and includes cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling and taste-testing, sensory analysis, product analysis and scientific experiments.

AREAS OF STUDY

Unit 1 – Food origins

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world. Students explore how humanity has historically sourced its food, examining the general progression from hunter-gatherers to rural-based agriculture, to today's urban living global trade in food.

Students consider the origins and significance of food through inquiry into specific food-producing regions of the world.

Students investigate Australian indigenous food prior to European settlement and how food patterns have changed over time.

Students investigate cuisines that are part of Australia's culinary identify today and reflect on the concepts of Australian cuisine.

They consider the influence of technology and globalisation on food patterns.

Unit 2 – Food makers

In this unit students investigate food systems in contemporary Australia, exploring both commercial food production industries and food production in small-scale domestic settings. 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 produce food and consider a range of evaluation measures to compare their foods to commercial products. Students design new food products and adapt recipes to suit particular needs and circumstances.

OUTCOMES

Outcome 1

Describe Australia's major food industries, analyse relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.

Outcome 2

Describe patterns of change in Australia's food industries and cultures and use foods indigenous to Australia and those introduced through migration in the preparation of food products.

Unit 2

Outcome 1

Describe Australia's major food industries, analyse relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.

Outcome 2

Compare and evaluate similar foods prepared in different settings, explain the influences on effective food provision and preparation in the home, and design and create a food product that illustrates potential adaption in a commercial context.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials
- Approximately $165

FOOD STUDIES – UNITS 3 & 4

VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills and building individual pathways to health and wellbeing through the application of practical food skills. Students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems and the many physical and social functions and roles of food. They research economic, environmental and ethical dimensions of food and critically evaluate information, marketing messages and new trends. Practical work is integral to Food Studies and includes cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling and taste-testing, sensory analysis, product analysis and scientific experiments.

AREAS OF STUDY

Unit 3 – Food in daily life

This unit investigates the many roles and everyday influences of food. Students explore the science of food – they consider the physiology of eating, the microbiology of digestion and appreciating food. They also investigate the functional properties of food and the changes that occur during food preparation and cooking. Students analyse the scientific rationale behind the Australian Dietary Guidelines and the Australian Guide to Healthy Eating and develop their understanding of diverse nutrient requirements.

Students also investigate how communities, families and individuals change their eating patterns over time. Students inquire into the role of food in shaping and expressing identity and connectedness. They investigate behavioural principles at assist in the establishment of lifelong, healthy dietary patterns.

Unit 4 – Food issues, challenges and futures

In this unit students examine debates about global and Australian food systems. Students focus on issues related to the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage and the use and management of water and land.

Students also investigate individual responses to food information and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. Students' food production repertoire reflects the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

OUTCOMES

Unit 3

Outcome 1

Explain the processes of eating and digesting food and absorption of macronutrients, explain causes and effects of food allergies, food intolerances and food contamination, analyse intolerances and food contamination, analyse food selection models and apply principles of nutrition and food science in the creation of food product.

Outcome 2

Explain and analyse factors affecting food access and choice, analyse the influences that shape an individual's food values, beliefs and behaviours, and apply practical skills to create a range of healthy meals for children and families.

Unit 4

Outcome 1

Explain a range of food systems' issues, respond to a selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.

Outcome 2

Explain a variety of food information contexts, analyse the formation of food beliefs, evaluate a selected food trend, fad or diet and create food products that meet the Australian Dietary Guidelines.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials
- Approximately $165.

GEOGRAPHY – UNITS 1 & 2

VCE Geography Unit 1 and 2 explores two topic areas which are very topical for 2022. The study of Geography enables students to examine natural and human phenomena, how and why they change, their interconnections and the patterns they form across the Earth's surface. These spatial perspectives, when integrated with historical, economic, ecological, and cultural perspectives, deepen understanding of places, environments and human interactions. Students explore these questions through fieldwork, the use of spatial technologies and investigation of a wide range of secondary sources.

AREAS OF STUDY

Unit 1 – Hazards and disasters

Students learn about geological, hydro-meteorological, biological, and technological hazards before choosing two to study in detail. A study at different scales (including fieldwork) investigates the nature of hazards, their impact on people and the environment and how the risk of hazards may be managed and reduced.

Unit 2 – Tourism: Issues and challenges

Selecting contrasting examples of tourism from within Australia and elsewhere in the world, students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments. Students undertake fieldwork in this unit.

OUTCOMES

Unit 1

Outcome 1

Analyse, describe and explain the nature of hazards and impacts of hazard events at a range of scales.

Outcome 2

Analyse and explain the nature, purpose and effectiveness of a range of responses to selected hazards and disasters.

Unit 2

Outcome 1

Analyse, describe and explain the nature of tourism at a range of scales.

Outcome 2

Analyse and explain the impacts of tourism on people, places and environments and evaluate the effectiveness of strategies for managing tourism.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Supplementary course materials, preparation of fieldwork SAC materials and exam papers.
- Fieldwork is an essential and compulsory part of geographical education. The cost of field trips is to be advised.

GEOGRAPHY – UNITS 3 & 4

This study focuses on the big issues facing mankind in the new millennium: how we use our natural resources and the impact of climate change in Unit 3, issues associated with population in Unit 4. We investigate the interactions between natural and human environments and the ways governments and organisations try to manage the often-conflicting demands of society, the environment, and the economy in a sustainable manner. Students explore these questions through fieldwork, the use of spatial technologies and investigation of a wide range of secondary sources.

AREAS OF STUDY

Unit 3 – Changing the land

This unit focusses on two investigations of geographical change: change to land cover and change to land use. The investigation of land use change includes the selection of a local area to use as a fieldwork site. A study of global land cover change involves an investigation of the processes of deforestation, melting glaciers and ice sheets.

Unit 4 – Human Population, trends and issues

In this unit, students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and the responses to those changes in different parts of the world. Investigations include a study of two significant population trends: a growing population of one country and an ageing population of another country.

OUTCOMES

Unit 3

Outcome 1

On completion of this unit the student should be able to analyse processes that result in changes to land cover and evaluate the impacts and responses resulting from these changes.

Outcome 2

On completion of this unit the student should be able to analyse land use change and evaluate its impacts.

Unit 4

Outcome 1

Analyse, describe and explain population dynamics on a global scale.

Outcome 2

Analyse, describe and explain the nature of significant population issues and challenges in selected locations and evaluate responses.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Supplementary course materials, preparation of fieldwork SAC materials and exam papers.
- Fieldwork is a requirement of Unit 3. The cost of these field trips will be advised.

HEALTH AND HUMAN DEVELOPMENT – UNITS 1 & 2

Through the study of VCE Health and Human Development, students investigate health and human development in local, Australian and global communities.

Health is a dynamic condition that is influenced by complex interrelationships between individuals and biomedical and behavioural factors, as well as physical and social environments. These interrelationships are reflected in a social view of health that sees health as being created in the settings where people live and work.

AREAS OF STUDY

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 Organisation's (WHO) definition and explore other interpretations. 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 among Aboriginal and Torres Strait Islanders.

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.

OUTCOMES

Unit 1

Outcome 1

Explain multiple dimensions of health and wellbeing, explain indicators used to measure health status and analyse factors that contribute to variations in health status of youth.

Outcome 2

Interpret data to identify key areas for improving youth health and wellbeing, and plan for action by analysing one particular area in detail.

Outcome 3

Apply nutrition knowledge and tools to the selection of food and the evaluation of nutrition information.

Unit 2

Outcome 1

Explain developmental changes in the transition from youth to adulthood, analyse factors that contribute to healthy development during prenatal and early childhood stags of the lifespan and explain health and wellbeing as an intergenerational concept.

Outcome 2

Describe how to access Australia's health system, explain how it promotes health and wellbeing in their local community, and examine the functions of various entities that play a role in our health system.

HEALTH AND HUMAN DEVELOPMENT – UNITS 3 & 4

Through the study of VCE Health and Human Development, students investigate health and human development in local, Australian and global communities.

The study is based on the premise that health and human development needs to be promoted at an individual level, and within group and community settings at national and international levels, to maximise global development potential.

AREAS OF STUDY

Unit 3 – Understanding health and wellbeing

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement. They use this knowledge as background to their analysis and evaluation of variations in the health status of Australians.

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 globalization and worldwide trends on health and human development.

OUTCOMES

Unit 3

Outcome 1

Explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status.

Outcome 2

Explain changes to public health approaches, analyse improvements in population health over time and evaluate promotion strategies and initiatives.

Unit 4

Outcome 1

Analyse similarities and differences in health status and burden of disease globally and the factors that contribute to differences in health and wellbeing.

Outcome 2

Analyse relationships between the Sustainable Development Goals and their role in the promotion of health and human development and evaluate the effectiveness of global aid programs.

HISTORY – UNITS 1 & 2

History is about human experience in time and place, showing us how people of different cultures have interacted and developed. Studying history gives students the opportunity and skills to think about their own lives and their place in the world.

AREAS OF STUDY

Unit 1 – Change and Conflict

This unit explores the nature of political, social and cultural change in the period between the world wars.

It investigates how the Nazis rose to power and the nature of the Nazi state.

Unit 2 – The Changing World Order

This unit explores the nature and impact of the Cold War and challenges and changes to exiting political, economic, and social arrangements in the second half of the twentieth century.

It investigates the reason why Australia became involved in the Vietnam War and the effects of the Vietnam War on the nations and people who fought there. Students are also asked to examine how the UN dealt with the problems brought about by decolonisation and self-determination movements, terrorism campaigns, regional conflicts, and social movements.

OUTCOMES

Unit 1

Area of Study 1 - Ideology and Conflict

Analyse the consequences of the peace treaties which ended World War 1.

Analyse the impact of Nazi ideologies on nations and events that led to World War Two.

Area of Study 2 - Social and Cultural Change

Analyse the factors which influenced changes to social life and culture.

Unit 2

Area of Study 1 – Causes, Course and Consequences of the Cold War

Analyse the ideological divisions in the post-war period and their nature.

Analyse the nature, development, and impact of the Cold War on nations and people.

Area of Study 2 – Challenge and Change

Analyse the causes and nature of challenge and change.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, guest speakers and exam papers.

HISTORY – UNITS 3 & 4

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution.

Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society.

AREAS OF STUDY

Unit 3 – The Russian Revolution of October 1917

Areas of Study 1 – Causes of revolution.

The Russian Revolution from 1896 to October 1917.

Area of Study 2 – Consequences of revolution.

The Russian Revolution from 26 October 1917 to 1927.

Unit 4 – The Chinese Revolution of 1949

Area of Study 1 – Causes of revolution.

The Chinese revolution from 1912 to 1 October 1949.

Area of Study 2 – Consequences of revolution

The Chinese Revolution from October 1949 to 1976.

OUTCOMES

Unit 3

Outcome 1:

Analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements.

Outcome 2:

Analyse the consequences of revolution and evaluate the extent of continuity and change in the post-revolutionary society.

Unit 4

Outcome 1:

Analyse the causes of revolution and evaluate the contribution of significant ideas, events, individuals and popular movements.

Outcome 2:

Analyse the consequences of revolution and evaluate the extent of continuity and change in the post-revolutionary society.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials, guest speakers and exam papers.

LANGUAGE – FRENCH – UNITS 1 & 2

The purpose of this study is to enable students to communicate with others, to understand and appreciate the cultural contexts in which French is used, to understand their own culture through the study of other cultures, to understand French as a system, to make connections between French and English and/or other languages and to apply French to work, further study, training and leisure.

AREAS OF STUDY

Unit 1

Students develop an understanding of the language and culture/s of French-speaking communities through the study of three or more topics from the prescribed themes of The Individual, The French-speaking Communities and The World Around Us. They also focus on analysing cultural products or practices that can be drawn from a diverse range of authentic texts and activities. From doing this, students will apply acquired knowledge of French culture and language to new contexts.

Unit 2

Students develop an understanding of aspects of language and culture through the study of three or more topics from the prescribed themes. Students analyse visual, spoken and written texts and access and share useful information on the topics and subtopics through French to consolidate and extend their vocabulary, grammar knowledge and language skills. Students will also explore cultural products and practices and how they can be used to demonstrate varying cultural perspectives between different French-speaking communities. Through doing this, students will reflect on the interplay between language and culture and its impact on meaning, understanding and language use in specific contexts and for specific audiences.

OUTCOMES

Unit 1

Outcome 1

Establish and maintain an informal/formal, personal spoken interaction on a selected topic.

Outcome 2

Interpret information from two texts on the same subtopic presented in French and respond in writing in French and in English.

Outcome 3

Present information, concepts and ideas in writing on the topic selected for the unit and for a specific audience and purpose.

Unit 2

Outcome 1

Respond in writing to spoken or written texts presented in French.

Outcome 2

Analyse and use information from written, spoken or visual texts to produce an extended written response.

Outcome 3

Explain information, ideas and concepts orally in French to a specific audience about an aspect of cultural diversity within or across cultures.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Exam revision materials, oral test assessment.
- Approximately $60.

LANGUAGE - FRENCH - UNITS 3 & 4

The purpose of this study is to enable students to develop their ability to communicate effectively in French: to increase their aural, oral, reading and writing skills and their knowledge of the linguistic elements of French and to encourage an appreciation of the views, literature, thought and culture of the French speaking people.

AREAS OF STUDY

Unit 3

Students investigate the way French speakers interpret and express ideas and negotiate and persuade in French through the study of three or more subtopics from the prescribed themes. Students access and share useful information on the subtopics through French and consolidate and extend vocabulary and grammar knowledge and language skills. Students reflect on how knowledge of French and French-speaking communities can be applied in a range of contexts and endeavors, such as further study, travel, and business or community involvement.

Unit 4

Students build on their knowledge of French-speaking communities, considering cultural perspectives and language and explaining personal observations. Students consolidate and extend vocabulary, grammar knowledge and language skills to investigate the topics through French.

Students identify and reflect on cultural products or practices that provide insights into French-speaking communities. Students consider how knowledge of more than one culture can influence the ways individuals relate to each other and function in the world.

OUTCOMES

Unit 3

Outcome 1

Participate in a spoken exchange in French to resolve a personal issue.

Outcome 2

Interpret information from texts and write responses in French.

Outcome 3

Express ideas in a personal, informative or imaginative piece of writing in French.

Unit 4

Outcome 1

Share information, ideas and opinions in a spoken exchange in French.

Outcome 2

Analyse information from written, spoken and viewed texts for use in a written response in French.

Outcome 3

Present information, concepts and ideas in evaluative or persuasive writing on an issue in French.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Highly recommended that Units 1 & 2 be completed successfully prior to commencing Units 3 & 4
- Exam revision materials, written practice exam $65.
- Excursion to la matinee du Français or a restaurant or French Film Festival will incur additional costs.

LANGUAGE - JAPANESE - UNITS 1 & 2

The purpose of this study is to enable students to communicate with others, to understand and appreciate the cultural contexts in which Japanese is used, to understand their own culture through the study of other cultures, to understand Japanese as a system, to make connections between Japanese and English and/or other languages and to apply Japanese to work, further study, training and leisure.

AREAS OF STUDY

Unit 1

Students develop an understanding of the language and culture/s of Japanese-speaking communities through the study of topics from the prescribed themes. They focus on analysing visual, spoken and written texts and cultural products, such as examples of art, music, dance, literature, photographs, film or sport. They apply acquired knowledge of Japanese culture and language in new contexts.

Unit 2

Students develop an understanding of cultural diversity within and between cultures through the study of three or more topics from the prescribed themes. These include art, music, dance, sport, buildings, tourism, dealing with money, organisations or individuals from Japanese-speaking communities. Students reflect on the interplay between language and culture, and how it impacts on meaning, understanding and the individual's language use. Grammar, text types and various kinds of writing will also be studied.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Exam revision materials $60.

OUTCOMES

Unit 1

Outcome 1

Establish and maintain an informal, personal spoken interaction on a selected topic.

Outcome 2

Interpret information from two texts on the same subtopic presented in Japanese and respond in writing in Japanese and in English.

Outcome 3

Present information, concepts and ideas in writing on the topic selected for the unit and for a specific audience and purpose.

Unit 2

Outcome 1

Respond in writing to spoken or written texts presented in Japanese.

Outcome 2

Analyse and use information from written, spoken, or visual texts to produce an extended written response.

Outcome 3

Explain information, ideas and concepts orally in Japanese to a specific audience about an aspect of cultural diversity within or across cultures.

LANGUAGE - JAPANESE - UNITS 3 & 4

The purpose of this study is to enable students to use Japanese to communicate with others, to understand and appreciate the cultural contexts in which Japanese is used, to understand their own culture through the study of Japanese culture, to understand Japanese language as a system, to make connections between Japanese and English and/or other languages and to apply Japanese to work, further study, training and leisure.

AREAS OF STUDY

Unit 3

Students investigate the way Japanese speakers interpret and express ideas, negotiate and persuade in Japanese through the study of three or more subtopics from the prescribed themes and topics. Students interpret information, inform others, and reflect upon and develop persuasive arguments. They access and share useful information presented in Japanese on the subtopics and consolidate and extend vocabulary and grammar knowledge and language skills. They reflect on how knowledge of Japanese and Japanese-speaking communities can be applied in a range of contexts, such as further study, travel, and business or community involvement.

Unit 4

Students investigate aspects of culture through the study of two or more subtopics from the prescribed themes and topics. Students build on their knowledge of Japanese-speaking communities, considering cultural perspectives and language and explaining personal observations. Students consolidate and extend vocabulary, grammar knowledge and language skills to investigate the topics through Japanese. Students identify and reflect on cultural products or practices that provide insights into Japanese-speaking communities.

OUTCOMES

Unit 3

Outcome 1

Participate in a spoken exchange in Japanese to resolve a personal issue.

Outcome 2

Interpret information from texts and write responses in Japanese.

Outcome 3

Express ideas in a personal, informative or imaginative piece of writing in Japanese.

Unit 4

Outcome 1

Share information, ideas, and opinions in a spoken exchange in Japanese.

Outcome 2

Analyse information from written, spoken and viewed texts for use in a written response in Japanese.

Outcome 3

Present information, concepts, and ideas in evaluative or persuasive writing on an issue in Japanese.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Exam revision materials $65.

LEGAL STUDIES – UNITS 1 & 2

Legal Studies examines the institutions and principles which are essential to Australia's legal system. Students develop an understanding of the rule of law, lawmakers, key legal institutions, rights protection in Australia and the justice system.

AREAS OF STUDY

Unit 1 – Guilt and Liability

Legal Foundations
This area of study provides students with foundational knowledge of laws and the Australian legal system.

The Presumption of Innocence
The presumption of innocence is the fundamental principle of criminal law and provides a guarantee that an accused is presumed innocent until proven guilty beyond reasonable doubt.

Civil Liability
Civil law aims to protect the rights of individuals, groups and organisations and provides opportunities for a wronged party to seek redress for a breach of civil law.

Unit 2 – Sanctions, remedies and rights

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

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

Rights
The protection of rights is fundamental to a democratic society. Rights are protected in Australia through the Australian Constitution, the Victorian Charter of Human Rights and Responsibilities and through common law and statute law such as through statutes relating to racial discrimination, sex discrimination and equal opportunity.

OUTCOMES

Unit 1

Outcome 1

Describe the main sources and types of law and assess the effectiveness of laws.

Outcome 2

Explain the purposes and key concepts of criminal law and use legal reasoning to argue the criminal culpability of an accused based on actual and/or hypothetical scenarios.

Outcome 3

Explain the purposes and key concepts of civil law and apply legal reasoning to argue the liability of a party in civil law based on actual and/or hypothetical scenarios.

Unit 2

Outcome 1

Explain key concepts in the determination of a criminal case and discuss the principles of justice in relation to the determination of criminal cases, sanctions and sentencing approaches.

Outcome 2

Explain key concepts in the resolution of a civil dispute and discuss the principles of justice in relation to the resolution of civil disputes and remedies.

Outcome 3

Evaluate the ways in which rights are protected in Australia, compare this approach with that adopted by another country and discuss the impact of an Australian case on the rights of individuals and the legal system.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials and exam papers
- There may be an excursion to Loddon Prison and to a court which will incur additional costs.

LEGAL STUDIES – UNITS 3 & 4

Legal Studies examines the institutions and principles which are essential to Australia's legal system. Students develop an understanding of the rule of law, lawmakers, key legal institutions, rights protection in Australia and the justice system.

AREAS OF STUDY

Unit 3 – Rights and Justice

The Victorian Criminal Justice System
In this area of study, students investigate the rights of the accused and of victims and explore the purposes and types of sanctions and sentencing considerations. Students consider factors that affect the ability of the criminal justice system to achieve the principles of justice.

The Victorian Civil Justice System
Students consider factors that affect the ability of the civil justice system to achieve the principles of justice. They examine recent reforms from the past four years and recommended reforms to enhance the ability of the civil justice system to achieve the principles of justice. Students synthesise and apply legal principles and information relevant to the civil justice system to actual and/or hypothetical scenarios.

Unit 4 – The People and the Law

The People and the Australian Constitution
In this area of study, students examine the relationship between the Australian people and the Australian Constitution and the ways in which the Australian Constitution acts as a check on parliament in law-making. Students investigate the involvement of the Australian people in the referendum process and the role of the High Court in acting as the guardian of the Australian Constitution.

The People, the Parliament and the Courts
In this area of study, students investigate factors that affect the ability of parliament and courts to make law. They examine the relationship between parliament and courts in law-making and consider the capacity of both institutions to respond to the need for law reform.

Rights
The protection of rights is fundamental to a democratic society. Rights are protected in Australia through the Australian Constitution, the Victorian Charter of Human Rights and Responsibilities and through common law and statute law such as through statutes relating to racial discrimination, sex discrimination and equal opportunity.

OUTCOMES

Unit 3

Outcome 1

Explain the rights of the accused and of victims in the criminal justice system, discuss the means used to determine criminal cases and evaluate the ability of the criminal justice system to achieve the principles of justice.

Outcome 2

Analyse the factors to consider when initiating a civil claim, discuss the institutions and methods used to resolve civil disputes and evaluate the ability of the civil justice system to achieve the principles of justice.

Unit 4

Outcome 1

Discuss the significance of High Court cases involving the interpretation of the Australian Constitution and evaluate the ways in which the Australian Constitution acts as a check on parliament in law-making.

Outcome 2

Discuss the factors that affect the ability of parliament and courts to make law, evaluate the ability of these lawmakers to respond to the need for law reform and analyse how individuals, the media and law reform bodies can influence a change in the law

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials and exam papers
- There may be an excursion to Parliament and to a court which will incur additional costs.

LITERATURE – UNITS 1 & 2

The study of English Literature enables students to focus on the meanings derived from texts, the relationships between texts, the contexts in which texts are produced and how readers' experiences shape their responses to texts. Students offer interpretations of whole texts, analyse passages or extracts from texts while considering the whole text, understand and explore multiple interpretations of a text and respond creatively to text. They read critically and examine the historical, social and contexts within which both readers and texts are situated.

AREAS OF STUDY

Unit 1

Reading practices

Students consider how language, structure and stylistic choices are used in different literary forms and types of both print and non-print texts. They closely examine the literary forms, features and language of texts and begin to identify and explore textual details to develop a close response to a text.

Exploration of literary movements and genres

Students explore the concerns, ideas, style and conventions common to a distinctive type of literature seen in literary movements or genres. They study one complete text alongside multiple samples of other texts from the selected movement or genre.

Unit 2

Voices of Country

Students explore the voices, perspectives and knowledge of Aboriginal and Torres Strait Islander authors and creators. They acknowledge and reflect on a range of Australian views and values and consider stories about the Australian landscape and culture.

The text in its context

Students focus on a text and its historical, social and cultural context, reflecting on representations of a specific time period and/or culture within a text. They explore the text to understand its point of view and what it is commenting on. They analyse the language closely, recognising that words have historical and cultural import.

OUTCOMES

Unit 1

Outcome 1

Students respond to a range of texts through close analysis in written or oral form. They discuss how literary forms, features and language of texts can guide readers to find meaning in texts.

Outcome 2

Students explore conventions common to a selected movement or genre, including its language, settings, narrative structures and characterisation. They develop and produce analytical and creative written and/or oral responses to texts.

Unit 2

Outcome 1

Students engage with and explore Aboriginal and Torres Strait Islander perspectives, knowledge and storytelling while studying the impact of colonialisation. They develop and produce creative and/or analytical responses to texts.

Outcome 2

Students analyse and respond to the representation of a specific time period and/or culture by commenting on the ideas and concerns of individuals and groups in that context. They develop and produce creative and/or analytical responses to texts.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials, exam papers

LITERATURE – UNITS 3 & 4

In Units 3 and 4 English Literature, students must study at least six texts (including an adapted text) to ensure that they experience a range of early to contemporary works and deal with a diversity of cultural experiences and a range of points of view. They are encouraged to read widely, guided by classroom exploration and their own interests to support the achievement of all outcomes.

AREAS OF STUDY

Unit 3

Adaptations and transformations

Students focus on how the form of a text contributes to its meaning. They construct a close analysis of the text and then reflect on the extent to which adapting the text to a different form affects its meaning by comparing the original to the adaptation.

Developing interpretations

Students explore the different ways people read and understand a text by developing, considering and comparing interpretations of a set text. They analyse how ideas, views and values are presented in a text before exploring a supplementary reading to further enhance their understanding and develop a second interpretation.

Unit 4

Creative responses to texts

Students focus on the imaginative techniques used for creating and recreating a literary work. They construct their own creative transformations of texts and reflect critically on the literary form, features and language of a text and discuss their own responses.

Close analysis of texts

Students focus on a detailed scrutiny of the language, style, concerns and construction of texts. They examine the ways specific passages contribute to their overall understanding, writing expressively to develop a close analysis of the text.

OUTCOMES

Unit 3

Outcome 1

Students analyse aspects of a text drawing on close analysis of textual details, and then discuss the extent to which meaning changes when that text is adapted to a different form.

Outcome 2

Students develop interpretations of a set text informed by the ideas, views and values of the set text and a supplementary reading.

Unit 4

Outcome 1

Students respond creatively to a text and comment critically on both the original text and the creative response.

Outcome 2

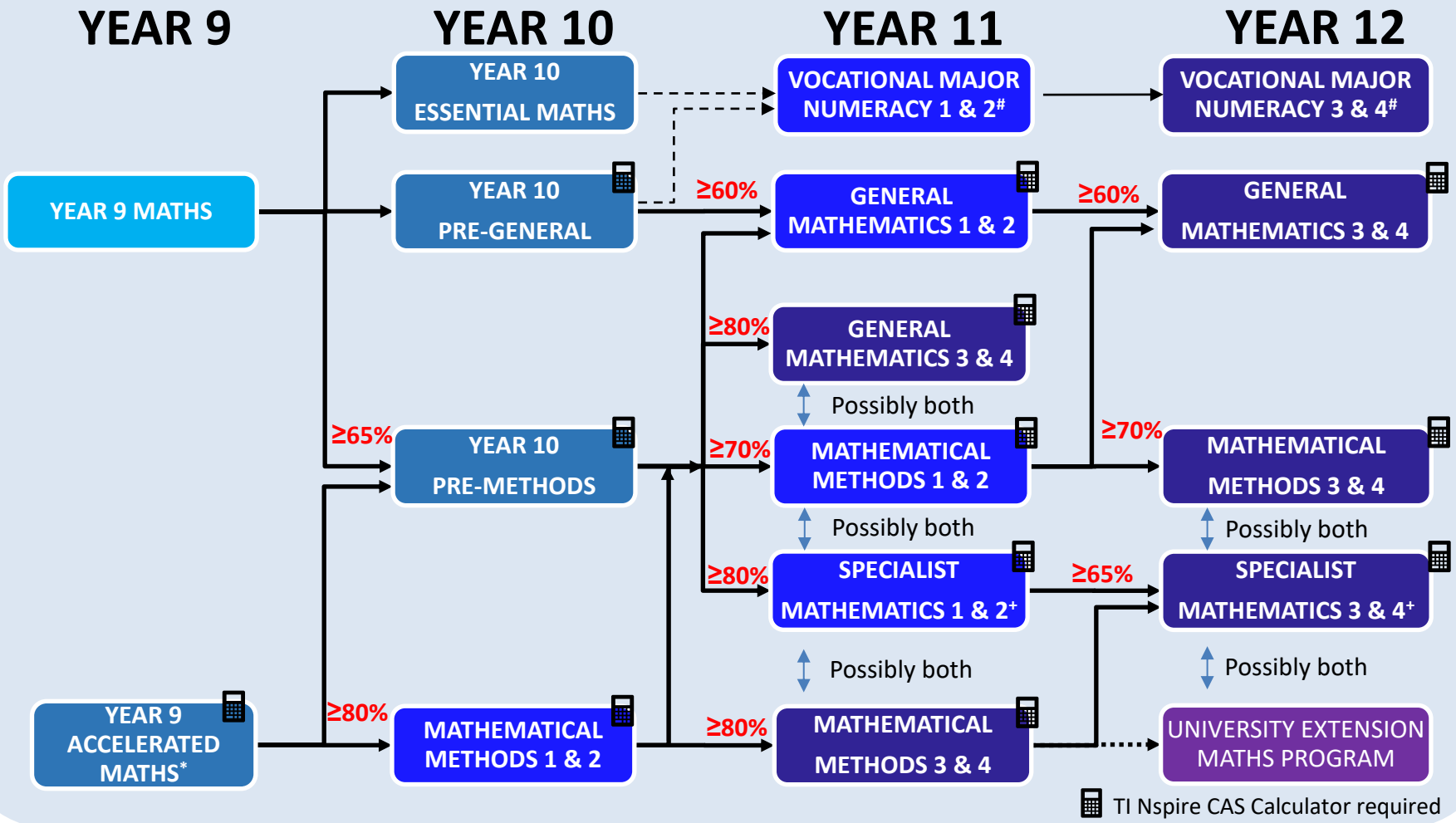
Students analyse literary forms, features and language to present a coherent view of a whole text.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials and exam papers.

MATHEMATICS

This diagram shows a range of typical pathways within the Mathematics Domain and the average grade prerequisite for success in that subject.



* Students to be selected for this subject by the college

+ Study of Specialist Mathematics assumes concurrent study or previous completion of Mathematical Methods. Specialist Maths ½ is a prerequisite for Specialist 3/4.

Vocational Major Numeracy is a compulsory subject for students who have been selected to undertake the Vocational Major course.
Only students who have successfully enrolled in the Vocational Major course may access VM Numeracy.

1. **Students should achieve a minimum grade average of 80% in Algebra-based units in Year 9 Mathematics if they wish to access Pre-Methods in Year 10.**
2. **Students who choose General Mathematics in Year 11 cannot study Specialist 1 & 2 in Year 11.**
3. **Students who choose Specialist Mathematics 1 & 2 in Year 11 MUST also study Mathematic Methods 1 & 2 in Year 11 or have studied Mathematic Methods 1 & 2 in Year 10.**

GENERAL MATHEMATICS – UNITS 1 & 2

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

AREAS OF STUDY

Algebra, number and structure

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

Data analysis, probability and statistics

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

Functions, relations and graphs

In this area of study students cover linear function and relations, their graphs, modelling with linear functions, solving linear equations and simultaneous linear equations, line segment and step graphs and their applications. In this area of study students cover direct and inverse variation, transformations to linearity and modelling of some non-linear data.

Discrete mathematics

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

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

Space and measurement

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

OUTCOMES

Outcome 1

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

Outcome 2

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

Outcome 3

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

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Students will need a CAS calculator.
- Additional class materials and exam papers $10.

MATHEMATICAL METHODS – UNITS 1 & 2

PREREQUISITE:

Minimum grade average of 70% for Semester 1 in Year 10 Pre-Methods Mathematics.

INTRODUCTION

Mathematical Methods Units 1 & 2 are designed as a preparation for Mathematical Methods Units 3 & 4. Units 1 & 2 may be undertaken alone or in conjunction with Specialist Mathematics Units 1&2.

AREAS OF STUDY

Functions and graphs

In this area of study students cover the graphical representation of simple algebraic functions (polynomial and power functions) of a single real variable and the key features of functions and their graphs.

Algebra

This area of study supports students' work in the 'Functions and Graphs', 'Calculus' and 'Probability and Statistics' areas of study.

Calculus

In this area of study students cover constant and average rates of change and an introduction to instantaneous rate of change of a function in familiar contexts, including graphical and numerical approaches to estimating and approximating these rates of change. In Unit 2 students cover first principles approach to differentiation, differentiation and anti-differentiation of polynomial functions and power functions by rule, and related applications including the analysis of graphs.

Probability and statistics

In this area of study students cover the concepts of event, frequency, probability and representation of finite sample spaces and events using various forms such as lists, grids, Venn diagrams, karnaugh maps, tables and tree diagrams.

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

OUTCOMES

Outcome 1

Define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

Outcome 2

Apply mathematical processes in non-routine contexts and to analyse and discuss these applications of mathematics.

Outcome 3

Use technology to produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Students will need a CAS calculator.
- Additional class materials and exam papers $10.

SPECIALIST MATHEMATICS – UNITS 1 & 2

PREREQUISITE

Minimum grade average of 80% for Semester 1 in Year 10 Pre-Methods Mathematics.

Specialist Mathematics Units 1 & 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. Specialist Mathematics Units 1 & 2 provides a course of study for students, which in conjunction with Mathematical Methods Units 1 & 2 prepare them for Specialist Mathematics Units 3 & 4.

AREAS OF STUDY

Students undertaking the study of Specialist Mathematics Units 1 & 2 study a range of topics:

- Number systems and recursion
- Geometry in the plane and proof
- Vectors in the plane
- Graphs of non-linear relations
- Principles of counting
- Kinematics
- Statistics

For a detailed description of the content areas, please refer to the VCAA study design.

OUTCOMES

Outcome 1

Define and explain key concepts in relation to the topics from the selected areas of study and apply a range of related mathematical routines and procedures.

Outcome 2

Apply mathematical processes in non-routine contexts and analyse and discuss these applications of mathematics in at least three of the areas of study.

Outcome 3

Use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques or approaches in at least three of the areas of study.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Entry requirements exist for this course.
- Students will need a CAS calculator.
- Additional class materials and exam papers $10.

GENERAL MATHEMATICS – UNITS 3 & 4

The assumed knowledge for General Mathematics Units 3 & 4 is drawn from General Mathematics Units 1 & 2. General Mathematics provides general preparation for employment or further study, in particular, where data analysis is important.

AREAS OF STUDY

Data Analysis

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

Recursion and Financial Modelling

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

Matrices

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

Networks and Decision Mathematics

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

OUTCOMES

Outcome 1

Define and explain key concepts as specified in the content from the core study and use this knowledge to apply related mathematical techniques and models in routine contexts.

Outcome 2

Select and apply the mathematical concepts, models and techniques from the core area of study in a range of contexts of increasing complexity.

Outcome 3

Select and appropriately use technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches in the areas of study.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Students will need a CAS calculator.
- Additional materials and exam papers.
- Approximately $15.

MATHEMATICAL METHODS – UNITS 3 & 4

PREREQUISITE:

Minimum grade 70% average in Mathematical Methods Units 1 & 2.

INTRODUCTION

Mathematical Methods Units 3 & 4 may be taken alone or in conjunction with either Specialist Mathematics Units 3 & 4 or Further Mathematics Units 3 & 4. It is intended to provide an appropriate background for further study in, for example, science, economics or medicine.

AREAS OF STUDY

Functions and graphs

In this area of study students cover transformations of the plane and the behaviour of some elementary functions of a single real variable, including key features of their graphs.

Calculus

In this area of study students cover graphical treatment of limits, continuity and differentiability of functions of a single real variable and differentiation, anti-differentiation and integration of these functions.

Algebra

In this area of study students cover the algebra of functions, including composition of functions, simple functional relations, inverse functions and the solution of equations. They also study the identification of appropriate solution processes for solving equations and systems of simultaneous equations, presented in various forms.

Probability and statistics

In this area of study students cover discrete and continuous random variables, their representation using tables, probability functions (specific by rule and defining parameters as appropriate) the calculation and interpretation of central measures and measure of spread, and statistical inference for sample proportions.

OUTCOMES

Outcome 1

Define and explain key concepts, as specified in the content from the areas of study, and to apply a range of related mathematical routines and procedures.

Outcome 2

Apply mathematical processes in non-routine contexts and to analyse and discuss these applications of mathematics.

Outcome 3

Select and appropriately use technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Students will need a CAS calculator.
- Additional materials and exam papers.
- Approximately $15.

SPECIALIST MATHEMATICS – UNITS 3 & 4

PREREQUISITE:

Minimum grade 65% average in both Mathematical Methods Units 1 & 2 and Specialist Mathematics Units 1 & 2.

INTRODUCTION

The areas of study in Specialist Mathematics Units 3 & 4 extend and develop material from Mathematical Methods Units 3 & 4. Specialist Mathematics Units 3 & 4 are intended for those with strong interest in mathematics who wish to undertake a career in mathematics and related disciplines.

AREAS OF STUDY

Functions and graphs

Inverse circular functions, reciprocal functions, rational functions and other simple quotient functions, the absolute value function, graphical representation of these functions, and the analysis of key features of their graphs.

Algebra

Expressions of simple rational functions as a sum of partial fractions, the arithmetic and algebra of complex numbers, including polar form, points and curves in the complex plane, introduction to factorization of polynomial functions over the complex field, and an informal treatment of the fundamental theorem of algebra.

Calculus

Advanced calculus techniques for analytic and numeric differentiation and integration of a range of functions and combinations of functions and their application in a variety of theoretical and practical situations.

Vectors

Arithmetic and algebra of vectors, linear dependence and independence of a set of vectors, proof of geometric results using vectors, vector representation of curves in the plane and vector kinematics in one and two dimensions.

Mechanics

Introduction to Newtonian mechanics, for both constant and variable acceleration.

Statistics

Statistical inference related to the definition and distribution of sample means, simulations and confidence interval.

OUTCOMES

Outcome 1

Define and explain key terms and concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

Outcome 2

Apply mathematical processes, with an emphasis on general cases, in non-routine contexts, and analyse and discuss these applications of mathematics.

Outcome 3

Select and appropriately use technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Students will need a CAS calculator
- Additional materials and exam papers.
- Approximately $25.

MEDIA – UNITS 1 & 2

This study provides students with the opportunity to examine the media in both historical and contemporary contexts while developing skills in media design and production in a range of media forms.

AREAS OF STUDY

Unit 1

Focuses on students gaining an understanding of:

- Media Representations
- Media forms in productions
- Australian stories.

Unit 2

Focuses on students gaining an understanding of:

- Narrative style and genre
- Narrative in production
- Media and Change

OUTCOMES

Unit 1

Outcome 1

Analyse how media representations in a range of media products and forms from different periods of time, locations and contexts, are constructed, distributed, engaged with, consumed and read by audiences.

Outcome 2

Use the media production process to design, produce and evaluate media representations for specified audiences in a range of media forms.

Outcome 3

Analyse how the structural features of Australian fictional and non-fictional narratives in two or more media forms, engage and are consumed and read by audiences.

Unit 2

Outcome 1

Analyse the intentions of media creators and producers and the influences of narratives on the audience in different media forms.

Outcome 2

Apply the media production process to create, develop and construct narratives.

Outcome 3

Analyse the influence of new media technologies on society, audiences, the individual, media industries and institutions.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials
- Students will need a USB.
- Approximately $90.

MEDIA – UNITS 3 & 4

This study provides students with the opportunity to examine the media in both historical and contemporary contexts while developing skills in media design and production in a range of media forms.

AREAS OF STUDY

Unit 3

Focuses on students gaining an understanding of:

- Narrative and their contexts
- Media production development
- Media production design.

Unit 4

Focuses on students gaining an understanding of:

- Media production
- Agency and control in and of the media

OUTCOMES

Unit 3

Outcome 1

Analyse how the construction of media narratives; discuss audience engagement, consumption and reading of narratives; and analyse the relationship between narratives and the contexts in which they are produced.

Outcome 2

Research aspects of a media for, and experiment with, media technologies and media production processes to inform and document the design of a media production.

Outcome 3

Develop and document a media production design in a selected media form for a specified audience.

Unit 4

Outcome 1

Produce, refine and resolve a media product designed in Unit 3.

Outcome 2

Analyse issues of agency and control in the relationship between the media and its audience.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional class materials
- Students will need a USB.
- Approximately $90.

MUSIC – UNITS 1 & 2

This subject focuses on developing skills in music performance in solo and ensemble contexts. Students develop their aural skills and musicianship as they explore and analyse the ways their solo and ensemble works are organised musically. They create brief creative responses that reflect the approaches to musical organisation used in their performance pieces.

AREAS OF STUDY

Unit 1
In this unit students explore and develop their understanding of how music is organised. By performing, creating, analysing and responding to music works that exhibit different approaches, students explore and develop their understanding of the possibilities of musical organisation.

Unit 2
In this unit, students focus on the way music can be used to create an intended effect. By performing, analysing and responding to music works/examples that create different effects, students explore and develop their understanding of the possibilities of how effect can be created. Through creating their own music, they reflect this exploration and understanding.

OUTCOMES

Units 1&2

Outcome 1 – Performing

In this area of study, students focus on practical music-making and performance skills by preparing and performing solo and ensemble works, one of which should be associated with a music approach studied in Area of Study 3.

Outcome 2 – Creating

In this area of study, students create a folio of brief creative responses. At least one exercise should demonstrate their understanding of musical organisation and effect, and characteristics of at least one work selected for study in Area of Study 3.

Outcome 3 – Analysing and responding

Students analyse the treatment of specific music elements, concepts and compositional devices in music that have been created using different approaches to musical organisation and effect.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Extra fees may be charged for Music Program (includes department and tutor instrumental lessons as required, instrumental music fees, attending concerts).
- Students should have **at least 3 years of instrumental (including voice) music lessons** and have a basic understanding of music theory. Contact the VCE Music teacher for more information regarding the instrumental and theory skills required.
- Instrumental lessons (at Koonung or outside school) are required.

MUSIC REPERTOIRE PERFORMANCE – UNITS 3 & 4

In this subject, students develop the recital program they will perform in Unit 4. Students use music analysis skills to refine strategies for further developing and presenting their final recital. They analyse technical, expressive and stylistic challenges relevant to the works they are preparing for performance and present these strategies for assessment at a school-based discussion.

Students analyse interpretation in a wide range of music. They develop their ability to identify, recreate and notate music language concepts such as scales, melodies, chords, harmony and rhythmic materials.

AREAS OF STUDY

Unit 3

In this unit students begin developing the recital program they will present in Unit 4. This preparation includes consideration of the historical performance practices and interpretative traditions that inform the styles represented in their programs.

Students use music analysis skills to refine strategies for developing their performances.

Students analyse interpretation in a wide range of recorded music, responding to and analysing musical elements, concepts and compositional devices. They develop their ability to identify, recreate and notate music language concepts such as scales, melodies, chords, harmony and rhythmic materials that relate to the works studied.

Unit 4

In this unit students continue to develop the performance program established in Unit 3 for their end-of-year practical examination. This preparation includes consideration of the historical performance practices and interpretative traditions that inform the styles represented in their programs.

Students use music analysis skills to refine strategies for further developing and presenting their final recital.

Students analyse interpretation in a wide range of music, responding to and analysing musical elements, concepts, compositional devices and music language.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Extra fees may be charged for Music Program (includes department and tutor instrumental lessons as required, instrumental music fees, attending concerts).
- Students should have **at least 4 years of instrumental (including voice) lessons** and have a basic understanding of music theory. Contact the VCE Music teacher for more information regarding the instrumental and theory skills required.
- Instrumental lessons are required.

OUTCOMES

Units 3&4

Outcome 1 – Performing

In this area of study, students present performances of musical works including at least one ensemble work. Students perform regularly in a variety of contexts. They reflect on these performances to explore and build on ways of expressively shaping their chosen works and communicating their artistic intentions to an audience.

Outcome 2 – Analysing for performance

In this area of study, students focus on the processes of analysis and research that they undertake when preparing musical works for performance. Students evaluate the strengths and weaknesses in their performance capabilities and develop a planned approach to improvement.

Outcome 3 – Responding

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

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

PHILOSOPHY – UNITS 1 & 2

Philosophy is the founding discipline of logic, and it continues to develop and refine the tools of critical reasoning, influencing approaches in mathematics, digital coding, science and the humanities. Philosophers grapple with the problems that lie at the foundation of issues of public debate such as the concept of artificial intelligence, justification for a charter of human rights and freedom of speech.

Philosophers are concerned with thinking rigorously and rationally about ideas, and exploring their meaning, context, coherence and implications. The nature of the questions studied, together with the techniques of reasoning and argument used to study them, can in turn help to create new ideas and insights.

Unit 1 focuses on understandings of existence and knowledge, drawing on ideas from historical philosophers. Unit 2 examines the ethical tradition and values identified within philosophy, and how ethical dilemmas continue to arise.

AREAS OF STUDY

Unit 1 - Philosophy, existence and knowledge

What is the nature of reality and identity? How can we acquire certain knowledge? These are some of the questions that have challenged humans for millennia and underpin ongoing endeavours in areas as diverse as science, justice and the arts. This unit engages students with fundamental philosophical questions through active, guided investigation and critical discussion of two key areas of philosophy: epistemology (knowledge) and metaphysics (existence).

Unit 2 - Questions of value

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

ADDITIONAL COURSE REQUIREMENTS

- Additional class materials, exam papers

OUTCOMES

Unit 1

Outcome 1 - The nature and methods of philosophy
Analyse the distinctive nature of philosophy and recognise and apply techniques of philosophical reasoning.

Outcome 2 – Metaphysics

Analyse metaphysical problems and evaluate viewpoints and arguments arising from these and analyse metaphysical problems in relevant contemporary debates.

Outcome 3 - Epistemology
Analyse epistemological problems and evaluate viewpoints and arguments arising from these and analyse epistemological problems in relevant contemporary debates.

Unit 2

Outcome 1 – Ethics and moral philosophy
Analyse problems in ethics and moral philosophy and related contemporary debates, evaluate viewpoints and arguments in response to these problems, and explain the interplay between ethical and moral problems and contemporary ethical and moral debates

Outcome 2 - Further problems in Value Theory
Analyse selected problems in value theory and evaluate viewpoints and arguments in response to these problems and discuss philosophical issues in the context of relevant contemporary debates.

Outcome 3 - Philosophy: its nature, purpose and value
Explain and evaluate the nature, purpose and value of philosophy.

PHYSICAL EDUCATION – UNITS 1 & 2

VCE Physical Education explores the complex interrelationships between the bodies cardiovascular, respiratory, and musculoskeletal systems and their role in producing and refining movement. The course examines behavioural, psychological, environmental, and sociocultural influences on performance and participation in physical activity. Students participate in practical activities to examine the core concepts that underpin movement and that influence performance and participation in physical activity, sport, and exercise.

AREAS OF STUDY

Unit 1 - The Human Body in Motion

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

Unit 2 - Physical Activity, Sport, Exercise and Society

This unit develops students' understanding of physical activity, sport and exercise from a participatory perspective. Using various methods to assess physical activity and sedentary behaviour, students analyse data to investigate perceived barriers and enablers, and explore opportunities to enhance participation in physical activity. They create and participate in a personal plan with movement strategies that optimise adherence to physical activity and sedentary behaviour guidelines. By investigating a range of contemporary issues associated with physical activity, sport and exercise, students explore factors that affect access, inclusion, participation and performance.

OUTCOMES

Unit 1

Outcome 1

Students will be able to participate in and analyse information from a variety of practical activities to explain how the muscular and skeletal systems function and interact to produce movement and evaluate the use of performance enhancement substances and methods.

Outcome 2

students will be able to participate in and analyse information from a variety of practical activities to explain how the cardiovascular and respiratory systems function and interact and evaluate the use of performance enhancement substances and methods.

Unit 2

Outcome 1

Students will be able to collect and analyse data related to individual and population levels of participation in physical activity and sedentary behaviour and conduct a Functional Movement Assessment (FMA) to create, undertake and evaluate a personalised plan that promotes adherence to the relevant physical activity and sedentary behaviour guidelines.

Outcome 2

Students will be able to explain a range of intrapersonal and interpersonal contemporary issues that influence access to, and inclusion, participation and performance in, physical activity and sport at the local, national and global levels.

ADDITIONAL COURSE REQUIREMENTS

- Students are required to wear the school physical education uniform for practical classes, which are an integral part of the course objectives.

PHYSICAL EDUCATION – UNITS 3 & 4

This course introduces students to the biochemical and skill acquisition principles used to analyse human movement skills and energy production from a physiological, psychological and sociocultural perspective. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Students analyse skill frequencies, movement patterns, heart rates and work at rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program.

AREAS OF STUDY

Unit 3

This unit introduces students to principles used to analyse human movement from a biophysical perspective. Students use a variety of tools and coaching techniques to analyse movement skills and apply biomechanical and skill-acquisition principles to improve and refine movement in physical activity, sport, and exercise. Students consider the cardiovascular, respiratory, and muscular systems and the roles of each in supplying oxygen and energy to the working muscles. They investigate the characteristics and interplay of the 3 energy systems for performance during physical activity, sport, and exercise. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

Unit 4

In this unit, students' participation and involvement in physical activity will form the foundations of understanding how to improve performance from a physiological perspective. Students analyse movement skills and fitness requirements and apply relevant training principles and methods to improve performance at various levels (individual, club and elite). 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 assess fitness and use collected data to justify the selection of fitness tests based on the physiological requirements of an activity, including muscles used, energy systems and fitness components.

OUTCOMES

Unit 3

Outcome 1

Students will be able to analyse primary data collected from participation in physical activity, sport, and exercise to develop and refine movement skills from an individual and coaching perspective, by applying biomechanical and skill-acquisition principles.

Outcome 2

Students will be able to use data collected in practical activities to analyse how the major body and energy systems work together to enable movements to occur; explain the factors causing fatigue; and recommend suitable recovery strategies.

Unit 4

Outcome 1

Students will be able to undertake an activity analysis to justify the physiological requirements of an activity that informs an appropriate assessment of fitness.

Outcome 2

Students will be able to participate in a variety of training methods; design and evaluate training programs; and explain performance improvements that occur due to chronic adaptations, depending on the type of training undertaken.

ADDITIONAL COURSE REQUIREMENTS

- Students are required to wear the school physical education uniform for practical classes, which are an integral part of the course objectives.

PHYSICS – UNITS 1 & 2

VCE physics provides students with opportunities to explore questions related to the natural and constructed world. Topics include atomic physics, electricity, fields, mechanics, thermodynamics, quantum physics, light, and waves. In unit two, students will be able to conduct and optional area of study from a list of 18, guided by their own interest. Students will develop their experimental skills during an extended practical investigation.

AREAS OF STUDY

Unit 1

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

Unit 2

In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments. In the core component of this unit, students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary and apply these concepts to a chosen case study of motion. In the optional component, students choose one of eighteen options related to climate science, nuclear energy, flight, structural engineering, biomechanics, medical physics, bioelectricity, optics, photography, music, sports science, electronics, astrophysics, astrobiology, Australian traditional artefacts and techniques, particle physics, cosmology and local physics research.

OUTCOMES

Outcome 1

Examine light using the wave model and thermal energy using a particle model forming an understanding of the fundamental physics ideas of reflection, refraction, and dispersion.

Outcome 2

Explore energy that derives from the nuclei of atoms. They learn about the properties of the radiation from the nucleus and the effects of this radiation on human cells and tissues and apply this understanding to the use of radioisotopes in medical therapy.

Outcome 3

Develop conceptual models to analyse electrical phenomena and undertake practical investigations of circuit components. Concepts of electrical safety are developed through the study of safety mechanisms and the effect of current on humans.

Outcome 1

Describe and analyse graphically, numerically, and algebraically the energy and motion of an object, using specific physics terminology and conventions.

Outcome 2

Develop a deeper understanding of an area of interest within diverse areas of physics.

Outcome 3

Adapt or design and then conduct a scientific investigation to generate appropriate primary qualitative and/or quantitative data, organise and interpret the data, and reach and evaluate a conclusion in response to the research question.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Electronics, other additional materials and exam papers.

PHYSICS – UNITS 3 & 4

This unit is an introduction to the nature and scope of Physics in selected contexts. Students are required to complete inquiries into theories developed from studying the ways that matter interacts with matter, and the ways that light and matter interact. Knowledge in physics is gained through qualitative and quantitative exercises and practical investigations. They are also required to report on an extended practical investigation. Students will enhance their ability to describe and use theories and models, propose, and investigate hypotheses, collect data, analyse the limitations of that data, draw conclusions, make recommendations, and select and use a range of appropriate technologies and mathematical techniques.

AREAS OF STUDY

Unit 3

Students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects.

Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation pf particle accelerators. They explore the interactions, effects, and applications of gravitational, electric and magnetic fields. Students use Newton's laws to investigate motion in one and two dimensions.

Unit 4

Students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students will consider the limitations of classical mechanics as Einstein's theories of relativity are introduced to explain the motion of very fast objects.

OUTCOMES

Unit 3

Outcome 1

Analyse gravitational, electric, and magnetic fields and use these to explain the operation of motors and particle accelerators and the orbits of satellites.

Outcome 2

Analyse and evaluate an electricity generation and distribution system.

Outcome 3

Investigate motion and related energy transformations experimentally, analyse motion using Newton's law of motion in one and two dimensions.

Unit 4

Outcome 1

Apply wave concepts to analyse, interpret and explain the behaviour of light. Provide evidence for the nature of light and matter and analyse the data from experiments that support this evidence and explain the motion of objects moving at very large speeds using Einstein's theory of special relativity.

Outcome 2

Design and undertake a practical investigation related to waves, fields or motion, and present methodologies, findings, and conclusions in a scientific poster.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Electronics, other additional materials and exam papers
- Approximately $20.

PRODUCT DESIGN TECHNOLOGY – UNITS 1 & 2

The Product Design and Technology study examines product design changes in response to the changing needs of society. Central to VCE Product Design and Technology is design thinking, which is applied through the product design process, providing a structure for creative problem solving. For VCE Product Design and Technology students assume the role of a designer-maker. In adopting this role, they develop and apply knowledge of factors that influence design and address the design factors relevant to their design situation. The knowledge and use of resources is integral to product design. This subject is an exploration into the properties of Wood while learning about other areas in industry and applying techniques and skills to both communicate and execute design ideas.

AREAS OF STUDY

Unit 1
Sustainable Product Development
This unit focuses on the analysis, modification, and improvement of an existing product design with consideration of sustainability. Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. Students learn to create technical drawings similar to in industry and then produce their designed product using a range of materials, tools and equipment.

Unit 2
Collaborative Design
This unit focuses on Collaborative design, learning to design within a team and individually. 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. In this unit students gain inspiration from a historical or a contemporary design.

OUTCOMES

Unit 1

Outcome 1
Sustainable redevelopment of a product
Outcome 2
Producing and evaluating a redeveloped product

Unit 2

Outcome 1
Designing within a team
Outcome 2
Producing and evaluating within a team.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional materials and exam papers
- At least one excursion per semester. These will incur additional costs.
- Approximately $100

PRODUCT DESIGN TECHNOLOGY – UNITS 3 & 4

In Product Design & Technology students problem solve and explore the Design Process through theory and practice. In Unit 3 and 4 students are engaged in the design and development of a product that addresses the needs and wants of a potential end-user/s to meet the needs of preferred futures. This subject requires students to explore industry and industry standards when designing to meet a purpose while exploring sustainability and ethical practice of designers. Students use a range of 21st century skills including problem solving, critical thinking and collaboration. Students create a folio of work in Unit 3 utilising the design process to test and research suitable designs. In Unit 4 students use technical skills to build their product utilising industry skills including project management, risk assessment and understanding of materials and techniques. Students are encouraged to use wood but are also able to apply other materials such as fabric.

AREAS OF STUDY

Unit 3

Influences on design, development and production of products

In this area of study students explore examples of product design and innovation and evaluate their impact on sustainability, ethical and industry considerations.

Investigating opportunities for ethical design and production

Students apply design thinking to investigate, research, test and experiment when formulating a design brief for the ethical design of a product.

Developing a final proof of concept for ethical production

Students design a physical product that will be made in Unit 4. Students evaluate product concepts related to ethical design, synthesise and apply feedback to justify a final proof of concept, and plan to make the product safely.

Unit 4

Managing production for ethical designs

In this area of study, students develop their product designed in Unit 3. Students make a product that relates to ethics to address the needs or opportunities of an end user(s).

Evaluation and speculative design

This area of study focuses on the skills, production techniques and processes employed to make a product to suit the needs of an end-user/s.

Students explore how designers can be innovative and entrepreneurial in the adaptation and renewal of products, by using research and development to integrate new and emerging technologies and address market trends.

OUTCOMES

Unit 3

Outcome 1

Critique examples of ethical product design and innovation within industrial settings.

Outcome 2

Investigate a need or opportunity that relates to ethics and formulate a design brief, conduct research to analyse current market needs or opportunities and propose, evaluate and critique graphical product concepts.

Outcome 3

Document the product design process used to meet the needs of an end-user/s and commence production of the designed product.

Unit 4

Outcome 1

Implement a scheduled production plan, using a range of materials, tools and processes and managing time and other resources effectively and efficiently to safely make the product designed in Unit 3.

Outcome 2

Use data to evaluate a range of products, including making judgments about the success of each product, and discuss product designs in regard to entrepreneurial activity, innovation and sustainability.

ADDITIONAL COURSE REQUIREMENTS AND COSTS
Additional materials and exam papers $125.

PSYCHOLOGY – UNITS 1 & 2

VCE Psychology enables students to explore how people think, feel and behave using a biopsychosocial approach. Students consider biological, psychological, and social factors and their complex interactions in the understanding of psychological phenomena. The study explores the connection between the brain and behaviour by focusing on several key interrelated aspects of the discipline. An understanding of the complexities and diversity of psychology leads students to appreciate the interconnectedness between different content areas both within psychology, and across psychology and the other sciences.

AREAS OF STUDY

Unit 1

How are behaviour and mental processes shaped?

Human development involves changes in thoughts, feelings, and behaviours. In this unit, students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system.

Unit 2

How do external factors influence behaviour and mental processes?

The psychological development of an individual involves complex interactions between biological, psychological, and social factors. Students explore how these factors influence different aspects of a person's psychological development.

OUTCOMES

Unit 1

Outcome 1

Describe how understanding of brain structure and function has changed over time, how different areas of the brain coordinate different functions, and how brain plasticity and brain damage can change psychological functioning.

Outcome 2

Identify the varying influences of nature and nurture on a person's psychological development and explain different factors that may lead to typical or atypical psychological development.

Outcome 3

Investigate and communicate a substantiated response to a question related to brain function and/or development, including reference to at least two contemporary psychological studies and/or research techniques.

Unit 2

Outcome 1

Compare the sensations and perceptions of vision and taste and analyse factors that may lead to the occurrence of perceptual distortions.

Outcome 2

Identify factors that influence individuals to behave in specific ways and analyse ways in which others can influence individuals to behave differently.

Outcome 3

Design and undertake a practical investigation related to external influences on behaviour and draw conclusions based on evidence from collected data.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional materials and exam papers
- Excursions may also be organised throughout the course. These will incur additional costs.

PSYCHOLOGY – UNITS 3 & 4

Psychology is a broad discipline that incorporates both the scientific study of human behaviour through biological, psychological, and social perspectives and the systematic application of this knowledge to personal and social circumstances in everyday life. VCE Psychology enables students to explore how people think, feel, and behave using a biopsychosocial approach.

AREAS OF STUDY

Unit 3

How does experience affect behaviour and mental processes? The nervous system influences behaviour and the way people experience the world. In this unit, students examine both macro-level and micro- level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress.

Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours.

Unit 4

Sleep 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 sleep and consider how changes in levels of sleep can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors.

OUTCOMES

Unit 3

Outcome 1

Analyse how the functioning of the human nervous system enables a person to interact with the external world and evaluate the different ways in which stress can affect psychobiological functioning.

Outcome 2

Apply different approaches to explain learning to familiar and novel contexts and discuss memory as a psychobiological process.

Unit 4

Outcome 1

Analyse the demand for sleep and evaluate the effects of sleep disruption on a person's psychological functioning.

Outcome 2

Discuss the concept of mental wellbeing, apply a biopsychological approach to explain the development and management of specific phobia, and discuss protective factors that contribute to the maintenance of mental wellbeing.

Outcome 3

Design and conduct a scientific investigation related to mental processes and psychological functioning, and present an aim, methodology and method, results, discussion, and conclusion in a scientific poster.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional materials and exam papers
- Excursions may also be organised throughout the course. These will incur additional costs
- Approximately $10.

VISUAL COMMUNICATION DESIGN – UNITS 1 & 2

The Visual Communication Design study examines the way visual language can be used to convey ideas, information, and messages. Students learn the value of human-centred research methods, working collaboratively to discover design problems and understand the perspectives of stakeholders. Designers create and communicate through visual means to influence everyday life for individuals, communities and societies. Visual communication design relies on drawing as the primary component of visual language to support the conception and visualization of ideas. Consequently, the study emphasises the importance of developing a variety of drawing skills to visualise thinking and to present potential solutions.

In the Visual Communication Design program, students explore four distinct fields of design areas: **Objects,** encompassing Industrial Design, Fashion Design, Jewellery Design, and other forms of 3D Product object creation. **Messages**, involving both traditional and digital graphic design as well as packaging design. **Environments**, covering Architectural Design, Landscape Design, and Theatre Set Design. **Interactive Experiences**, comprising UX design, Game Design, and Digital Product Design.

AREAS OF STUDY

Unit 1

Finding, reframing and resolving design problems

In this area of study, students learn that designers not only deliver design solutions, but also find and reframe problems that can be complex, misunderstood or ill-defined. They draw on conceptions of 'good design' and apply research methods to create a range of design solutions using both manual and digital design methods.

Unit 2

Design contexts and connections

Unit 2 builds on understandings of visual communication practices developed in Unit 1. Students draw on conceptions of good design, human-centred research methods and influential design factors as they revisit the VCD design process, applying the model in its entirety. Practical tasks across the unit focus on the design of environments and interactive experiences. Students adopt the practices of design specialists working in fields such as architecture, landscape architecture and interior design, while discovering the role of the interactive designer in the realm of user-experience (UX).

OUTCOMES

Unit 1

Outcome 1 - Reframing design

Exploring design problems as a starting point to create a brief.

Outcome 2 - Solving communication design problems

Creating a brand identity / logo for the client of the brief in Outcome 1.

Outcome 3 - Designs influence and influences on design.

Designing sustainable solutions and presentation drawings for the field of Objects.

Unit 2

Outcome 1 - Design place and time

Designing solutions for issues of humanity in the field of Environments.

Outcome 2 - Cultural ownership and design

Exploring how designers navigate different cultural perspectives and legal obligations and creating individual iconography**.**

Outcome 3 - Designing interactive experiences

Developing and evaluating an interactive experience for a set audience.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional materials and exam papers.
- Excursions will incur additional costs.
- Approximately $135.

VISUAL COMMUNICATION DESIGN – UNITS 3 & 4

The Visual Communication Design study examines the way visual language can be used to convey ideas, information, and messages. Visual communication design relies on manual and digital drawings as the primary component of visual language to support the conception and visualisation of ideas. Students apply the Double Diamond Design Process to generate and develop visual communications. Students develop the skills to communicate final presentations of ideas through manipulation and organisation of design elements, design principles, selected media, materials, and methods of production.

In the Visual Communication Design program, students explore four distinct fields of design areas: **Objects,** encompassing Industrial Design, Fashion Design, Jewellery Design, and other forms of 3D Product object creation. **Messages**, involving both traditional and digital graphic design as well as packaging design. **Environments**, covering Architectural Design, Landscape Design, and Theatre Set Design. **Interactive Experiences**, comprising UX design, Game Design, and Digital Product Design.

AREAS OF STUDY

Unit 3
Visual communication in design practice

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

Students explore the Discover, Define and Develop phases of the VCD design process to address a selected design problem. They then begin the journey to creating final concepts for a specific client.

Unit 4
Delivering design solutions

In this unit students continue to explore the VCD design process, resolving design concepts and presenting solutions for two distinct communication needs. Students choose how best to present design solutions, considering aesthetic impact and the communication of ideas.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional materials and exam papers
- Excursions these will incur additional costs.
- Approximately $165.

OUTCOMES

Unit 3
Outcome 1 – Professional design practice

Students write a comparison analysis of contemporary designers and practical responses to designers' practice.

Outcome 2 – Design analysis

Students compare and analyse design examples from selected field(s) of design practice, describing how aesthetic considerations contribute to the effective communication of information or ideas.

Outcome 3 – Defining problems and developing ideas

Developing a brief and generating ideas.
Apply design thinking in preparing a brief with two communication needs for a client, undertaking research and generating a range of ideas relevant to the brief.

Unit 4

Outcome 1 – Refining and resolving concepts

Develop distinctly different concepts for each communication need and devise a pitch to present concepts to an audience, evaluating the extent to which these concepts meet the requirements of the brief.

Outcome 2 – Presenting design solutions

Produce a final visual communication presentation for each communication need that satisfies the requirements of the brief.

VCE VOCATIONAL MAJOR SUBJECT OVERVIEW

VCE VM LITERACY: UNITS 1-4

VCE Vocational Major Literacy empowers students to read, write, speak and listen in different contexts. Literacy enables students to understand the different ways in which knowledge and opinion are represented and developed in daily life in the 21st Century. The development of literacy in this study design is based upon applied learning principles, making strong connections between students' lives and their learning. By engaging with a wide range of content drawn from a range of local and global cultures, forms and genres, including First Nations Peoples' knowledge and voices, students learn how information can be shown through print, visual, oral, digital and multimodal representations.

Along with the literacy practices necessary for reading and interpreting meaning, students will develop their capacity to respond to information. Listening, viewing, reading, speaking and writing are developed so that students can communicate effectively both in writing and orally. A further key part of literacy is that students develop their understanding of how written, visual and oral communication are designed to meet the demands of different audiences, purposes and contexts, including workplace, vocational and community contexts. This understanding helps students develop their own writing and oracy, so that they become confident in their use of language in a variety of settings.

The development of literate practices includes an emphasis on critical literacy so that they understand the social nature of language and how texts position readers in relation to particular ideologies.

VCE VM NUMERACY: UNITS 1-4

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.

This study 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.

The contexts are the starting point and the focus, and are framed in terms of personal, financial, civic, health, recreational and vocational classifications. 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: UNITS 1-4

VCE Vocational Major Personal Development Skills (PDS) takes an active approach to personal development, self-realisation and citizenship by exploring interrelationships between individuals and communities. PDS focuses on health, wellbeing, community engagement and social sciences, and provides a framework through which students seek to understand and optimise their potential as individuals and as members of their community.

This study provides opportunities for students to explore influences on identity, set and achieve personal goals, interact positively with diverse communities, and identify and respond to challenges. Students will develop skills in self-knowledge and care, accessing reliable information, teamwork, and identifying their goals and future pathways.

PDS explores concepts of effective leadership, self-management, project planning and teamwork to support students to engage in their work, community and personal environments. Through self-reflection, independent research, critical and creative thinking and collaborative action, students will extend their capacity to understand and connect with the world they live in, and build their potential to be resilient, capable citizens.

VCE VM WORK RELATED SKILLS: UNITS 1-4

VCE Vocational Major Work Related Skills (WRS) examines a range of skills, knowledge and capabilities relevant to achieving individual career and educational goals. Students will develop a broad understanding of workplace environments and the future of work and education, to engage in theoretical and practical planning and decision-making for a successful transition to their desired pathway.

The study considers four key areas: the future of work; workplace skills and capabilities; industrial relations and the workplace environment and practice; and the development of a personal portfolio.

Students preparing to transition to the workforce and to further education are best placed for success when they have confidence, self-awareness and the skills to interpret relevant information and make informed decisions about their future goals. Students will have the opportunity to apply the knowledge and skills gained from this study in the classroom environment and through Structured Workplace Learning (SWL).

In WRS, students will develop the knowledge, skills and experiences to be active and engaged citizens and future members of the workforce, with the ability to communicate effectively, advocate for themselves and be adaptable to change. The study of WRS leads to opportunities across all industries and areas of work as well as in further education and provides young people with the tools they need to succeed in the future.

ADDITIONAL COURSE REQUIREMENTS AND COSTS

- Additional course materials.
- Approximately $55.
- Applied learning is a major component of this course and will include at least one excursion per term that will incur additional costs.