An e of subjects offered from Year 9 – 12 at Bayview
Introduction

At Bayview College we believe education is a holistic experience, engaging the mind, body and spirit of every student. We believe every child is a unique individual who learns in their own way, in their own timing. Our curriculum aims to reflect this, offering students a breadth of experiences while allowing sufficient time and space to engage deeply in the course content. In this handbook you will find a wealth of information about the curriculum we offer.

Curriculum Years 7, 8, 9 and 10

All Bayview College students have access to the core subjects of English, Faith & Values, Mathematics, History, Geography, Science, Health and Physical Education. Students on an Individualised Learning Program (ILP) may deviate from these core subjects but will have access to all learning areas. These subjects provide strong foundations for further study, vocation studies or work. From Year 9, students can choose to continue their study of Japanese as their LOTE. Students who continue their LOTE studies into the Senior Years have the opportunity to participate in an exchange program to Japan.

At Years 8, 9 and 10, students begin to specialise and are able to pursue their passions by selecting elective subjects from within the Visual and Performing Arts, Food and Nutrition, Information Technology, Health and Physical Education, Humanities and Science learning areas. The elective program enables students to begin to specialise and further develop their skills and knowledge in their interest areas.

Students who have demonstrated a good work ethic and consistent sound academic progress can elect to work at an advanced level and begin VCE studies whilst in Year 10, or commence TAFE studies. Students who take this option have the capacity to broaden their choices for future study.

In Year 11 and 12, students select from a broad range of VCE studies and attend seminars for Faith and Values. Students can also choose to undertake a School Based Apprenticeship as part of their academic program.

At Bayview College we believe that learning is a fulfilling and life-long process. It is enhanced and nurtured by:

- Interaction with parents
- Respect and friendship between students and teachers
- An acceptance that each student is an individual
- Opportunities for parents to contribute to the learning process
- Caring, motivated, skilled and qualified teachers
- Systematic monitoring and regular reporting of student progress
- A contribution to the community outside the academic program

The Core subjects are:

- English
- Faith & Values
- Geography
- History
- Mathematics
- Science
- Physical Education
The Flagship Program

Bayview College offers students a unique wellbeing program based upon the College Crest. These programs focus on the unique stage of development the students are in and incorporate a range of learning activities, experiences and opportunities.

Year 7: Wave
The Year 7 WAVE Program covers skills that are required to successfully transition from primary to secondary school: organisation, building positive relationships, resilience and at home study skills are the key focus.

Year 8: Anchor
The ANCHOR program for year 8 provides an opportunity for students to develop team work and a social conscience through the development and delivery of projects within the broader community. Students will develop an understanding of their place in the community whilst creating and sustaining positive relationships.

Year 9: Circle
The CIRCLE program for year 9 combines Faith & Values, aspects of Health Education, and Environmental Science. Students work in teams, dealing with real world problems, as they develop a stronger sense of self-worth and an understanding of their capacity to contribute to building a better world.

Year 10 (& VCE): Horizons
The HORIZON program, Years 10 – 12, is focussed on preparation for the world beyond school: vocational education, work experience, TAFE and University visits, leadership development, and exposure to a range of careers and training practitioners. In addition a structured study skills program is delivered across the 3 years.
Year 7 CURRICULUM MAP

Year 7 Curriculum

Core Subjects
- Faith & Values
- English
- Mathematics
- Science
- Humanities: History & Geography
- PE/Health
- LOTE Japanese

Wave Program
- Building Positive Relationships
- Organisation Skills
- Study Skills

Specialist Subjects
- Performing Arts
- Design Tech: Textiles
- Design Tech: Wood
- Food Technology
- Digital Design
- Visual Design

* Wave Program takes part each fortnight for two periods and focuses on relevant areas of life and schooling for Year 7 students.

* Specialist Arts / Technology subjects are designed to help students make more informed choices in their Year 8-10 electives.

** Year 7 students undertake all six Specialist Subjects.
Year 8 CURRICULUM MAP

Year 8 Curriculum

Core Subjects
- Faith & Values
- English
- Mathematics
- Science
- Humanities: History & Geography
- PE / Health
- LOTE Japanese

Anchor Program
- Building Positive Relationships
- Organisation Skills
- Study Skills
- Service Learning

Elective Subjects
- Digital Design: App & Web
- Visual Design
- Food Technology
- Performing Arts: Music / Drama
- Design Tech: Wood
- Design Tech: Textiles
- Robotics

* Anchor Program takes part each fortnight for two periods and focuses on relevant areas of life and schooling for Year 8 students.

* Students wishing to undertake all elective subjects will have access to the same subjects as part of their Year 9 elective program.
Year 9 CURRICULUM MAP

Core subjects
- English
- Mathematics
- Science
- PE / Health

Specialist Subject Areas
- Language & Literature
- Science
- Humanities
- Health & Physical Education
- Visual & Performing Arts
- Product & Digital Technology

Circle Program
- Community Service
- Faith & Values
- Health
- Environmental Science

LOTE: Japanese
- Humanities: History & Geography

* As part of the Year 9 & 10 program, students may opt to study LOTE: Japanese in place of Humanities. Students wishing to study both may select from the Humanities electives as part of their electives program.

* Circle Program takes part each fortnight for two periods and focusses on relevant areas of life and schooling for Year 9 students.

* Students select from a wide range of subjects from these learning areas as part of their elective program.
**Year 10 Curriculum Map**

**Year 10 Curriculum**

- **Core subjects**
  - Faith & Values
  - VCE Unit 2
  - Ethics
  - English
  - Mathematics
  - Science
  - PE/Health

- **Horizons Program**
  - Careers
  - Study Skills
  - Vocational Preparation

- **Specialist Subject Areas**
  - Language & Literature
  - Science
  - Humanities
  - Health & Physical Education
  - Visual & Performing Arts
  - Product & Digital Technology
  - Accelerated VCE available by negotiation

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*Horizons Program takes part each fortnight for two periods and focuses on relevant areas of life and schooling for Year 10 students.*

*As part of the Year 9 & 10 program, students may opt to study LOTE: Japanese in place of Humanities. Students wishing to study both may select from the Humanities electives as part of their electives program.*
Core subjects are undertaken by all students and form the basis of Bayview College Curriculum. Students on an Individual Learning Plan may sometimes be exempt from particular classes but in most cases, differentiation is applied to ensure each student has equal opportunity to participate in the course on offer.

English

The Australian Curriculum aims to ensure that students:

- learn to listen to, read, view, speak, write, create and reflect on increasingly complex and sophisticated spoken, written and multimodal texts across a growing range of contexts with accuracy, fluency and purpose
- appreciate, enjoy and use the English language in all its variations and develop a sense of its richness and power to evoke feelings, convey information, form ideas, facilitate interaction with others, entertain, persuade and argue
- understand how Standard Australian English works in its spoken and written forms and in combination with non-linguistic forms of communication to create meaning
- develop interest and skills in inquiring into the aesthetic aspects of texts, and develop an informed appreciation of literature

The English curriculum is built around the three interrelated strands of language, literature and literacy. Teaching and learning programs should balance and integrate all three strands. Together, the strands focus on developing students’ knowledge, understanding and skills in listening, reading, viewing, speaking, writing and creating. Learning in English builds on concepts, skills and processes developed in earlier years, and teachers will revisit and strengthen these as needed.

Year 7 and 8

In Years 7 and 8, students interact with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments. They experience learning in both familiar and unfamiliar contexts that relate to the school curriculum, local community, regional and global contexts.

Students engage with a variety of texts for enjoyment. They listen to, read, view, interpret, evaluate and perform a range of spoken, written and multimodal texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These include various types of media texts including newspapers, magazines and digital texts, early adolescent novels, non-fiction, poetry and dramatic performances. Students develop their understanding of how texts, including media texts, are influenced by context, purpose and audience.

The range of literary texts for Foundation to Year 10 comprises Australian literature, including the oral narrative traditions of Aboriginal and Torres Strait Islander Peoples, as well as the contemporary literature of these two cultural groups, and classic and contemporary world literature, including texts from and about Asia.

Literary texts that support and extend students in Years 7 and 8 as independent readers are drawn from a range of realistic, fantasy, speculative fiction and historical genres and involve some challenging and unpredictable plot sequences and a range of non-stereotypical characters. These texts explore themes of interpersonal relationships and ethical dilemmas within real-world and fictional settings and represent a variety of perspectives. Informative texts present technical
and content information from various sources about specialised topics. Text structures are more complex including chapters, headings and subheadings, tables of contents, indexes and glossaries. Language features include successive complex sentences with embedded clauses, unfamiliar technical vocabulary, figurative and rhetorical language, and information supported by various types of graphics.

Students create a range of imaginative, informative and persuasive types of texts, for example narratives, procedures, performances, reports and discussions, and continue to create literary analyses and transformations of texts.

**Year 9 and 10**

In Years 9 and 10, students interact with peers, teachers, individuals, groups and community members in a range of face-to-face and online/virtual environments. They experience learning in familiar and unfamiliar contexts, including local community, vocational and global contexts.

Students engage with a variety of texts for enjoyment. They interpret, create, evaluate, discuss and perform a wide range of literary texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These include various types of media texts, including newspapers, film and digital texts, fiction, non-fiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references. Students develop a critical understanding of the contemporary media, and the differences between media texts.

The range of literary texts comprises Australian literature, including the oral narrative traditions of Aboriginal and Torres Strait Islander peoples, as well as the contemporary literature of these two cultural groups, and classic and contemporary world literature, including texts from and about Asia.

Literary texts that support and extend students in Years 9 and 10 as independent readers are drawn from a range of genres and involve complex, challenging and unpredictable plot sequences and hybrid structures that may serve multiple purposes. These texts explore themes of human experience and cultural significance, interpersonal relationships, and ethical and global dilemmas within real-world and fictional settings and represent a variety of perspectives.

Informative texts represent a synthesis of technical and abstract information (from credible/verifiable sources) about a wide range of specialised topics. Text structures are more complex including chapters, headings and subheadings, tables of contents, indexes and glossaries. Language features include successive complex sentences with embedded clauses, a high proportion of unfamiliar and technical vocabulary, figurative and rhetorical language, and dense information supported by various types of graphics presented in visual form. Students create a range of imaginative, informative and persuasive types of texts including narratives, procedures, performances, reports, discussions, literary analyses, transformations of texts and reviews.

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**Faith and Values**

**Year 7 and 8**

Students are encouraged throughout the Faith and Values program to consider the role that faith has in people’s lives. By developing an understanding of Christian traditions, an appreciation of other faith perspectives and knowledge of the rituals associated with religion, students develop a deeper understanding of the human story.

In Year 7 the focus is on community, the Bible, the life and example of Jesus and the traditional Christian celebrations such as Lent, Easter, Advent and Christmas.
In Year 8 the Christian celebrations are studied further in relation to the celebrations of other world religions. The Bible is studied with more depth and how and why to care for our community is explored using examples from the Bible.

**Year 9**

*This subject content is now embedded in the Circle program*

Students undertake an exploration of personal Christian values and their significance to adolescents. They will study Christian values in relationship to the Ten Commandments. Students will undertake studies of stories of creation and undertake studies of environmental issues to gain an understanding of Christian stewardship of the environment. They will further commence a study of Christianity and morality, the concept of Social Justice and an exploration of human rights and media issues.

**Year 10**

**VCE Religion and Society Unit 2: Ethics and Morality**

*Subject Description*

Today, religious and philosophical traditions compete with powerful alternative sources of moral values represented in the media and popular culture. Nevertheless, society still relies on cultural heritages that contain a variety of ethical perspectives as well as numerous values centred on human dignity and basic justice. In this unit students survey various approaches to ethical decision-making and then explore at least two religious traditions in detail. They explore contemporary ethical issues in the light of their investigations into ethical decision-making and moral viewpoints in religious traditions.

**Areas of study**

1. Ethical method
2. Religion and morality
3. Contemporary ethical issues

**Learning Outcomes**

On completion of this unit the student should be able to:

- explain ethical decision-making in pluralist society.
- explain the ethical perspectives and moral viewpoints upheld by at least two religious traditions in pluralist society.
- analyse and evaluate two or more debates on contemporary ethical issues in pluralist society.

**Geography**

**Year 7**

The Australian Curriculum aims to ensure that students:

- Understand the importance of resources with particular interest in water
- Apply concepts of interconnection and scale to explain the importance of water and measures of liveability
- Develop their understanding of the concepts of change and sustainability
- Describe the effectiveness of strategies designed to improve the liveability of places within the world

The Geography curriculum is focused around Geographical knowledge and understanding and Geographical inquiry and skills. Within the knowledge and understanding aspects the students will focus on 2 units:
Unit 1 Water in the world – focusing on the characteristics of environmental resources such as water and how the movement of water through the environment connects places together. The role water plays in different places and cultures is explored using case studies and resources. The management of water resources in Australia and other regions of the world is explored with focus on what can be done to save our water.

Unit 2 Place and liveability – focusing on why people live where they do, how is liveability measured and perceived and how the liveability of places be improved. Case studies within Africa, Australia and Asia are used to show the vulnerability of our world.

Within the inquiry and skills aspects the students will develop 5 main areas enabling them to successfully achieve the Australian Curriculum Standards for Geography.

These skills include:

- Observing, questioning and planning
- Collecting, recording, evaluating and representing
- Interpreting, analysing and concluding
- Communicating
- Reflecting and responding.

Year 8

The Australian Curriculum aims to ensure that students:

- Understand the formation of geomorphological landscapes with particular focus on oceans
- Apply concepts of change, interconnection and scale to explain the formation of landscapes with particular focus on beaches
- Develop strategies for the management and protection of landscapes
- Analyse the effects people have on landscapes

The Geography curriculum is focused around Geographical knowledge and understanding and Geographical inquiry and skills. Within the knowledge and understanding aspects the students will focus on 2 units:

Unit 1 Landforms and Landscapes – focusing on investigating geomorphology through a study of landscapes and their landforms. It examines the processes that shape individual landforms, the values and meanings placed on landforms and landscapes by diverse cultures, hazards associated with landscapes and management of landscapes. Case studies are investigated drawn from Australia and throughout the world.

Unit 2 Changing Nations – focusing on the changing human geography of countries, as revealed by shifts in population distribution. Processes of urbanisation are explored and a study of a country of the Asia regions is used to show how urbanisation changes the economies and societies of low – and middle – income countries. Issues related to the management and future of Australia’s urban areas are explored.

Within the inquiry and skills aspects the students will develop 5 main areas enabling them to successfully achieve the Australian Curriculum Standards for Geography.

These skills are:

- Observing, questioning and planning
- Collecting, recording, evaluating and representing
- Interpreting, analysing and concluding
- Communicating
- Reflecting and responding.
Year 9
There are two units of study in the Year 9 curriculum for Geography: **Biomes and food security** and **Geographies of interconnections**.

**Biomes and food security** focuses on investigating the role of the biotic environment and its role in food and fibre production. This unit examines the biomes of the world, their alteration and significance as a source of food and fibre, and the environmental challenges and constraints on expanding food production in the future. These distinctive aspects of biomes, food production and food security are investigated using studies drawn from Australia and across the world.

**Geographies of interconnections** focuses on investigating how people, through their choices and actions, are connected to places throughout the world in a wide variety of ways, and how these connections help to make and change places and their environments. This unit examines the interconnections between people and places through the products people buy and the effects of their production on the places that make them. Students examine the ways that transport and information and communication technologies have made it possible for an increasing range of services to be provided internationally, and for people in isolated rural areas to connect to information, services and people in other places. These distinctive aspects of interconnection are investigated using studies drawn from Australia and across the world.

The content of this year level is organised into two strands: **Geographical Knowledge and Understanding and Geographical Inquiry and Skills**.

**Learning Outcomes**
On completion of this unit the student should be able to demonstrate competency in:
- explaining how geographical processes change the characteristics of places.
- predicting changes in the characteristics of places over time and identify the possible implications of change for the future.
- analysing interconnections between people, places and environments and explain how these interconnections influence people, and change places and environments.
- proposing explanations for distributions and patterns over time and across space and describe associations between distribution patterns.
- analysing alternative strategies to a geographical challenge using environmental, social and economic criteria and propose and justify a response.

Year 10
There are two units of study in the Year 10 curriculum for Geography: **Environmental change and management** and **Geographies of human wellbeing**.

**Environmental change and management** focuses on investigating environmental geography through an in-depth study of a specific environment. The unit begins with an overview of the environmental functions that support all life, the major challenges to their sustainability, and the environmental worldviews including those of Aboriginal and Torres Strait Islander Peoples that influence how people perceive and respond to these challenges. Students investigate a specific type of environment and environmental change in Australia and one other country. They apply human environment systems thinking to understand the causes and consequences of the change and geographical concepts and methods to evaluate and select strategies to manage the change.

**Geographies of human wellbeing** focus on investigating global, national and local differences in human wellbeing between places. This unit examines the different concepts and measures of human wellbeing, and the causes of global differences in these measures between countries. Students explore spatial differences in wellbeing within and between countries, and evaluate the differences from a variety of perspectives. They explore programs designed to reduce the gap
between differences in wellbeing. These distinctive aspects of human wellbeing are investigated using studies drawn from Australia, India and across the world as appropriate.

The content of this year level is organised into two strands: Geographical Knowledge and Understanding and Geographical Inquiry and Skills.

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:

- explaining how the interaction between geographical processes at different scales change the characteristics of places.
- predicting changes in the characteristics of places and environments over time, across space and at different scales and explain the predicted consequences of change.
- identifying, analysing and explaining significant interconnections between people, places and environments and explain changes that result from these interconnections and their consequences.
- proposing explanations for distributions, patterns and spatial variations over time, across space and at different scales, and identify and describe significant associations between distribution patterns.
- evaluating alternative views on a geographical challenge and alternative strategies to address this challenge using environmental, social and economic criteria and propose and justify a response.

History

Year 7
The Year 7 curriculum introduces a study of the history of the ancient world. Students are introduced to the skills historians use to learn about and understand the past. The content includes an overview of the ancient world focusing on the theory that people moved out of Africa and migrated to other parts of the world. The evidence for the emergence and establishment of ancient societies and the key features of ancient societies. An in depth study is undertaken of ancient Greece where we look at the physical features of ancient Greece and how they influenced the civilisation that developed there. What were the roles of key groups in Athenian and Spartan society. The beliefs, values and practices of the ancient Greeks. Conflicts and contacts within and with other societies and a study of a significant individual in ancient Greek society.

Year 8
The Year 8 curriculum focuses on the process of transformation from the ancient world to the modern world. Key questions include: How did societies change from the end of the ancient period to the beginning of the modern age? What key beliefs and values emerged and how did they influence societies? What were the causes and effects of contact between societies in this period? What significant people, groups and ideas from this period have influenced the world today? The major focus is on Medieval Europe and the way of life, the roles and relationships of different groups in society, during this period. We study continuity and change in society, especially relating to crime and punishment, and how the Catholic Church dominated society. Students look briefly at Japan under the Shoguns and are able to make comparisons between the way of life in Shogunate Japan and Medieval Europe.

Year 9
The Making of the Modern World
The Year 9 curriculum provides a study of the history of the making of the modern world from 1750 to 1918. It was a period of industrialisation and rapid change in the ways people lived, worked
and thought. It was an era of nationalism and imperialism, and the colonisation of Australia was part of the expansion of European power. The period culminated in World War I 1914-1918, the ‘war to end all wars’.

The content provides opportunities to develop historical understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts may be investigated within a particular historical context to facilitate an understanding of the past and to provide a focus for historical inquiries.

The history content at this year level involves two strands: Historical Knowledge and Understanding and Historical Skills. These strands are interrelated and are taught in an integrated way; and in ways that are appropriate to our specific local contexts. The order and detail in which they are taught are programming decisions.

Key inquiry questions
- What were the changing features of the movements of people from 1750 to 1918?
- How did new ideas and technological developments contribute to change in this period?
- What was the origin, development, significance and impact of imperialism in this period?
- What was the significance of World War I?

Year 10
The Modern World and Australia
The Year 10 curriculum provides a study of the history of the modern world and Australia from 1918 to the present, with an emphasis on Australia in its global context. The twentieth century became a critical period in Australia’s social, cultural, economic and political development. The transformation of the modern world during a time of political turmoil, global conflict and international cooperation provides a necessary context for understanding Australia’s development, its place within the Asia-Pacific region, and its global standing.

The content provides opportunities to develop historical understanding through key concepts, including evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability. These concepts may be investigated within a particular historical context to facilitate an understanding of the past and to provide a focus for historical inquiries.

The history content at this year level involves two strands: Historical Knowledge and Understanding and Historical Skills. These strands are interrelated and should be taught in an integrated way, and in ways that are appropriate to specific local contexts. The order and detail in which they are taught are programming decisions.

Key inquiry questions
- How did the nature of global conflict change during the twentieth century?
- What were the consequences of World War II? How did these consequences shape the modern world?
- How was Australian society affected by other significant global events and changes in this period?

Mathematics

Year 7 & 8
Year 7 and 8 Math’s draws on the foundations built in primary school, this prior understanding prepares students for more abstract challenges. Previously established
mathematical ideas can be drawn upon in unfamiliar sequences and combinations to solve non-routine problems and to consequently develop more complex mathematical ideas. Students will also make connections between mathematical concepts and their application in their world. Students will begin to be able to represent numbers in a variety of ways; to develop an understanding of the benefits of algebra, through building algebraic models and applications and the various applications of geometry; to estimate and select appropriate units of measure; to explore ways of working with data to allow a variety of representations; and to make predictions about events based on their observations. It focuses on building the foundation knowledge and practical skills required to both study VCE Mathematics and to use Mathematics in real life situations. Thinking and problem solving skills will be taught and used throughout the topics studied. Information technology will be integrated into the classroom, with activities and assessment being presented in many forms. Students requiring extension or modification in mathematics will be supported with individualised programs. Wednesday Period 7 after school classes provide extra tutoring by the College’s math’s teachers and opportunities to participate in math’s competitions will be offered.

Topics to be studied include:

Year 7
- Positive and Negative integers
- Indices and Primes
- Patterns and Algebra
- Rational Numbers
- Coordinates and Cartesian planes
- Decimals and percentages
- Measurement
- Geometry
- Solving Equations
- Probability and Data

Year 8
- Integers
- Index Laws
- Real numbers
- Percentages
- Algebra
- Measurement
- Probability
- Data
- Linear equations
- Coordinates and linear graphs
- Ratios and Rates.

Assessment structure:
A range of tasks must be satisfactorily completed to meet the requirements of the course. Assessment items will include:

1. Topic tests
2. Assignment/Project tasks
3. Workbook – an accurate record of all class work documented and detailed answers and accounts

Year 9
The proficiency strands Understanding, Fluency, Problem Solving and Reasoning are an integral part of mathematics content across the three content strands: Number and Algebra, measurement and Geometry, and Statistics and Probability. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics.

At this year level
Understanding- describing the relationship between graphs and equations, simplifying a range of algebraic expressions, explaining the use of relative frequencies to estimate probabilities, and the use of the trigonometric ratios for right-angle triangles.
**Fluency** - applying the index laws to expressions with integer indices, expressing numbers in scientific notation, listing outcomes for experiments and developing familiarity with calculations involving the Cartesian plane and calculating areas of shapes and surface areas of prisms

**Problem Solving** - formulating, and modeling practical situations involving surface areas and volumes of right prisms, applying ratio and scale factors to similar figures, solving problems involving right-angle trigonometry, and collecting from secondary sources to investigate an issue.

**Reasoning** - following mathematical arguments, evaluating media reports and using statistical knowledge to clarify situations, developing strategies in investigating similarity and sketching linear graphs.

Thinking and problem solving skills will be taught and used throughout the topics studied. Information technology will be integrated into the classroom, with activities and assessment being presented in many forms.

Students requiring extension or modification in mathematics will be supported with individualised work programs. Wednesday Period 7 after school classes provide extra tutoring by the College’s math’s teachers and opportunities to participate in math’s competitions will be offered.

**Assessment structure for Year 9 and 10 Mathematics**

A range of tasks must be satisfactorily completed to meet the requirements of the course. Assessment items will include:

1. Topic tests
2. Assignment/Project tasks
3. Workbook – an accurate record of all class work documented and detailed answers and accounts

**Year 10**

The proficiency strands **Understanding, Fluency, Problem Solving and Reasoning** are an integral part of mathematics content across the three content strands: **Number and Algebra, Measurement and Geometry, and Statistics and Probability**. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics.

**At this year level**

**Understanding** - applying the four operations to algebraic fractions, finding unknowns in formulas after substitution, making the connection between equations of relations and their graphs, comparing simple and compound in financial contexts and determining probabilities of two and three step experiments.

**Fluency** - factorising and expanding algebraic expressions, using a range of strategies to solve equations and using calculations to investigate the shape of datasets

**Problem Solving** - calculating the surface area and volume of a diverse range of prisms to solve practical problems, finding unknown lengths and angles using applications of trigonometry, using algebraic and graphical techniques to find solutions to simultaneous equations and inequalities, and investigating independence of events

**Reasoning** - formulating geometric proofs involving congruence and similarity, interpreting and evaluating media statements and interpreting and comparing data sets.

Thinking and problem solving skills will be taught and used throughout the topics studied. Information technology will be integrated into the classroom, with activities and assessment being presented in many forms.
Students requiring extension or modification in mathematics will be supported with individualised work programs. Wednesday Period 7 after school classes provide extra tutoring by the College’s math’s teachers and opportunities to participate in math’s competitions will be offered.

**Assessment structure for Year 9 and 10 Mathematics**

A range of tasks must be satisfactorily completed to meet the requirements of the course. Assessment items will include:

4. Topic tests
5. Assignment/Project tasks
6. Workbook – an accurate record of all class work documented and detailed answers and accounts

### Science

**Year 7 & 8**

Year 7 and 8 Science introduces students to the scientific method of investigation and reporting. It focuses on building the foundation knowledge and practical skills required to study biology, physics, chemistry and earth sciences in later years of schooling. Students will learn to work safely and effectively in the laboratory. They will begin to analyse and interpret data and to write scientific reports in the correct format. Thinking and problem solving skills will be taught and used throughout the topics studied. Information technology will be integrated into the classroom, with activities and assessment being presented in many forms.

**Topics to be studied include:**

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**Assessment structure**

A range of tasks must be satisfactorily completed to meet the requirements of the course. Assessment items will include:

1. Topic tests
2. Assignment tasks
3. Practical work – performed in a safe manner following correct procedures and illustrating findings
4. Practical reports – prepared using the correct format
5. Workbook – an accurate record of all class work documented and detailed answers and accounts
Year 9
By the end of Year 9, students explain chemical processes and natural radioactivity in terms of atoms and energy transfers and describe examples of important chemical reactions. They describe models of energy transfer and apply these to explain phenomena. They explain global features and events in terms of geological processes and timescales. They analyse how biological systems function and respond to external changes with reference to interdependencies, energy transfers and flows of matter. They describe social and technological factors that have influenced scientific developments and predict how future applications of science and technology may affect people’s lives.

Students design questions that can be investigated using a range of inquiry skills. They design methods that include the control and accurate measurement of variables and systematic collection of data and describe how they considered ethics and safety. They analyse trends in data, identify relationships between variables and reveal inconsistencies in results. They analyse their methods and the quality of their data, and explain specific actions to improve the quality of their evidence. They evaluate others’ methods and explanations from a scientific perspective and use appropriate language and representations when communicating their findings and ideas to specific audiences.

Year 10
By the end of Year 10, students analyse how the periodic table organises elements and use it to make predictions about the properties of elements. They explain how chemical reactions are used to produce particular products and how different factors influence the rate of reactions. They explain the concept of energy conservation and represent energy transfer and transformation within systems. They apply relationships between force, mass and acceleration to predict changes in the motion of objects. Students describe and analyse interactions and cycles within and between Earth’s spheres. They evaluate the evidence for scientific theories that explain the origin of the universe and the diversity of life on Earth. They explain the processes that underpin heredity and evolution. Students analyse how the models and theories they use have developed over time and discuss the factors that prompted their review.

Students develop questions and hypotheses and independently design and improve appropriate methods of investigation, including field work and laboratory experimentation. They explain how they have considered reliability, safety, fairness and ethical actions in their methods and identify where digital technologies can be used to enhance the quality of data. When analysing data, selecting evidence and developing and justifying conclusions, they identify alternative explanations for findings and explain any sources of uncertainty. Students evaluate the validity and reliability of claims made in secondary sources with reference to currently held scientific views, the quality of the methodology and the evidence cited. They construct evidence-based arguments and select appropriate representations and text types to communicate science ideas for specific purposes.

Health & Physical Education

Years 7 and 8
The Year 7 and 8 curriculum expands students’ knowledge, understanding and skills to help them achieve successful outcomes in classroom, leisure, social, movement and online situations. Students learn how to take positive action to enhance their own and others’ health, safety and wellbeing. They do this as they examine the nature of their relationships and other factors that influence people’s beliefs, attitudes, opportunities, decisions, behaviours and actions. Students
demonstrate a range of help-seeking strategies that support them to access and evaluate health and physical activity information and services.

The curriculum for Years 7 and 8 supports students to refine a range of specialised knowledge, understanding and skills in relation to their health, safety, wellbeing, and movement competence and confidence. Students develop specialised movement skills and understanding in a range of physical activity settings. They analyse how body control and coordination influence movement composition and performance and learn to transfer movement skills and concepts to a variety of physical activities. Students explore the role that games and sports, outdoor recreation, lifelong physical activities, and rhythmic and expressive movement activities play in shaping cultures and identities. They reflect on and refine personal and social skills as they participate in a range of physical activities.

Focus areas to be addressed in Years 7 and 8 include:
- Alcohol and other drugs
- Food and nutrition
- Health benefits of physical activity
- Mental health and wellbeing
- Relationships and sexuality
- Safety
- Challenge and adventure activities
- Games and sports
- Lifelong physical activities
- Rhythmic and expressive movement activities

Years 9 and 10
The Years 9 and 10 curriculum supports students to refine and apply strategies for maintaining a positive outlook when making decisions and practise skills for maintaining respectful relationships and evaluating behavioural expectations in different leisure, social, movement and online situations. Students learn to apply health and physical activity information to devise and implement personalised plans for maintaining a healthy and active lifestyle. They also experience different roles that contribute to successful participation in physical activity by all. Students propose strategies that support the development of preventive health practices that build and optimise the health and wellbeing of their communities.

In Years 9 and 10, students learn to apply more specialised movement skills and complex movement concepts and strategies in a range of movement contexts and environments. They also are provided with opportunities to use a range of concepts to evaluate and refine their own and others’ movement performances. Students analyse how physical activity and sport participation can influence an individual’s identity and explore the role participation plays in shaping cultures.

The curriculum also provides opportunities for students to refine and consolidate the personal and social skills necessary to demonstrate leadership and collaboration in a range of physical activities.

In Years 9 and 10, students explore questions such as:
- How can I maintain a healthy, active, and safe lifestyle as I get older?
- What factors influence the challenges and decisions I may face in the future and how can I respond effectively to these challenges and decisions?
- How can I access strategies or resources to support me to make health decisions that are in the best interest of others and me?
- How do I support and contribute to community health and wellbeing?
- How can I improve my movement performances and those of others?
• How do meanings of health and physical activity change across communities and cultures?
• How can my behaviours and actions when participating in physical activities affect and influence the experience of others who are also participating?

The health contexts to be explored in Years 9 to 10 include, but are not limited to, alcohol and drugs, food and nutrition, health benefits of physical activity, mental health and wellbeing, relationships and sexuality and safety.

The movement and physical activity contexts to be explored in Years 9 to 10 include, but are not limited to, challenge and adventure, games and sports, health-related and rhythmic and expressive movement activities.

Specialist Subjects – Year 7

Digital Design
This subject is designed to expose students to a range of learning areas involving digital design and technological implementation. Students learn how to form a design brief, develop a project plan and deliver a finished product. App design, web design and robotics are key areas of this course. Throughout the course, students will develop a basic understanding of app and web design and experience a 'taster' of robotics as undertaken in the Year 8 Digital Design course. This subject will lead into Year 8 Digital Design and other tech related subjects in the Year 8, 9 and 10 elective program. App and web design are upcoming new industries that present today's young people with exciting new employment prospects.

On completion of this unit students will:
• Prepare and present a project proposal
• Apply their learning in an app design challenge
• Have developed a basic webpage using online editing tools
• Plan, organise and execute a design task within a given timeframe

Food Technology
The purpose of the course is to introduce beginner cooks to a kitchen where they can work safely, hygienically, logically and confidently. Students develop an understanding of kitchen routines and procedures, hygiene in the kitchen, use of kitchen equipment, measuring accurately, following a recipe, simple food nutrition – why we eat food, the dietary pyramid, analysis of eating patterns and preparation of foods from each of the 5 food groups using a variety of skills.

Learning outcomes
On completion of this unit the student should be able to demonstrate competency in:
• Individual and group work methodology
• Practising and refining food preparation skills
• Nutrition and dietary understanding

Pathways: This elective will be of interest to students who would like to pursue a career in the Food, Hospitality and/or Health industry. This unit provides links to Year 8/9/10 Food Technology electives, VCE Food Technology and Health and Human Development and VET Food Technology/ Hospitality.

Visual Design
Students will experience a range of art forms and activities that will enhance their knowledge and skills of a variety of art forms, materials, mediums and techniques. Art activities will provide
opportunities for exploration and resolution of ideas in the visual form. It will encourage independent content to become the focus of study and individual styles and appropriate media and techniques to be employed. Students will be encouraged to talk and write about their work and that of other artists.

Learning Outcomes:
- Combine and manipulate art elements and principles to represent and communicate ideas and develop imaginative solutions to set tasks.
- Observe and reflect on their exploration to develop and express opinions about their use of art elements and principles, skills and techniques, media and materials, equipment and technologies.
- Analyse and evaluate work art works from different cultural and historic contexts using appropriate art language.

Pathways: This unit leads towards Year 8/9/10 Arts and Visual Communication Design electives, VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in design or photographic careers either through apprenticeships and TAFE courses and University degree courses.

Textiles Design
This unit introduces students to Textiles and Textile articles, develops confidence and skill in the use of materials, tools and equipment. The course encourages creatively in using the design process in the construction of textile articles, developing good construction skills and techniques and encourages thorough and effective workbook skills. Students complete an introduction to machine safety, care and use, experimenting with stitches, designing, pattern making, trialling, recording decisions and following an instruction sheet for the construction of products.

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:
- What are Textiles?
- Machine use and care.
- Designing to a brief, pattern making and evaluation of final products.
- To develop a good understanding of the nature of natural fibres and fabrics

Pathways: This Unit prepares students for Year 8/9/10 Product Design and Technology electives, VCE Design and Technology, VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in fashion and design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.

Performing Arts
This specialist subject introduces students to the Performing Arts which is a fusion of Drama and Music. Students will develop confidence and skills in the basic elements of drama. The course engages students in a variety of units which exemplify creativity, original thought and working with stimulus. Students will study the language of the Performing Arts and understand how to use that language during the analysis and creating processes. Students will be competent in creating and performing both scripted and improvised work, working in both small groups and as individuals.

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:
• The basic elements of the Performing Arts
• Improvisation and theatre sports.
• Intertwining music in the Arts.
• Creating and developing both character and a performance.
• Written analysis of both the students own work and the work of others.

Pathways: This specialist subject prepares students for Year 8/9/10 Performing Arts electives. It will provide the necessary skills and knowledge for VCE Drama and Theatre Studies. Performing arts is a pathway for careers in the arts, design, performance and theatre production and it is a useful course for people interested in Performance, sound production, costume and set design, directing and a number of performing arts careers either through apprenticeships and TAFE courses and University degree courses.

Product Design and Technology (Wood)
This course is an introduction to basic carpentry skills for Year 7 students. It commences with tuition about safety and workshop expectations for the students’ first Design and Technology subject. Students are taught about the use and purpose of hand tools, mechanised tools and equipment while building a timber model. Such models could include a small chest of drawers, a tea tray, a pen and pencil holder, a timber storage unit for games, DVDs. They are instructed on the setting out, measuring, building, assembling and finishing techniques required to complete such wooden projects. Scope is also provided for the attainment of design and drawing skills. Product Design and Technology (Wood) or Woodwork, as it is more familiarly known, is popular, allows students to acquire manual competence and is suited to brand new woodworkers, as well as those with experience.

Learning Outcomes
On completion of this unit, the student should be able to demonstrate competency in:

• Safe workshop practices
• The use of hand tools and mechanised equipment
• Understanding setting out and measurement
• Building and assembling
• Finishing a model
• Computerised and hand drawing

Pathways
Year 7 Woodwork introduces students to the Design and Technology area of study. It engenders interest in and opens up the considerable potential of both theoretical and practical study in design, planning, and building. It is also the beginning of the pathway that ultimately leads to Design and Technology subjects at VCE level.

Year 8, 9 and 10 Electives
In order to offer Bayview College students the widest range of subjects during the elective program, a two year rotation of subjects is utilized. This allows students to select their most desirable subjects each year from the below listing of courses. If a particular subject you are interested in is included in this handbook yet does not appear on your subject selection form, it will be offered in the following year. Subjects listed in BLUE may be chosen by Year 8 or 9 students. All other subjects are available to Years 9 and 10 students. Subjects with an asterisk* next to them may be undertaken twice as different content is covered each semester.
Students in Year 10 have the opportunity to undertake an Accelerated VCE subject. In order to prepare for this students should undertake the relevant preparation subject during their Year 9 electives and ensure they are achieving a Distinction average in their grades.

If unsure of the subject selection process please arrange a time to meet with Director of Teaching and Learning, Mr. Zac Jeffries.

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**Visual and Performing Arts**

Within the Visual Arts Electives students can elect to take the same unit in both semesters. Students work with the teacher to develop individualised learning plans.

**Digital Photography**

This elective will include inspirational artist worksheets, traditional techniques and innovative computer skills. The students will trial new techniques and ideas, producing a folio of work. Students will be introduced to the basic technology necessary for the production of their art work, how to look at and critique photography, photographic vocabulary, using tools such as framing, composition, "rule of thirds", light, texture, pattern, lines, symmetry, depth of field, distance, perspective, culture, space, balance, colour and black and white photography, and be introduced to many works by well-known photographers. Students will be expected to demonstrate an ability to use the tools competently in the production of their art work, however, the production and analysis of expressive and thoughtful art work is the main objective of the course.
Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:

- using tools competently in the production of their art work
- the production and analysis of expressive and thoughtful art work
- Technical skills and knowledge

Pathways: This unit leads towards VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in design or photographic careers either through apprenticeships and TAFE courses and University degree courses.

Performing Arts
Students will work to develop their creative skills through the fusion of Drama and Music. The semester will focus on the student’s ability to create and manipulate character and interject those characters into a creative performance. The students will study professional playwrights and a piece of their literature, they will use that literature as a muse for their own piece of theatre. Students will create and use music to enhance a performance. They will understand the history and structure of Melodrama and create a melodrama of their own. Students will development dramatic techniques, learn non-naturalistic techniques, use improvisation to explore character, understand and demonstrate their understanding of stagecraft and how you can use it to enhance performance. Each unit will culminate in a performance which will demonstrate the skills students have developed while working together

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:

- Understanding character and how to use it in a performance.
- Performing theatre using dramatic elements and stagecraft.
- The use of music in performing and showing the ability to incorporate music in a performance.
- Understand and demonstrate the use of dramatic language.

Pathways: This elective will provide the necessary skills and knowledge for VCE Drama and Theatre Studies. This elective is a pathway for careers in the arts, design, performance and theatre production.

Exploring Drama
Students will work to develop their expressive skills through focusing on Australian Playwrights and themes surrounding Australian culture. The semester will culminate in a performance which will demonstrate the skills students have developed while working together. Students will study a number of Australian playwrights and look in depth at themes and issues of Australia. Through studying these texts and themes, students will apply character development techniques, learn non-naturalistic techniques, use improvisation to explore contexts, understand the need for effective stagecraft to enhance performance and engage in staging a show.

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:

- Understanding playwrights and the themes and issues of Australia.
- Performing non-naturalistic theatre using theatrical conventions and dramatic elements.
- All elements of the theatre including set design, costume design, lighting and more.
Pathways: This elective will provide the necessary skills and knowledge for VCE Drama and Theatre Studies. This elective is a pathway for careers in the arts, design, performance and theatre production.

Visual Design
Students use skills, techniques, processes, materials and technologies to plan and create Visual Art and Design. They reflect upon and refine their work and display the visuals for different target audiences. Students recognise the interrelationship between practices and viewpoints. They research and analyse practices and viewpoints. They use Visual Art and Design language to describe and justify their understanding of their own and others’ practices.

General capabilities
- deconstructing concrete and abstract visual Art and Design concepts
- exploring the ways artists, craft practitioners and designers employ symbols and metaphors to tell stories
- respecting cultural practices and ethical responsibilities
- analysing how genres, conventions and technologies shape art, craft, design and architecture in historical and contemporary cultural contexts
- explaining how visual arts works reflect values of care, respect and responsibility towards others and the environment

Practices: The ways artists, architects, designers, craftspeople, critics and historians respond, represent, create and communicate. This includes the knowledge, understanding and skills associated with the techniques, materials, technologies and processes of two-dimensional (2D), three-dimensional (3D) and four-dimensional (4D) forms, shapes, images, objects, spaces, environments and experiences.

Viewpoints: The knowledge and understanding that come from exploring ideas and beliefs and are informed by material, cultural, social, historical, virtual, spatial, temporal and environmental experiences. This includes the critical, theoretical, emotional and intuitive responses that arise when making and responding.

The Visual Artist
Students engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of a portfolio of quality works. Students apply media, techniques, and processes with sufficient skill to communicate intended meaning. They create abstract and realistic artworks exploring drawing, painting, printmaking and sculpture. Students use a variety of materials such as pencil, dry and oil pastels, charcoal, pen and ink, watercolor, oil, acrylics, ceramics, plaster and wire as well as the associated techniques. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art.

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:
- Analysis of existing artworks.
- Creation of exhibition quality final pieces.

Pathways: This unit will prepare students for VCE Studio Arts, VCE Visual Communication Design and VCE Design and Technology. It is a useful course for students interested in design or visual arts careers either through apprenticeships and TAFE courses and University degree courses.
**Visual Communication Design (May be taken twice)**

Students will apply technical and practical applications to design and create effective visual communication. They will be introduced to the fundamental elements and principles of design, learning how to brainstorm ideas and develop a concept and analyse and interpret a brief. Students will be introduced to the techniques of design fundamentals, learning how to produce drawings for communicating and presenting a concept visually and developing drawing skills from observation of the world around them. Students will explore a variety of materials and techniques.

**Learning Outcomes**

On completion of this unit the student should be able to demonstrate competency in:

- Digital imaging
- Drawing and Illustration
- Painting
- Photography
- In the fields of environmental, industrial and communication fields

**Pathways:** This unit prepares students for VCE Visual Communication Design, VCE Design and Technology and VCE Studio Arts. It is a useful course for people interested in design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.

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**Product and Digital Technology**

**Food Technology: Cooking for Special Occasions**

This course focuses on food as a socializer which brings people together to celebrate life’s events. A variety of functions will be prepared which will encompass different styles of presentation including casual, formal buffets and set decorated tables. Students will be required to plan, prepare and present beyond the everyday provision of food.

**Learning outcomes**

On completion of this unit the student should be able to demonstrate competency in:

- decision and interpretive skills
- individual and group work methodology
- Practising and refining food preparation skills
- table design and setting skills

**Pathways:** This elective will be of interest to students who would like to pursue a career in the Food, Hospitality and/or Health industry. This unit provides links to VCE Food Technology and Health and Human Development and VET Food Technology/ Hospitality.

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**Food Technology: Classic cooking**

This unit is designed to set the students up with skills needed for daily cooking, they will learn techniques and skills to make classic recipes that will see them through when they leave the home and cook for themselves. With each unit students will research their own recipes, follow a design brief to plan meals for others and will master the skills needed to successfully cook their favorite meals. A detailed workbook and collection of recipes will be assessed and then practical assessment will be based on skill competency and the final product. There will be a final assessment which will be a true test of the skills they have acquired.
Learning Outcomes
On completion of this unit, the student should be able to demonstrate competency in:
- Using all equipment in the kitchen safely and with purpose.
- Understanding different cultures and cuisines.
- Skills for successful baking with different degrees of difficulty.
- Understanding and following recipes.
- Presentation of final culinary products.

Pathways: This elective will be of interest to students who would like to pursue a career in the Food and/or Health industry. This unit provides links to VCE Food Technology and Health and Human Development and VET Food Technology/ Hospitality.

Food Industry and Hospitality Studies
This unit is designed to provide students with advanced skills needed for the hospitality industry.

Learning Outcomes
On completion of this unit, the student should be able to demonstrate competency in:
- Using all equipment in the kitchen safely and with purpose.
- Understanding different techniques and processes required in the industry.
- Using advanced skills for successful food production and presentation.
- Designing menus and recipes.
- Developing the knowledge and skills to work in the Hospitality industry.

Pathways: This elective will be of interest to students who would like to pursue a career in the Food and/or Health industry. This unit provides links to VCE Food Technology and Health and Human Development and VET Food Technology/ Hospitality.

Digital Design: App & Web Design (May be taken twice)
In this subject students build on and refine the skills they obtained through the Year 7 Digital Design course. App and web design are key areas of study as students learn to develop more complex app and web products.

Learning Outcomes
Throughout the course, students will develop a stronger understanding of app and web design and begin to explore more unique features of digital design.

On completion of this unit students will:
- Prepare and present a project proposal
- Apply their learning in a complex app design challenge
- Developed a webpage using online editing tools
- Plan, organise and execute a design task within a given timeframe

Pathways
Students are encouraged to undertake Digital Technologies as part of their Year 9 and 10 elective program which can then lead into the VCE course of Computing.
**Digital Technologies**

The rapid developments in information and communications technology are having a major influence on virtually all aspects of society. Not only does Information Technology have the capacity to change how existing tasks and activities are undertaken, but it also creates new opportunities in work, study, recreation and in personal relationships. It is important that students learn to use information and communications technology and learn of its power, scope and limitations. Students need to become innovative in perceiving possible uses of information and communications technology, and to orient themselves towards the future, with an awareness of the implications of the possible uses.

**Learning Outcomes**

The Digital Technology course will equip students with the skills to be able to make use of information and communications technology and make informed choices, at a personal level and within the workplace, on the future developments and directions in this exciting and challenging field.

The overall focus of the course is on:
- the information and communications technology used to process data into information.
- the processing and management of information to meet a range of purposes.
- the acquisition and application of knowledge and skills in using information and communications technology.
- responding to technological change.
- acquiring and applying knowledge of the characteristics of information and its management.
- developing a critical prospective in the use of information and communications technology in society.
- acquiring and applying skills, techniques and strategies to creatively and methodically solve problems requiring software solutions and/or system change.

The main emphasis in these courses is on the rapidly developing areas of multimedia and application software. The students will learn to use a variety of industry-standard software and hardware to produce solutions to information and communications problems encountered by individuals and organisations. Students will undertake a number of projects in the semester. Some of these projects will be research based, whereas others will require students to solve an information problem using the computer as a tool. Some projects will be done individually, whereas others will be done in teams.

The topics on offer in the Year 9 / 10 Digital Technologies Learning Area are:

- The Internet and Web Sites
- Computer Game Design
- Multimedia
- Software Development
- Advanced App Design
- Other topics as they develop.

**Wood Technology**

In this elective, students will select a project to design and make from a range of possible projects which will be suited to their age and experience level. The projects on offer to the students are designed to be fun to design and make and at the same time teach the students new designing and making skills and techniques. The students will be taught to use a range of materials, hand and power tools. In the past, Year 9 students have made seating and storage type projects and the
Year 8 students have made smaller designs such as gumball machines, games and small chairs. The students will be able to suggest project ideas of their own.

**Learning Outcomes**

On completion of this unit the student should be able to demonstrate competency in:

- safe workshop practices
- Some Computer Aided Design drawings and or hand drawn technical drawing
- accuracy and neatness in the measuring and setting-out a timber model and/or project
- the use of a variety of hand tools on timber,
- the use of hand and some power tools and equipment in the completion of a project
- the construction assembly and finishing of projects
- the understanding of adhesives, fixings, forces and joints in construction.

**Pathways:** The elective is a useful preparation for anyone thinking of progressing to our additional electives in subsequent years. It is all part of the preparation for undertaking Product Design Technology as a VCE subject. It may be that you just like designing and making. This elective is ideal for anyone who may want to become a tradesperson, or anyone thinking of becoming an engineer, architect or designer, furniture designer etc.

**Wood Technology: Furniture Making (May be taken twice)**

This elective builds upon the designing and making skills of the previous year. If a student wished to undertake four electives in this subject in the 1 year they will be able to complete four different projects. At this stage students will be encouraged to choose their own designs or at least to make significant changes to a project offered by the teacher and chosen by the student.

The students will select and build a project chosen from a list of chairs, stools, tables, step ladder chairs and chests of drawers. Students will have the opportunity to redesign aspects of their chosen project either to change or improve the function or to change its appearance. The students may choose to influence their designs using the work of famous international designers. The students will use a range of materials, jigs, templates, formers, hand and power tools. The students will apply different finishes to their work. Examples can be seen in the workshop and at the elective evening.

**Learning Outcomes**

On completion of this unit the student should be able to demonstrate competency in:

- safe workshop practices
- Computer Aided Design drawings and or hand drawn technical drawing
- accuracy and neatness in the measuring and setting-out a timber model and/or project
- the use of a variety of hand tools on timber, plastic, fabric and metal
- the use of mechanised tools and equipment in the completion of a model and/or project
- the construction and assembly process of models
- the understanding of adhesives, fixings, forces and joints in construction.

**Pathways:** The elective is a useful preparation for anyone thinking of undertaking Product Design Technology as a VCE subject. This elective is ideal for anyone who may want to become a tradesperson, or anyone thinking of becoming an engineer, architect or designer, furniture designer etc.
Wood Technology: Carpentry (May be taken twice)

This course continues the development of skills acquired in other Design and Technology subjects, while providing the opportunity of designing and building with more complexity. It consolidates the importance of safe practices and the safe use of all tools and mechanised equipment in the Design and Technology workshop. Students will again have the chance to explore aspects of design and produce a timber model of their choice. The project will demonstrate the procedural competencies of building such as setting out, accurate dimensioning, understanding the properties of raw materials and how to produce appropriate joins and fixing techniques to complete a functional and aesthetically pleasing piece. Models students may choose in consultation with teachers include: a lamp, a bedside table, a portable chair, cabinets (tool/wall/standing), a tool box, wooden toys, a kennel, mirrors and picture frames, a portable table, a timber trolley, as well as storage vessels of a student’s choice. Computer Aided Design and hand drawn technical drawing are also part of this course. While this course continues the development of skills learnt in Design and Technology previously, Carpentry is also suitable for less experienced woodworkers.

Learning Outcomes

On completion of this unit, the student should be able to demonstrate competency in:

- The understanding of safe workshop practices
- The use of hand and hand held powered tools, as well as mechanised equipment
- Planned setting out and accurate dimensioning
- Designing, planning and building
- Finishing and evaluating
- Computer Aided Design and hand drawn technical drawing

Pathways

Carpentry continues the development of competencies already acquired in Design and Technology subjects, as well as provides the opportunity for students wanting to try a woodwork subject after not having done so for some time. In both instances, students will receive preparation for the study of Design and Technology at VCE level. This elective is also ideal for students interested in employment in building trades, engineering, architecture and design.

Technology Textiles – Design and Creation

Students will view different styles of Textiles Technology and create their own, developing a distinctive and personal style. Students research their choice of textile technology during a particular period of time and research the development and advancement of the product. The students are required to produce at least one quality product throughout the semester focusing on correct processes and techniques. They will be working from their choice of design and are expected to individualise their work.

Learning Outcomes

On completion of this unit the student should be able to demonstrate competency in:

- Developing skills and knowledge of primary processes
- Pattern making and modification
- Reflection and evaluation processes

Pathways: This Unit prepares students for the Year 9/10 Product Design and Technology elective, VCE Design and Technology, VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in fashion and design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.
Technology Textiles: Designing the Future

Students will develop skills in designing and constructing products for the future. Students will be introduced to issues involved in the production and sustainability of products and they will complete a folio of sketches and story boards on selected themes. Students may choose to develop design briefs based on any number of products such as clothing products for the future incorporating technology, producing an innovative model of a sustainable home or using recycling to produce a new product. Students will be required to maintain a developmental folio and evaluations of their processes.

Learning Outcomes

On completion of this unit, the student should be able to demonstrate competency in:

- Modification of designs for our future
- Sustainability and future directions in the industry
- Designers, trends and International standards

Pathways: This Unit leads towards VCE Product Design and Technology, VCE Studio Arts and VCE Visual Communication Design. It is a useful course for people interested in fashion and design or manufacturing careers either through apprenticeships and TAFE courses and University degree courses.

Language and Literature

Literature: Media and Film – Offered in 2017

Students will investigate and analyse various aspects of Media based narratives (film, animation, television, etc.) in order to gain understanding how they report on and influence wider society, while identifying themes and topical commentary.

Learning Outcomes

On completion of this unit the student should be able to demonstrate competency in:

- Textual analysis
- Report creation
- Analysis of societal trends
- Identify media influences

Pathways: This elective will provide an introduction to Literature Studies as well as provide background information in other areas, including English and Social Studies. Students wishing to explore careers in Tourism, International Studies, Journalism, Law or Teaching may benefit from studying Literature subjects during the elective program and VCE.

Literature: Comic Books & Graphic Novels – Offered in 2018

A review of the history of the medium, starting from the proto-comics of pulp novels to the modern day. Students use the form and stories to identify, analyse and discuss social issue, themes and messages. The changes of the form are researched and used to comment on the changes in society over the decades (civil rights, laws, social uprisings, attitudes, etc.). Students will also engage with the medium to create their own works.

Learning Outcomes:

On completion of this unit the student should be able to demonstrate competency in:

- Textual analysis
- Report creation
- Analysis of societal trends
Identify media influences

Pathways: This elective will provide an introduction to Literature Studies as well as provide background information in other areas, including English and Social Studies. Students wishing to explore careers in Tourism, International Studies, Journalism, Law or Teaching may benefit from studying Literature subjects during the elective program and VCE.

Year 9 Japanese (To be taken both Semester 1 and 2 in place of Humanities)
Get ready to enter the world of Anna and Tom as they prepare to go on an exchange to the city of Nagasaki in Japan. You will follow their journey, learning alongside them as they prepare for their visit. You will cover stimulating topics including, self-introductions, telephone etiquette, host families, weather, and hobbies, gift-giving and packing for Japan. You will learn about Nagasaki and festivals in this region. Activities will involve treasure hunts, creating and describing your own avatar, participating in a fashion show and creating and filming your own weather forecast (Japanese style of course!). You will continue to improve your script writing with the new katakana alphabet will be introduced.

Learning Outcomes:
On completion of this unit the student should be able to demonstrate competency in:
- Speaking fluency
- Written fluency
- Aural fluency
- Reading fluency and comprehension
- Understanding appropriate etiquette

Pathways:
This unit prepares students for senior LOTE – Japanese studies and provides conversation skills that will enable the student to participate confidently in the Japanese exchange program. The study of Japanese is also highly regarded in many occupations including business, hospitality, tourism, and trade.
Studying Japanese at VCE level enables students to gain bonus points toward their ATAR and makes them eligible for the prestigious VCE Baccalaureate Certificate.

Year 10 Japanese (To be taken in both Semester 1 and 2 to be taken in place of Humanities)
In Year 10 Japanese you will learn about modern and traditional Japan through a variety of stimulating and fascinating topics. There is just so much to discover: from relationships and leisure activities amongst young Japanese people today, to hi-tech Japan and popular trends. If you’re thinking of visiting Japan, there is a unit devoted to getting around the famous city of Hiroshima. If you’re looking for adventure, there’s Japanese travel and adventure-sport holidays. Learning activities will include letter writing, profile creations, job interviews, learning about pocket money and how to spend it and many other interesting language tasks. You will look at various text types including, magazines, comics, advertisements, emails and more.

Learning Outcomes:
On completion of this unit the student should be able to demonstrate further competency in all key language skill areas:
- Speaking fluency
- Written fluency
- Aural fluency
- Reading fluency and comprehension
- Understanding appropriate etiquette

Pathways:
This unit prepares students for senior LOTE – Japanese studies and provides conversation skills that will enable the student to participate confidently in the Japanese exchange program. The study
of Japanese is also highly regarded in many occupations including business, hospitality, tourism, and trade.

Studying Japanese at VCE level enables students to gain bonus points toward their ATAR and makes them eligible for the prestigious VCE Baccalaureate Certificate.

**Humanities**

**Business Alive**

We live in a commercialized world: commercial activity of one kind or another is part of our everyday lives. Therefore having an understanding of the principles of commerce will provide students with the necessary knowledge and skills to make informed decisions about every day issues they face. This unit will cover such issues as banking, taxation, financial management, investment and provide a sound introduction to the VCE studies of Accounting and Business Management.

**Learning Outcomes**

On completion of this unit the student should be able to:

- Demonstrate an understanding of personal and business financial management, and identify and apply enterprise skills and attributes.
- Explain key factors that influence the Australian economy.
- Demonstrate an understanding of ways individuals can successfully plan and manage personal finances.

**Pathways:** This elective provides an introduction to VCE Business Management and Legal Studies. It also provides valuable life skills important for any career.

**Walking in their Shoes**

We now live in a world of fear, uncertainty and problems associated with terrorism, homelessness and the rich getting richer and the poor getting poorer. Therefore having an understanding of why these issues arise will help us combat and develop strategies to ensure we do not become too scared to be a global citizen. This unit will cover such issues as what a refugee is, where they come from and why they leave, ISIS (and other terrorist groups) – who are they and what are they doing and the plight of the homeless both within our own country and our local community. To help understand these issues we will be investigating what NGO’s such as World Vision and UNICEF are doing, discover the soup kitchens in Melbourne and Portland and view the programme “Go back to where you came from”.

**Learning Outcomes**

- Demonstrate an understanding of why people become displaced.
- Demonstrate an empathy of the plight of refugees.
- Demonstrate key geographical concepts, skills and knowledge on social indicators enabling people to increase their economic wealth while at the same time exploring why the poor are getting poorer.
- Developing an understanding of the poorer nations including their health and wellbeing and being able to draw conclusions on why rich countries enable this to occur.

**Pathways:** This elective provides an introduction to VCE Geography and Health and Human Development. It also provides valuable life skills important to become an invested global citizen important for any career.
Thinking Big: People, Politics, Plague & Pus

Are you curious? Creative? Do you want to know the answers to the Big Questions of our time? In ‘Thinking Big’ we ask those Big Questions. Our approach in this subject is based on the idea that to see where we are going we need to go back the beginning. We look at the events, people and forces that have shaped the modern world. In doing so, we will then begin to look at what the future hold for us.

Part History, Philosophy, English, Geography, Politics, Sociology and Science, ‘Thinking Big: People, Politics, Plague & Pus’ is a flexible, adaptable curriculum, with changing topics designed to meet the needs, interests and strengths of individual students. Information and content comes from a variety of sources and formats. Assessment is also varied, with students being empowered to design tasks that enable them to use their strengths to succeed and at the same time develop and improve weaknesses in their skills. So if you want to push past the limits of a normal school day and a normal class curriculum, ‘Thinking Big: People, Politics, Plague & Pus’ is for you!

Learning Outcomes:
- Analysis of trends in society
- Identify and explain key factors shaping the modern world
- Design and manage projects individually and in groups
- Analysis of varied text types

Pathways: This elective provided valuable skills and knowledge for a number of VCE subjects including History, Geography, English and Science. It is a useful subject for students thinking of careers in History, International Aid, Education, International Studies, Tourism and Trade.

Health and Physical Education

Human Movement
Through the Human Movement course, you will develop an understanding of the impact exercise and physical activity has on the biological, psychological and social factors of human life. You will study a variety of subjects including anatomy, physiology, exercise physiology, psychology, growth and development, skill learning and control and biomechanics.

Learning Outcomes
Students who undertake the Human Movement course will learn to:
Evaluate human movement from a scientific perspective. Integrate the biological and biomechanical principles of sport science to movement and performance enhancement.
Develop strategies to improve sporting performance.

Pathways
This course is designed to prepare students for VCE PE but could also lead to a career as an exercise physiologist, personal fitness trainer, sport nutritionist, sports coach or PE teacher.

Super Coach
In addition to the core subject of Physical Education students will be exposed to the theoretical and practical study of the sport sciences. The course is designed to provide students with hands on experience of sport coaching, sport nutrition, development of fitness programs and training techniques.
Learning Outcomes
Super Coach will be broken into three units.

- **Unit 1: Methods and Principles of Training**
  Provide students with an understanding of the key Methods and Principles of Training required to design and implementing a training program.

- **Unit 2: Sports Nutrition**
  Develop an Understanding of the core components of a balanced diet and the needs of athletes when competing in a variety of sporting activities.

- **Unit 3: Sports Coaching and Skill Acquisition**
  Students should be able to analyse skill performances, break down complex motor skills and develop drills and activities that will enhance a performer's skill.

Pathways
VCE PE, Sports Coaching & Management, Fitness Instruction/Personal Training

Advanced Water Skills
This course prepares students for their "Royal Lifesaving Bronze Medallion" and by doing so students will become aware and competent in many facets of water safety. Areas of water awareness, patient identification, and survival and rescue procedures are considered. Students will also be given instruction in canoeing and snorkeling in preparation for further advanced water skills.

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:

- Demonstrating Cardio Pulmonary Resuscitation
- Considering potential dangers when in a water environment.
- Rescue techniques.
- Safe use of procedures when canoeing & snorkelling

Pathways: At the successful completion of this course students will gain the internationally recognized ‘Royal Life Saving Bronze Medallion Award. This award is also nationally recognized as a Certificate 2 in Public Safety. With further study students may gain Certificate 3 in Public Safety which will enable them to obtain careers in water safety and Occupational Health and Safety fields.

Move to Improve
This module will allow students to identify their fitness level both in general and for a sport of their choice. They will then develop a battery of fitness tests throughout the semester to see if they can improve on their original fitness. Incorporating terms and concepts such as stages of fitness, basic anatomy – muscle and bones, biomechanics and then relating these to their particular sport.

Learning Outcomes

- On completion of this unit the student should be able to demonstrate competency in:
  - Designing a sport specific fitness programme relating to general fitness and implement this programme for 6 weeks.
  - Taking into account life interruptions.
  - Evaluating their performance after completing their fitness test.
  - Completing a written report outlining their results including problems associated with implementing the program.

Pathways: This elective is designed for students who plan to take the VCE Physical Education.
Outdoor Education
This exciting course will examine ways in which experience in the outdoor environment influences human development. It looks at how our definition of the outdoors differs according to our backgrounds. The activities selected throughout the course will enable students to develop a sympathetic understanding of nature and will include such pursuits as cycling and mountain biking, hiking, abseiling, sand boarding, compass work, bush-craft and surfing in our spectacular local environment. Each of these and other topics will include written, illustrative, research and oral components, as well as practical opportunities, giving students learning experiences both inside and outside the classroom.

Learning Outcomes
On completion of this unit students should be able to demonstrate:
- A greater awareness and understanding of the outdoors and the impact people have on the environment
- Competence in outdoor pursuits such as; cycling and mountain biking, sand boarding, surfing, abseiling, hiking, compass work
- Understanding of basic bush-craft skills
- Proficiency in combining both theoretical and practical aspects of subject content
- A greater appreciation for our beautiful environment, in and around Portland

Pathways: This course provides students with the opportunity to develop their skills and knowledge in VCE Physical Education and Certificate 2 in Outdoor Education.

Surf Life Saving (Formerly ‘Surf’s Up’)
This course provides students with the basic skill requirements necessary for them to obtain their ‘Surf Life Saving Bronze Medallion’. The theoretical aspects of this course will include basic Cardio-Pulmonary Resuscitation, Surf Awareness, understanding Rips, Currents and Undertows, Rescue Techniques, Signal and Communication Techniques, and basic First Aid. The practical components include the correct use of surfboards, rescue techniques in surf, and contending with a variety of surf conditions whilst either swimming or surfing. At the successful completion of the course students will be awarded their ‘Surf Life Saving Bronze Medallion’

Learning Outcomes
On completion of this unit the student should be able to demonstrate competency in:
- Surf Awareness & Surf Skills
- Basic First Aid & Emergency care & Cardio-Pulmonary Resuscitation
- Considering dangers in a water environment
- Preparation procedures for surfing & competence in swimming a variety of strokes relevant to surfing

At the completion of the course students will be required to participate in an external practical and theoretical exam which will include a 200 m run, 200 m swim, and a 200 m run.

Pathways: At the successful completion of this course students will gain the internationally recognized ‘Surf Lifesaving Bronze Medallion Award’. This award is also nationally recognized as a Certificate 2 in Public Safety. With further study students are able to gain Certificate 3 in public Safety which will enable them to obtain careers in Water safety and Occupational Health and Safety fields.
Global Health
This module aims to inform students about the state of health around the world and to compare the health of Australians to that of other countries. Focus will be placed on the health related ‘Millennium Development Goals’ and will explore how students can be an active part of the achievement of these goals. Students will research types of Aid and look at practical ways in which they can become involved in making a difference to Global Health. Students will be involved in the planning and implementation of activities that will raise awareness of, and help address world health issues.

Learning Outcomes
On completion of this unit the student should have:

- a greater awareness of challenges faced in achieving equality in health on a global scale.
- learnt how they can be a part of making a difference in closing the gap in health status between developed and developing countries.
- learnt practical skills in event & fundraising organisation such as creating timelines, setting agendas, communication, managing rosters, & working as a team to complete a goal.

Pathways: This elective will provide valuable skills and knowledge for VCE Health & Human Development and Geography. Practical skills will also be of value for those students undertaking VCAL Personal Development Skills. This module is relevant to careers in Health, Human Relations, International Studies, Social Work and International Aid.

Science

Robotics (May be taken twice)
This module is designed to introduce the students to the world of Robotics through the use of LEGO DACTA ROBOLAB package which utilizes icon oriented program software to program the LEGO RCX microcomputer. This involves the use of computers to control the movements and functions of different robotic models via different input and output devices.

Learning Outcomes
Students will be working individually or in groups to plan, construct, test and redesign robots that can complete a variety of tasks (as set by the teacher or the students). Each of the robots will be matched against those designed by the other groups.
On completion of this unit students will:

- Apply what they know from many subject areas.
- Communicate and collaborate with each other.
- Plan, organise and execute a task within a deadline.
- Extend their programming and higher order thinking skills.
- Apply their own creativity and ingenuity in solving a problem.
- Participate in a friendly, competitive event.

Pathways: This will give the students a practical learning environment for what they have already learnt in Science. It is also a brief insight into the world of Robotics which they can build on in further studies at a Tertiary level, if they decide to have this as a career path. This elective will provide valuable skills and knowledge for VCE Physics.
Forensic Science – to be offered in 2018
This elective will use practical activities to discover how science can be used to help solve crimes. Various laboratory techniques such as chromatography, flame tests and gel electrophoresis will be used. Trace evidence left at a crime scene such as DNA, fingerprints, foot/tyre prints, fibres, hairs, bite marks and blood spatter will be investigated. Students will explore the types of careers related to forensic science. Students will look at how each technique studied was vital in solving real life cases. Students will get to integrate their knowledge of the techniques studied with their problem solving and thinking skills to solve mock crimes.

Learning Outcomes
On completion of this unit the student should be able to:

- Explain the use of various chemical and physical forensic techniques to solve crime
- Design, implement and report on experimental activities
- Outline various careers in this field and related learning pathways

Pathways: This elective will provide valuable skills and knowledge for VCE Chemistry and Biology. The elective is relevant to careers in the Science, Legal and Health fields.

Get Psyched
In this elective students will investigate and gain an understanding of what makes us individuals. Students will discuss theories of moral, emotional and cognitive development and debate about the impact of nature and nurture on human development. Students will examine what factors influence a person’s attitudes and value structures and why some people choose to behave in pro or anti-social ways. Students will also investigate the merit of sports psychology and concepts such as intelligence and personality. This unit will involve practical investigations and psychological research. Students will gain skills in research methods and investigate the role of ethics in scientific studies.

Learning Outcomes
On completion of this unit the student should be able to:

- Explain the difference between a science and a pseudoscience.
- Explain theories of attitude formation.
- Recognise factors that influence all aspects of psychological development including learning and child development.
- Understand the impact of social pressures on individual behaviour.
- Explain various fields of psychology such as sports, educational and counselling psychology.
- Recognise the importance of mental health and wellbeing strategies and services.
- Recognise the work of famous psychologists and how their work has influenced the study of psychology.

Pathways: This elective will provide valuable skills and knowledge for VCE Psychology and Health and Human Development. The elective is relevant to careers in Psychology, Science, Welfare, Education and Health Fields.
Marine Science
Portland’s coastline and oceans are a marine wonderland – so what better place to study marine science! Marine science is the study of the ocean, its ecosystems and its life forms as well as the study of coastal environments, oceanic currents and the sea floor. Learn how the amazing creatures on the shoreline and in rock pool survive; why whales and tuna visit our shores; the importance of ocean currents to Portland’s fishing industry; how the spectacular coastal areas around Portland and the Great Ocean Road are formed; why do so many fish live on reefs; why we get such great waves at Yellow Rock and Crumpets? And do it all through practical activities and fieldwork in our local environment.
Marine Science is run as two different standalone semester subjects. Students can complete two semesters of marine science over years 9 and 10, these can be taken in any order.

Semester One focuses on Portland’s marine environment through studying classification, fish anatomy, commercial and recreational fishing, erosion, wave formation and surf spots and the intertidal zone.

Semester Two focuses on Portland’s marine environment through investigating marine conservation, introduced species, aquaculture, marine mammals and the upwelling.

Learning Outcomes
On completion of this unit the student should be able to:

- Understand the terms and concepts related to studying marine and coastal ecosystems
- Explain the different ways scientist monitor the health of the marine and coastal environment
- Describe different parts of the marine environment from data collected in the field
- Analyse monitoring data and write basic field reports
- Conduct laboratory experiments including dissections and write experimental reports

Pathways: This elective provides a pathway to VCE Biology, Environmental Science and Geography. Students who are interested in careers in Marine Biology; Zoology; Natural Resource Management (e.g. Park Ranger or Fisheries Officer); Maritime Safety, Navigation and Engineering; or Commercial Fishing will benefit from studying this elective.

Electronics
This elective is designed to extend the student’s knowledge of electronics. Students will learn about different electrical components and the construction of circuits.

Students will design and build projects which will develop skills in the use of electronic test equipment, circuit interpretation, circuit board production, soldering, component identification and create electronic circuit diagrams.

Learning Outcomes
Students will become familiar with electronic components and their functions. They will develop skills in constructing simple Electronic circuits and eventually construct complex circuits.

Projects - These projects are based on the “Funway into Electronics” series produced by Dick Smith Electronics. They require students to solder components into a circuit and students have been permitted to take completed projects home. Some examples of projects are a water indicator, a MORSE code communicator and a Music Maker.
Pathways: This elective will provide valuable skills and knowledge for VCE Physics. The elective is relevant to careers in Science, Engineering and Electrical trades.

Engineering, Design and Construction
This elective is based on the principals of STEM - the integration of Science, Technology, Engineering and Maths. International research shows that building STEM capacity across the population is critical in helping to support innovation and productivity regardless of occupation or industry. Consistent with this research, industry surveys show that STEM literacy is increasingly becoming part of the core capabilities that Australian employers need. 1

Engineering, design and construction will continue to develop student’s observation, evaluation, thinking and problem solving skills. Students undertaking this elective will be exposed to the construction of civil and mega structures from the planning phase to the engineering principles behind the design, and the final construction phase. Students focus on the key design elements of bridges and skyscrapers; the move towards green engineering of energy efficient homes, buildings and electric powered cars; and case studies the construction of megastructures such as the Hoover Dam, the Golden Gate Bridge and Bell Rock Light House. Students will focus on Physics principles by conducting in class investigations into sound, light, and Young’s Modulus. Design and construction challenge projects will allow students to apply these principals and to integrate and test their skills and knowledge. Students will have opportunity to visit local firms that specialize in engineering, design and construction including The Port of Portland, Keppel Prince and the Portland Aluminium Smelter. At these visits students will have access to professionals in these fields who will be able to inform students of the various career pathways, such as trade apprenticeships and tertiary pathways, to enter into these industries.


Pathways: This elective will provide valuable skills and knowledge for VCE Physics, ICT and Maths and is relevant to careers in Science, Engineering, Technology, Architecture and Construction.
**Victorian Certificate of Education (VCE), Victorian Certificate of Applied Learning (VCAL)**

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<tr>
<th>Year 11 – Unit 1 and 2</th>
<th>Year 12 – Unit 3 and 4</th>
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* Please note that the provision of VCAL will be subject to student numbers.
Vocational Education & Training (VETiS)

In partnership with South West TAFE Bayview College students are able to access the following VETiS offerings in 2017. This will be subject to student interest. They will all run on Thursday afternoon between 1.00 – 5.00pm with the exception of second year hairdressing that runs from 9.00am – 3.30pm. VETiS is available to choose as an elective from Year 10. This is a great option for students choosing to do VCE but not doing an early VCE subject (Accelerated VCE) because the VETiS subject acts as their 6th VCE subject and will be finished before entering Year 12.

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<th>Portland Campus</th>
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<td>Certificate II in Engineering Studies</td>
<td>Certificate II in Community Services Work</td>
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<td>Certificate III in Allied Health Assistance</td>
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<th>Warrnambool Campus</th>
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<td>Certificate II in Community Services Work</td>
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<td>Certificate III in Media</td>
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<td>Certificate II in Retail Make-up Services (with second year option Cert 3 in Beauty)</td>
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<td>Certificate II in Automotive (Pre-vocational)</td>
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<td>Certificate II in Building &amp; Construction</td>
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<td>Certificate II in Hairdressing (with second year option Cert 3 Hairdressing*)</td>
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<td>Certificate II in Furniture Making</td>
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<td>Certificate II in Conservation and Land Management</td>
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Subject Selection
Subject selection, particularly at Year 11 is a very important process. This is also a time of realistic assessment for future choices. It is generally true that the transition from Year 10 to 11 represents a significant advance in academic expectations.

- Students who find a subject difficult in Year 10 will almost always find it more difficult in Year 11.
- Students are advised to consider their performance honestly in making these decisions about specific subjects and styles of programs.
- Students perform best at the subjects that they enjoy. They find it easier to research and complete required course work.
- A number of Tertiary courses have pre-requisite subjects (subjects that must be completed at the VCE level) that are compulsory if students wish to apply for and enter such courses.

The Senior Years Are About More Than Just Study!
We appreciate that the VCE years are important in all students’ lives: We are confident that our smaller classes and the opportunity for additional help provided by our staff are significant advantages. It is also important, however, for students to appreciate that they should be involved in other areas, and that this time of developing maturity is one where students should take the additional opportunities school and the community offers, particularly in the area of student leadership and community service, as well as sport and recreation. In an increasingly competitive environment for both employment and tertiary courses, it is the student who has clearly been involved in a wide range of activities who will have the edge and who will generally perform better at University/TAFE or in work. Completing secondary education and gaining the VCE or its equivalent is the basic expectation required in our society today. It is expected that students will show the required commitment to their school work and in order to achieve their best students should be completing an average of at least 3 - 4 hours of homework, study and revision per night.

VCE at Bayview College
Parents will note that the College offers an extensive range of subjects at both Unit 1 and 2 and Units 3 and 4. Each year the subjects that run will be slightly different depending on the choices made by the students themselves. Please note that not all the subjects offered will eventually be run. Our timetable is built from student preference.

The courses outlined are those that we have the capacity to offer, but we will eventually only offer those for which there are sufficient subscribers. One or two subjects may well be offered by Distance Education Victoria, others may well not be offered at all. It is important for all concerned to appreciate that the first round is a preliminary round of indication of interest and subject selection will occur after blockings have been confirmed.

VCAL and Employment
We will continue to offer VCAL [Victorian Certificate of Applied Learning] if sufficient numbers of students elect to undertake this pathway. Students considering selecting a VCAL course would generally be considering employment or apprenticeships at the end of Year 11 or 12, and should read the information contained in this booklet carefully. They will be required to complete a VET Certificate and Work Placement and have a clear understanding that it is not an easier VCE equivalent; it has specific requirements and will require focus and commitment equal to that necessary for a university orientated program.

Achieving the VCE/VCAL
Gaining of the VCE/VCAL and an ATAR (Australian Tertiary Admission Rank) is as much dependent on students managing the process as academic ability. The students must be aware of the
importance of self-discipline, self-motivation, building relationships with teachers, and organizing and managing themselves as the factors that will most influence their results/success.

Pathway Planning
It is essential that students select subjects that will allow them to enter their desired field of interest. Many University Courses have pre-requisite subjects that must be completed at year 11 and 12 in order to be considered for the course. Students should research the areas of interest by visiting web sites such as www.myuniversity.gov.au or www.vtac.edu.au

Below are some subjects that students should consider at Year 11 for particular fields

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<tr>
<th>Health Science/ Nursing</th>
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<td>• Health and Human Development</td>
<td>• Mathematics (Methods)</td>
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<td>• Mathematics (either)</td>
<td>• Physics / Chemistry</td>
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<td>• Biology/ Chemistry</td>
<td>• Design Technology/ Visual Communication Design</td>
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<td>• Physical Education</td>
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<th>Sport Science</th>
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<td>• Physical Education</td>
<td>• Mathematics (Methods)</td>
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<td>• Biology/ Health and Human Development</td>
<td>• Chemistry</td>
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<td>• Biology/ Physics</td>
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<th>Visual Arts</th>
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<td>• Studio Art</td>
<td>• History/ Geography</td>
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<td>• Visual Communication Design</td>
<td>• Literature</td>
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<td>• Product Design and Technology</td>
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<th>Business/ Economics/ Accounting</th>
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<td>• Business Management</td>
<td>• Product Design and Technology (Building)</td>
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<td>• Legal Studies</td>
<td>• Mathematics</td>
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<td>• Physics (Electrical)</td>
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<td>• Business management</td>
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<th>Apprenticeships- electrical, building, chef, plumbing etc.</th>
<th>VCE</th>
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Summary of the VCE Course
The VCE is a two year course based on units in different studies leading to the award of the Victorian Certificate of Education. The VCE is governed by the rules and regulations prescribed by the Victorian Curriculum and Assessment Authority (VCAA).

Unit descriptions for all VCE studies offered at Bayview College can be found in the second section of this information booklet and on the VCAA website
Units 1 and 2 are usually taken in Year 11 but can also be taken in Year 10 or Year 12. They are assessed within the school and the result of (S) Satisfactory or (N) Not Satisfactory is reported to the Victorian Curriculum and Assessment Authority (VCAA).

Units 3 and 4 are usually taken at Year 12 as they are substantially more difficult than Units 1 and 2. Satisfactory or Not Satisfactory completion of a unit is assessed within the school and the result (S or N) is reported to VCAA. Unit 3 and 4 must be taken as a sequence or pair. Units 3 and 4 have externally set and assessed formal examinations.

Assessment
Satisfactory completion of a unit is based on demonstrated achievement of the outcomes specific for that unit.

The standard of achievement in Units 1 & 2 is determined by the teachers of each unit. It is not reported to VCAA but is reported to parents and students by the school at the usual reporting times.

The standard of achievement in Unit 3 & 4 is determined by assessment tasks spread across Unit 3 and Unit 4. These tasks are set by VCAA - some are assessed by the unit teachers and some are assessed by VCAA. Results of each task are based on the grades A+ to E and UG (Ungraded - low standard) or NA (Not Assessed - not attempted). These grades are reported to parents and students by VCAA at the end of the year.

Successful Completion of the Victorian Certificate of Education
To graduate with the Victorian Certificate of Education students must satisfactorily complete
- at least 16 units over two years
- these must include:
  1. three units from the English group (English, Literature)
  2. at least three pairs of Units 3 and 4 other than English

Students must satisfactorily complete all the outcomes in a Unit to gain Satisfactory Completion. Failure to complete even one outcome means a student will not be deemed to have satisfactorily completed the unit.

Students must also have at least an 80% attendance in subjects to pass. If, for any valid reason, a student is unable to complete an outcome by the due date, he or she may apply (in writing) to the VCE Coordinator for an extension of time, provided that the application is submitted before the due date.

The General Achievement Test - GAT
All students studying any level 3 and 4 units are required by VCAA to sit the General Achievement Test. The GAT is a test of general skills, rather than specific knowledge, and covers the areas of Written Expression, Humanities/Arts/Social Sciences and Mathematics/Science/Technology. It is used in conjunction with other Unit 3 and 4 assessment tasks, including examinations to assist in ensuring a fair and equitable subject study score.

Advice on Entry to Tertiary Courses
Entry into most, but not all tertiary courses is coordinated by the Victorian Tertiary Admissions Centre (VTAC). During August Year 12 students are able to apply through VTAC for up to twelve tertiary courses, in order of preference, into which they wish to gain entry in the following year.

As students do not always get their first or second preference, as course places are limited, students must carefully consider a number of possible course and career options. Careful
consideration of future career paths and possible courses should be part of the decision process when choosing Year 11 and 12 units.

Selection into Tertiary Courses is based on either the ATAR (Australian Tertiary Admission Rank) AND/OR - an interview AND/OR - submission of a folio of student work AND/OR - completion of an application form

**Calculation of the ATAR** tends to be complicated but is based on the sum of the Study Scores (Relative Position) achieved on assessment tasks in:

- English 3 & 4
- the best three other Unit 3 & 4 studies
- Plus 10% of those received in a fifth (or sixth study) Unit 3 & 4 study.

Any units in which N (Not Satisfactorily Completed) is obtained will not be used for score calculation.

The ATAR will provide an overall percentile ranking, calculated in steps of 0.05, reflecting the **comparative performance** of each applicant against all other competing applicants in a given year. The highest rank will be 99.95.

The ATAR is calculated by VTAC and conveyed to those people who are selecting students for courses. These course selection officers then choose students with the highest scores from a list of those students seeking entry to their courses.

For applicants whose ATAR’s for a particular course are ‘borderline’, some other factors may be taken into consideration. For example, the Selection Officer may look more closely at how an applicant performed on the examinations as opposed to the school assessed tasks. For some courses a ‘bonus’ is awarded for completion of particular subjects. This process is known as Middle-band selection.

Interviews, if required, are usually conducted to determine the aptitude of a student for a particular course. Work Experience completed in a relevant area often is a useful background for these interviews. Folios of student work are usually required for most Art and Design courses.

**Minimum Entrance Requirements**
To be eligible for entry into a Tertiary Institution, students will need to:

- satisfactorily complete the VCE
- demonstrate achievement in the outcomes for English/Literature Units 3 and 4
- Complete pre-requisite subjects

Most tertiary courses specify that certain prerequisite studies must be satisfactorily completed before a student will be considered for the course. These prerequisite studies are usually at the Unit 3 and 4 levels and may require a minimum grade average.
Vocational Education in the VCE

VCE VET Programs and Part-Time Apprenticeships and Traineeships

What Is a VCE VET Program?
You can choose a VCE VET program as part of your VCE. This means that you will be undertaking training in a specific vocational area, for instance hospitality, engineering, community services, building or computer studies, along with the usual studies.

VCE VET programs will give you credits at Units 1-4. A number of these programs also have a study score available and these and most others contribute to an ATAR score.

Bayview College has worked in cooperation with Southwest TAFE institute in providing our VET programs. South West TAFE also offers courses in Warrnambool.

The final list of VET subjects offered will depend on student demand but a list of some the programs likely to be available is contained in this booklet.

(Note: Because we contract SW TAFE to deliver large parts of our VET programs, there is a charge above normal fees attached to selecting VET programs)

What Is a School Based New Apprenticeship?
Another way of gaining credit toward your VCAL for Vocational Training is through a part-time, School-Based New Apprenticeship or traineeship. In order to become a part-time apprentice or trainee you have to be in paid work, and sign a contract of training which must be registered with the Office of Training and Tertiary Education (OTTE).

Your VCAL program would share time with your part-time work and vocational training. Your VCAL would therefore consist of three parts:

- VCE or VCAL studies undertaken at school
- Vocational training, undertaken in conjunction with a training authority
- Part-time, paid work in the industry in which you are undertaking the training- often called structured work place learning.

The vocational qualification you receive will contribute to satisfactory completion of the VCAL in the same way that VCE VET programs contribute.

VCAL General Information

The VCAL Program
The Victorian Certificate for Applied Learning (VCAL) gives students in Years 11 and 12 the chance to choose the qualification option that best suits their interests. Just like the VCE, the VCAL is an accredited senior secondary school qualification. Unlike the VCE, which is widely used by students as a pathway to university, students who do the VCAL are more likely to be interested in going on to training at TAFE, doing an apprenticeship, or going straight into the workplace after completing Year 11 or 12.

VCAL learning programs focus on “applied” learning, aiming to give students “hands-on” practical work-related skills and experience that are important for further education, training and employment.
Pathways from VCAL
Successful completion of VCAL will allow students to continue into employment, VET courses, apprenticeships or traineeships, further School Study, or higher level VCAL.

VCAL Requirements
For a VCAL certificate, students must complete:
• 10 credits.
  A credit equals one VCE or VCE/VET unit, or 100 nominal hours of VET or Further Education delivery.
• A minimum of 2 VCAL units
• At least 1 credit from each strand
• At least 1 credit each of Literacy and Numeracy
• 8 credits at least must be at the certificate award level, including 1 Literacy and 1 VCAL Personal Development Skill Unit.
• Include VET in the Industry Specific Skills Strand for Intermediate and Senior levels.

VCAL Certificates
After students have successfully completed the VCAL requirements they will get:
• A VCAL Certificate for Foundation, Intermediate or Senior level. The certificate selected depends on the overall level of the subjects and is part of the course counseling process.
  ▪ A statement of results listing all VCE, VCAL and VCE/VET units completed.
  ▪ Statements of Attainment for VET and Further Education courses completed.

Sources of Information
It is critical that students investigate fully all possible options and have a full understanding of the requirements of VCAL, VCE and VET. Visiting the following web sites is recommended and read the information provided by Bayview College.

Web Sites

VCE
• its structure
• specific course information
• guidelines and expectations
• assessment- including past examinations for unit 3 and 4 subjects
• the GAT
www.vcaa.vic.edu.au and follow the links to VCE

VCAL
• its structure
• specific course information
• guidelines and expectations
www.vcaa.vic.edu.au and follow links to VCAL

• VET and TAFE courses available in the South West: www.swtafe.vic.edu.au/vetis/
• For information on VET accredited courses in Australia: www.myfuture.edu.au
• Tertiary courses: www.vtac.edu.au/
• Options available when you finish school:
  o www.year12whatnext.gov.au
  o www.goingtouni.gov.au
  o www.myuniversity.gov.au

• On different occupations and the training they require: www.jobguide.deewr.gov.au
• For information on apprenticeships: www.australia.gov.au/australianapprenticeships
Biology

Aims
This study enables students to:

• develop knowledge and understanding of key biological models, theories and concepts, from the cell to the whole organism
• examine the interconnectedness of organisms, their relationship to their environmental context, and the consequences of biological change over time including the impact of human endeavours on the biological processes of species and more broadly to:
• understand the cooperative, cumulative, evolutionary and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations and political and sociocultural influences
• develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
• develop an informed perspective on contemporary science-based issues of local and global significance
• apply their scientific understanding to familiar and unfamiliar situations, including personal, social, environmental and technological contexts
• develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions
• understand and apply the research, ethical and safety principles that govern the study and practice of the discipline in the collection, analysis, critical evaluation and reporting of data
• communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

Unit 1: How do living things stay alive?
In this unit students explain what is needed by an organism to stay alive. They are introduced to some of the challenges for organisms in sustaining life. Students examine the cell as the structural and functional unit of life and the requirements for sustaining cellular processes in terms of inputs and outputs. Types of adaptations that enhance the organism’s survival in a particular environment are analysed, and the role that homeostatic mechanisms play in maintaining the
internal environment is studied. Students consider how the planet’s biodiversity is classified and investigate the factors that affect population growth.

**Areas of Study**
1. How do organisms function?
2. How do living systems sustain life?
3. Practical Investigation

**Unit 2: How is continuity of life maintained?**
In this unit students focus on asexual and sexual cell reproduction and the transmission of biological information from generation to generation. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered. Students explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They consider the role of genetic knowledge in decision-making about the inheritance of various genetic conditions. In this context the uses of genetic screening and its social and ethical issues are examined.

**Areas of Study**
1. How does reproduction maintain continuity of life?
2. How is inheritance explained?
3. Investigation of an issue?

**Unit 3: How do cells maintain life?**
In this unit students investigate the workings of the cell from several perspectives. They explore the importance of the insolubility of the plasma membrane in water and its differential permeability to specific solutes in defining the cell, its internal spaces and the control of the movement of molecules and ions in and out of such spaces. Students consider base pairing specificity, the binding of enzymes and substrates, the response of receptors to signalling molecules and reactions between antigens and antibodies to highlight the importance of molecular interactions based on the complementary nature of specific molecules.

**Areas of Study**
1. How do cellular processes work?
2. How do cells communicate?

**Unit 4: How does life change and respond to challenges over time?**
In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population’s gene pool. The accumulation of changes over time is considered as a mechanism for biological evolution by natural selection that leads to the rise of new species. Students examine change in life forms using evidence from palaeontology, biogeography, developmental biology and structural morphology. They explore how technological developments in the fields of comparative genomics, molecular homology and bioinformatics have resulted in evidence of change through measurements of relatedness between species.

**Areas of Study**
1. How are species related?
2. How do humans impact on biological processes?
3. Practical Investigation

**Assessment and Reporting**
Units 1 and 2 will be assessed internally on course work and end-of-semester exams.
Units 3 and 4 In Biology school-assessed course work, and an end-of-year examination will determine the student’s level of achievement. Percentage contributions to the final assessment are as follows:

Unit 3 school assessed course work: 20%
Unit 4 school-assessed course work: 20%
Units 3 and 4 examinations: 60%

Business Management

Aims
This study is designed to enable students to:

- Acquire knowledge of the ways in which businesses are managed
- Develop an understanding of management and the concepts and relationships on which it is built
- Examine the role and functions of management across a range of contexts;
- Explore the operation of management in practice
- Acquire knowledge of the skills required in management
- Examine the values and assumptions underlying business management practice and theory

Unit 1: Planning a business
Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. Therefore how businesses are formed and the fostering of conditions under which new business ideas can emerge are vital for a nation’s wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

Unit 2: Establishing a business
This unit focuses on the establishment phase of a business’s life. Establishing a business involves complying with legal requirements as well as making decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. In this unit students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse various management practices in this area by applying this knowledge to contemporary business case studies from the past four years.

Unit 3: Managing a business
In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives. Students develop an understanding of the complexity and challenge of managing businesses and through the use of contemporary business case studies from the past four years have the opportunity to compare theoretical perspectives with current practice.

Unit 4: Transforming a business
Businesses are under constant pressure to adapt and change to meet their objectives. In this unit students consider the importance of reviewing key performance indicators to determine current
performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management. Using a contemporary business case study from the past four years, students evaluate business practice against theory.

Assessment and Reporting
Units 3 and 4: School-assessed coursework and an external end of year examination will determine the student’s level of achievement. Percentage contributions to the final assessment are as follows:

Units 1 and 2 will be assessed internally on course work and end-of-semester exams
Unit 3 school-assessed course work: 25%
Unit 4 school-assessed course work: 25%
Units 3 and 4 examination: 50%

NB: Either Business Management OR Legal Studies will run based on student interest. But probably not both.

Chemistry

Aims
This study enables students to:

• apply models, theories and concepts to describe, explain, analyse and make predictions about chemical phenomena, systems, structures and properties, and the factors that can affect them
• understand and use the language and methodologies of chemistry to solve qualitative and quantitative problems in familiar and unfamiliar contexts
• and more broadly to:
• understand the cooperative, cumulative, evolutionary and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations and political and sociocultural influences
• develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
• develop an informed perspective on contemporary science-based issues of local and global significance
• apply their scientific understanding to familiar and unfamiliar situations including personal, social, environmental and technological contexts
• develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions
• understand and apply the research, ethical and safety principles that govern the study and practice of the discipline of collection, analysis, critical evaluation and reporting of data
• communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.
Unit 1: How can the diversity of materials be explained?
The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties and practical applications of a range of materials including metals, crystals, polymers, nanomaterials and giant lattices. They explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible through to nanoparticles, molecules and atoms. Students are introduced to quantitative concepts in chemistry.

Areas of Study
1. How can knowledge of elements explain the properties of matter?
2. How can the versatility of non-metals be explained?
3. Research Investigation

Unit 2: What makes water such a unique chemical?
Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis.

Students examine the structure and bonding within and between water molecules in order to investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. They are introduced to stoichiometry and to analytical techniques and instrumental procedures analysis, and apply these to determine concentrations of different species in water samples, including chemical contaminants. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water.

Areas of Study
1. How do substances interact with water?
2. How are substances in water measured and analysed?
3. Practical Investigation

Unit 3: How can chemical processes be designed to optimize efficiency?
Students compare and evaluate different chemical energy resources, including fossil fuels, biofuels, galvanic cells and fuel cells. They investigate the combustion of fuels, including the energy transformations involved, the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions, and calculations of the amounts of energy released and their representations. Students consider the purpose, design and operating principles of galvanic cells, fuel cells and electrolytic cells. In this context they use the electrochemical series to predict and write half and overall redox equations, and apply Faraday’s laws to calculate quantities in electrolytic reactions.

Areas of Study
1. What are the options for energy production?
2. How can the yield of a chemical product be optimised?

Unit 4: How are organic compounds categorized, analysed and used?
Students study the ways in which organic structures are represented and named. They process data from instrumental analyses of organic compounds to confirm or deduce organic structures, and perform volumetric analyses to determine the concentrations of organic chemicals in mixtures. Students consider the nature of the reactions involved to predict the products of reaction pathways and to design pathways to produce particular compounds from given starting materials.
Areas of Study
1. How can the diversity of carbon compounds be explained and categorised?
2. What is the chemistry of food?
3. Practical Investigation

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams

Unit 3 school-assessed course work: 20%
Unit 4 school-assessed course work: 20%
Unit 4 examination: 60%

Drama

Aims
This study is designed to enable students to:
• develop an understanding of the origins, forms and purposes of performance from a diversity of cultures;
• develop an understanding of the processes of developing role and character;
• develop, through practice and analysis, an understanding of drama as an evolving performing art;
• use dramatic elements, theatrical conventions and stagecraft in creating, developing and performing dramatic works;
• develop and refine expressive and performance skills;
• create, perform and evaluate solo and ensemble performances

Unit 1: Dramatic storytelling
This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. This unit also involves analysis of a student’s own performance work and of a performance by professional drama practitioners. In this unit students use performance styles from a range of contexts associated with naturalism and non-naturalism.

Areas of Study
1. Creating a devised performance
2. Presenting a devised performance
3. Analysing a devised performance
4. Analysing drama performances presented by other practitioners

Unit 2: Non-Naturalistic Australian drama
This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance that uses non-naturalistic performance styles. Students create, present and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context. Students use a range of stimulus material in creating the performance and examine non-naturalistic performance styles from a range of contexts relevant to Australia and Australians. Conventions appropriate to the selected performance styles are also explored. Students’ knowledge of how dramatic elements can be enhanced or manipulated through performance is further developed in this unit. Students analyse their own performance work as well as undertake the analysis of a performance of an Australian work by other actors. An Australian work might be written, adapted or devised by Australian writers or theatre-makers or reflect aspects of the Australian identity, for example the indigenous voice, the Celtic perspective, the twentieth or
twenty-first century migrant experience, the refugee experience, the urban and rural perspectives.

Areas of Study
1. Using Australia as inspiration
2. Presenting a devised performance
3. Analysing a devised performance
4. Analysing Australian drama performances

Unit 3: Devised non-naturalistic ensemble performance
This unit focuses on non-naturalistic devised ensemble drama. Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions and work collaboratively to devise, develop and present an ensemble performance. Students use and manipulate dramatic elements, conventions, performance and expressive skills, performance styles and stagecraft in non-naturalistic ways to shape and enhance the performance. Students also document and evaluate stages involved in the creation, development and presentation of the ensemble performance.

Areas of Study
1. Devising and presenting non-naturalistic ensemble performance
2. Responding to devised ensemble performances
3. Analysing non-naturalistic performance

Unit 4: Non-Naturalistic Solo performance
Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions. They develop skill in extracting dramatic potential from stimulus material and use dramatic elements, conventions, performance styles and performance and expressive skills to develop and present a short solo performance. These skills are further developed as students create a devised solo performance in response to a prescribed structure. Students also document and evaluate the stages involved in the creation, development and presentation of a solo performance.

Areas of Study
1. Working with stimulus material
2. Devising a non-naturalistic solo performance
3. Analysing devised non-naturalistic solo performance

Assessment
Units 1 and 2: Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision.

Units 3 and 4:
Coursework: 40 per cent
End-of-year performance examination: 35 per cent
End-of-year written examination: 25 per cent.

NB: Either Drama or Theatre Studies would run based on student interest, but not both.
Aims

This study enables students to:

- extend their English language skills through thinking, listening, speaking, reading, viewing and writing
- enhance their understanding, enjoyment and appreciation of the English language in its written, spoken and multimodal forms
- analyse and discuss a range of texts from different periods, styles, genres and contexts
- understand how culture, values and context underpin the construction of texts and how this can affect meaning and interpretation
- understand how ideas are presented by analysing form, purpose, context, structure and language
- analyse their own and others’ texts, and make relevant connections to themselves, their community and the world
- convey ideas, feelings, observations and information effectively in written, spoken and multimodal forms to a range of audiences
- recognise the role of language in thinking and expression of ideas
- demonstrate in the creation of their own written, spoken and multimodal texts an ability to make informed choices about the construction of texts in relation to purpose, audience and context
- think critically about the ideas and arguments of others and the use of language to persuade and influence audiences
- extend their use of the conventions of Standard Australian English with assurance, precision, vitality and confidence in a variety of contexts, including for further study, the work place and their own needs and interests
- extend their competence in planning, creating, reviewing and editing their texts for precision and clarity, tone and stylistic effect

Unit 1:

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

Areas of Study

1. Reading and Creating texts
2. Analysing and Presenting Argument

Unit 2:

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

Areas of Study

1. Reading and Comparing texts
2. Analysing and Presenting Argument
Unit 3:
In this area of study students identify, discuss and analyse how the features of selected texts create meaning and how they influence interpretation. In identifying and analysing explicit and implied ideas and values in texts, students examine the ways in which readers are invited to respond to texts. They develop and justify their own detailed interpretations of texts.

Areas of Study
1. Reading and creating texts
2. Analysing Argument

Unit 4:
In this unit students compare the presentation of ideas, issues and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

Areas of Study
1. Reading and comparing texts
2. Presenting Argument

Unit 3:
The focus of this unit is on reading and responding both orally and in writing to a range of texts. Students analyse how the authors of texts create meaning and the different ways in which texts can be interpreted. They develop competence in creating written texts by exploring ideas suggested by their reading within the chosen Context, and the ability to explain choices they have made as authors.

Area of Study
1. Reading and Responding
2. Creating and Presenting
3. Using Language to Persuade

Unit 4:
The focus of this unit is on reading and responding in writing to a range of texts in order to analyse their construction and provide an interpretation. Students create written or multimodal texts suggested by their reading within the chosen Context and explain creative choices they have made as authors in relation to form, purpose, language, audience and context.

Area of Study
1. Reading and Responding
2. Creating and Presenting
3. Using Language to Persuade

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams.
Units 3 and 4:

Unit 3 school-assessed course work: 25%
Unit 4 school-assessed course work: 25%
End of year examination: 50%
Aims
This study enables students to:

• develop an enjoyment of language and literature through reading deeply, widely and critically
• appreciate the stylistic and aesthetic qualities of texts and develop an understanding of and sensitivity to nuances in the English language
• read closely, developing the ability to engage in detailed critical analysis of the key literary features of individual texts and to make relevant connections between them
• demonstrate an understanding that the context and perspective of both author and reader influence the reading experience
• develop the capacity for critical thinking and understanding of the relationship between literature and society
• develop an understanding of literary criticism
• develop the capacity to engage with and contest complex and challenging ideas to develop their own interpretation informed by a range of literary criticism
• develop the capacity for creativity and self-expression, and the ability to write confident analytical and creative responses to texts

Unit 1: Approaches to Literature
In this unit students focus on the ways in which the interaction between text and reader creates meaning. Students’ analyses of the features and conventions of texts help them develop increasingly discriminating responses to a range of literary forms and styles. Students respond critically, creatively and reflectively to the ideas and concerns of texts and gain insights into how texts function as representations of human experience. They develop familiarity with key terms, concepts and practices that equip them for further studies in literature. They develop an awareness of how the views and values that readers hold may influence the reading of a text.

Areas of Study
1. Reading practices
2. Ideas and concerns in texts

Unit 2: context and connections
In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Drawing on a range of literary texts, students consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted. Students analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

Areas of Study
1. The text, the reader and their contexts
2. Exploring connections between texts
Unit 3: Form and transformation
In this unit students consider how the form of a text affects meaning, and how writers construct their texts. They investigate ways writers adapt and transform texts and how meaning is affected as texts are adapted and transformed. They consider how the perspectives of those adapting texts may inform or influence the adaptations. Students draw on their study of adaptations and transformations to develop creative responses to texts.

Areas of Study
  1. Adaptations and transformations
  2. Creative responses to texts

Unit 4: Interpreting texts
In this unit students develop critical and analytic responses to texts. They consider the context of their responses to texts as well as the ideas explored in the texts, the style of the language and points of view. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches.

Areas of Study
  1. Literary perspectives
  2. Close analysis

Unit 3:
This unit focuses on the ways writers construct their work and how meaning is created for and by the reader. Students consider how the form of text (such as poetry, prose, drama, non-print or combinations of these) affects meaning and generates different expectations in readers, the ways texts represent views and values and comment on human experience, and the social, historical and cultural contexts of literary works.

Area of Study
  1. Adaptations and Transformations
  2. Views, Values and Contexts
  3. Considering alternative viewpoints

Unit 4:
This unit focuses on students creative and critical responses to texts. Students consider the context of their responses to texts as well as the concerns, the style of the language and the point of view in their re-created or adapted work. In their responses, students develop an interpretation of a text and learn to synthesise the insights gained by their engagement with various aspects of a text into a cogent, substantiated response.

Area of Study
  1. Creative Responses to Text
  2. Close Analysis

Assessment and Reporting
Unit 3 school assessed course work: 25%
Unit 4 school assessed course work: 25%
End of year examination: 50%
Scope of study
VCE Food Studies takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills and building individual pathways to health and wellbeing through the application of practical food skills. VCE Food Studies provides a framework for informed and confident food selection and food preparation within today’s complex architecture of influences and choices. Practical work is integral to Food Studies.

Rationale
VCE Food Studies examines the background to Australia’s varied and abundant food supply, and explores reasons for our food choices. This study is designed to build the capacities of students to make informed food choices. Students develop their understanding of food while acquiring skills that enable them to take greater ownership of their food decisions and eating patterns.

Structure
The study is made up of four units:
Unit 1: Food origins
Unit 2: Food makers
Unit 3: Food in daily life
Unit 4: Food issues, challenges and futures
Each unit contains two 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-gatherer to rural-based agriculture, to today’s urban living global trade in food. Students consider the origins and significance of food through inquiry into particular food-producing regions of the world.

Students also 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 identity today and reflect on the concept of an 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 foods and consider a range of evaluation measures to compare their foods to commercial products. They consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life. Students design new food products and adapt recipes to suit particular needs and circumstances.

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 and how our food values and behaviours develop within social environments. Students inquire into the role of food in shaping and expressing identity and connectedness and the ways in which food information can be filtered and manipulated. They investigate behavioural principles that assist in the establishment of lifelong, healthy dietary patterns. The practical component of this unit enables students to understand food science terminology and to apply specific techniques to the production of everyday food that facilitates the establishment of nutritious and sustainable meal 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 misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. Students consider how to assess information and draw evidence-based conclusions, and apply this methodology to navigate contemporary food fads, trends and diets. Students’ food production repertoire reflects the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

**Geography**

**Aims**

This study is designed to enable students to:

- Develop a sense of wonder and curiosity about people, culture and environments throughout the world
- Develop knowledge and understanding of geographic phenomena at a range of temporal and spatial scales
- Understand and apply geographical concepts including place, scale, distance, distribution, movement, region, process, change, spatial association and sustainability to develop their ability to think and communicate geographically
- Develop an understanding of the complexity of natural and human induced geographic phenomena across the Earth’s surface.
- Develop a range of skills to assist in analysing information and making informed judgements and decisions about geographic challenges.
- Understand the importance of Geography in analysing issues and challenges to human welfare and the environment, at a range of scales.
- Develop an understanding of the role and application of Geography in the planning and management of human welfare and the environment

**Unit 1: Hazards and disasters**

In this unit the students will undertake an overview of hazards before investigating two contrasting types of hazards and the response to them by people. Hazards represent the potential to cause harm to people and the environment whereas disasters are judgments about the impacts of hazard events. Examples of hazards include: Geological – volcanoes, earthquakes, tsunamis and landslides; Biological – HIV/AIDS, malaria, animal transmitted diseases, and animal invasions; Human induced – pollution, epidemics, climate change and oil spills. Students undertake fieldwork in this unit.
Areas of Study
   1. Characteristics of hazards
   2. Responses to hazards and disasters.

Unit 2: Tourism
In this unit students investigate the characteristics of tourism, with particular emphasis on where it is
has developed, its various forms, how it has changed and continues to change and its impacts on
people, places and environments. Tourism is studied at a local, regional and global scale and
how this impacts on the people. Students undertake fieldwork in this unit.

Areas of Study
   1. Characteristics of tourism
   2. Impacts of tourism.

Unit 3: Changing the land
This unit focuses on two investigations of geographical change: change to land cover and
change to land use. Land cover includes biomes such as forests, grassland, tundra and wetlands
as well as land covered by ice and water. Land cover is the natural state of the biophysical
environment developed over time as a result of the interconnection between climate, soils,
landforms and flora and fauna and, increasingly, interconnections with human activity.

Areas of Study
   1. Land use change
   2. Land cover change

Unit 4 Human population – trends and issues
In this unit students investigate the geography of human populations. They explore the patterns of
population change, movement and distribution, and how government’s organisations and
individuals have responded to those changes in different parts of the world. Students study two
significant population trends arising in different parts of the world. They examine the dynamics of
populations and their economic, social, political and environmental impacts on people and
places.

Areas of Study
   1. Population dynamics
   2. Population issues and challenges

Unit 3 Regional resources
This unit investigates the characteristics of resources and the concept of region. A resource is
anything which occurs naturally or is created by humans provided that people use it to satisfy a
need or want. Resources found within regions mean different things to different people over place
and time. A study of resources is about the processes and relationships operating in the past, in
the present, and those which will operate in the future. Regions are areas of various scales that
have characteristics and features that distinguish them from other areas according to the
elements used to define them. The use and management of resources is dynamic and changes
spatially over time in response to the interactions between human activities, natural processes
and the legislative processes that humans put into place. Social, historical, environmental,
economic and political factors can be used to predict and plan for future policies and strategies
to ensure the sustainability of the available resources.

Areas of Study
   1. Use and management of an Australian water resource
   2. Use and management of local resources
Unit 4 Global perspectives
Global phenomena are major natural or human events, processes or activities. Such phenomena are distributed globally and possess the capacity to affect the globe or significant parts of the globe and require more than a local or national response.

Areas of Study
1. Global Phenomena
2. Global responses

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams
Contribution to final assessment

Unit 3 School-assessed Coursework: 25 %
Unit 4 School-assessed Coursework: 25 %
End-of-year examination: 50 %.

History

Aims
This study enables students to:

- develop an understanding of the nature of history as a discipline and to engage in historical inquiry
- ask questions about the past, analyse primary and secondary sources, and construct historical arguments based on evidence
- use historical thinking concepts such as significance, evidence, continuity and change, and causation
- explore a range of people, places, ideas and periods to develop a broad understanding of the past
- engage with debates between historians in an informed, critical and effective manner
- recognise that the way in which we understand the past informs decision-making in the present
- appreciate that the world in which we live has not always been as it is now, and that it will continue to change in the future

Unit 1: Twentieth-Century History (1918 – 1939)
World War One is regarded by many as marking the beginning of twentieth century history since it represented such a complete departure from the past and heralded changes that were to have an impact for decades to come. The post-war treaties ushered in a period where the world was, to a large degree, reshaped with new borders, movements, ideologies and power structures. These changes affected developments in Europe, the USA, Asia, Africa and the Middle East. Economic instability caused by the Great Depression also contributed to the development of political movements. Despite ideals about future peace, reflected in the establishment of the League of Nations, the world was again overtaken by war in 1939. The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarised and anti-western. In the USA, the consumerism and material progress of the 1920s was tempered by the Great Crash of 1929.
Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

**Areas of Study**

1. Ideology and conflict
2. Social and Cultural Change

**Unit 2: Twentieth-Century History (1945 - 2000)**

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

**Areas of Study**

1. Competing ideologies
2. Challenge and change

**Unit 3 and 4: Revolutions**

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror.

**Areas of Study**

1. Causes revolution
2. Consequences of revolution

**Unit 3 and 4: Revolutions**

Revolutions in history have been reconsidered and debated by historians. The study of a revolution should consider differing perspectives and the reasons why different groups have made different judgments of the history of the revolution.

- The Russian Revolution
- The Chinese Revolution

For the two selected revolutions, both areas of study must be explored. The periods for each revolution are indicated in the description of the areas of study.

**Area of Study**

Revolutionary ideas, leaders, movements and events.
The periods for this area of study are:
• Russian Revolution 1905 to October 1917 (Bloody Sunday to the Bolshevik Revolution)
• Chinese Revolution 1898 to 1949 (100 Days Reform to the Triumph of Mao)

Creating a new society.
The periods for this area of study are:
• Russian Revolution November 1917 to 1924 (Initial decrees to the death of Lenin);
• Chinese Revolution 1949 to 1976 (Communist Revolution to the death of Mao).

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams
Contribution to final assessment
Unit 3 School-assessed Coursework: 25 %
Unit 4 School-assessed Coursework: 25 %
End-of-year examination: 50 %

Information Technology

Aims
This study enables students to:
• apply skills, techniques, processes and a methodology to create digital solutions that meet a range of needs and conditions
• understand how data can be represented in digital systems and structured and manipulated to become part of a digital solution become independent and discerning users of digital systems, able to critically appraise the opportunities and appropriateness of different digital systems in a range of settings
• understand the components of information systems and the architecture of the associated digital systems
• understand how digital systems, processes, legislation and personal behaviours can affect the integrity and security of data and information
• apply computational, design and systems thinking skills when creating digital solutions

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

Areas of Study
1. Data and graphic solutions
2. Networks
3. Collaboration and communication

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

Areas of Study
1. Programming
2. Data analysis and visualisation
3. Data Management

Unit 3: Informatics
In Informatics Units 3 and 4 students focus on data, information and information systems. In Unit 3 students consider data and how it is acquired, managed, manipulated and interpreted to meet a range of needs. In Area of Study 1 students investigate the way organisations acquire data using interactive online solutions, such as websites and applications (apps), and consider how users interact with these solutions when conducting online transactions. They examine how relational database management systems (RDBMS) store and manipulate data typically acquired this way. Students use software to create user flow diagrams that depict how users interact with online solutions, and acquire and apply knowledge and skills in the use of an RDBMS to create a solution.

Areas of Study
1. Organisations and data management
2. Data analytics: drawing conclusions

Unit 4: Informatics
In this unit students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs. In Area of Study 1 students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate a multimodal, online solution that effectively communicates the conclusion and findings. The evaluation focuses on the effectiveness of the solution in communicating the conclusion and the reasonableness of the findings. Students use their project plan to monitor their progress and assess the effectiveness of their plan and adjustments in managing the project.

Areas of Study
1. Data analytics: presenting the findings
2. Information Management

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester examinations.

Units 3 and 4 assessed course work, school assessed task, and examination will determine the student’s level of achievement. Percentage contributions to the final assessment are as follows:

- Unit 3 school-assessed course work: 10%
- Unit 4 school-assessed course work: 10%
- Unit 3 & 4 School Assessed Task: 30%
- Units 3 and 4 examination: 50%
Aims
The study enables students to:
- develop an understanding of individual human development (physical, social, emotional and intellectual) that occurs through the lifespan stages of childhood, youth and adulthood;
- develop an understanding of the physical, mental and social dimensions of health and the interrelationship between health and individual human development;
- develop an understanding that variations in health and human development are influenced by a range of determinants including biological and behavioural factors, as well as physical and social environments;
- critically examine health and human development from an individual, community, national and global perspective;
- develop an understanding of the interdependencies between health, human development and sustainability;
- identify, develop and evaluate behaviours and strategies that promote health and human development;
- analyse the role of governments and non-government agencies in achieving sustainable improvements in health and human development in Australia and globally.

Unit 1: The Health and Development of Australia’s Youth
This unit focuses on the health and individual human development of Australia’s youth. For the purposes of this study, ‘youth’ is defined as twelve to eighteen years of age; however, it should be acknowledged that some agencies may use differing age classifications for the stage of youth. There are many factors that influence health and individual human development of youth, including the importance of nutrition for the provision of energy and growth as well as food behaviours and their impact on youth health and individual human development.

Area of Study
1. Understanding health and development
2. Your health and development
3. Health issues for Australia’s youth

Unit 2: Individual Human Development and Health Issues
Individual human development is perceived as involving a series of orderly and predictable changes, which can be classified as physical, social, emotional and intellectual. Over the lifespan, individuals accumulate life experiences that affect both their health and individual human development. This unit focuses on the lifespan stages of childhood and adulthood.

Areas of study
1. The health and development of Australia’s children
2. Adult health and development
3. Health Issues

Unit 3: Australia’s Health
Australians generally enjoy good health and are among the healthiest people in the world when compared to other developed countries. The health status of Australians can be measured in many ways, such as consideration of burden of disease, health adjusted life expectancy, and disability adjusted life years (DALYs), life expectancy, under-five mortality rate, mortality and morbidity rates, incidence and prevalence of disease. Despite Australia’s good health status, there is still potential for improvements. The National Health Priority Areas (NHPAs) initiative provides a national approach that aims to improve health status in the areas that contribute most
of the burden of disease in Australia. Regardless of how health is measured, health is not shared equally by all Australians. Different levels of health are experienced by different groups, which can be attributed to biological, behavioural and social determinants of health.

Areas of study
1. Understanding Australia’s Health
2. Promoting Health in Australia

Unit 4: Global Health and Human Development
This unit takes a global perspective on achieving sustainable improvements in health and human development. In the context of this unit human development is about creating an environment in which people can develop to their full potential and lead productive, creative lives in accord with their needs and interests. It is about expanding people’s choices and enhancing capabilities (the range of things people can be and do), having access to knowledge, health and a decent standard of living, and participating in the life of their community and decisions affecting their lives (adapted from the United Nations Development Programme, 1990). ‘Sustainability refers to meeting the needs of the present without compromising the ability of future generations to meet their own needs’ (United Nations, 1992).

Areas of study
1. Introducing global health and human development
2. Promoting global Health and human development

Assessment and reporting
Units 1 and 2 The individual school will determine the level of achievement.
Units 3 and 4 School-assessed Coursework and examination:
Unit 3 School-assessed Coursework: 25%
Unit 4 School-assessed Coursework: 25%
End-of-year examination: 50%

Legal Studies

Aims
This study is designed to enable students to:
• Develop knowledge of some of their basic legal rights, the means available to protect and assert their rights and their obligations under the law
• Identify legal problems and the means by which they may be resolved
• Develop an understanding of the extent to which individuals have equality under the law regardless of sex, race, religion or status
• Establish links between law-related and other problems in contemporary society, particularly within the Australian context
• Evaluate the effectiveness of laws and recent reforms to the law, and analyse current proposals for further reform and the process by which change is effected
• Evaluate the effectiveness of the adjudicating and decision-making bodies that apply and enforce the law in the Australian legal system
• Develop the ability to research and evaluate evidence and arguments, and form reasoned conclusions
• Develop an analytical approach to legal problem solving; and
• Develop an appreciation of the individual collective responsibility of citizens in a democratic society for the creation and operation of laws, and evaluate participation in the process through which Australian society regulates its activities and reforms
• its laws
Unit 1: Criminal Law in Action
Students examine the need for laws in society. They investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts of crime. Through a consideration of contemporary cases and issues, students learn about different types of crimes and explore rights and responsibilities under criminal law. Students also consider the role of parliament and subordinate authorities in law-making, as well as the impact of the Victorian Charter of Rights and Responsibilities on law enforcement and adjudication in Victoria. Students investigate the processes and procedures followed by courts in hearing and resolving criminal cases. They explore the main features and operations of criminal courts and consider the effectiveness of the criminal justice system in achieving justice.

Areas of Study
1. Law in Society
2. Criminal Law
3. The Criminal Courtroom

Unit 2: Issues in Civil Law
The civil law regulates the rights and responsibilities that exist between individuals, groups and organisations. If legal rights have been infringed, the aggrieved party may pursue legal action through the court system, through a tribunal, or by using one of the methods of dispute resolution. Students examine the rights that are protected by civil law, as well as obligations that laws impose. They investigate types of civil laws and related cases and issues and develop an appreciation of the role of civil law in society and how it affects them as individuals.

Areas of Study
1. Civil Law
2. The Civil Law in Action
3. The law in focus
4. A question of rights

Unit 3: Law-Making
In this unit students develop an understanding of the institutions that determine our laws, and their law-making powers and processes. They undertake an informed evaluation of the effectiveness of law-making bodies and examine the need for the law to keep up to date with changes in society. Students develop an appreciation of the complex nature of law-making by investigating the key features and operation of parliament, and influences on law-making, with a focus on the role of the individual.

Areas of Study
1. Parliament and the Citizen
2. The Constitution and the Protection of Rights
3. Role of the Courts in law making

Unit 4: Resolution and Justice
The legal system provides mechanisms by which legal disputes of both a criminal and a civil nature can be resolved in a fair and just manner. Dispute resolution bodies such as courts and tribunals employ a range of means and processes that enables the resolution of legal disputes. Students examine the institutions that adjudicate criminal cases and civil disputes. They also investigate methods of dispute resolution that can be used as an alternative to civil litigation. Students investigate the processes and procedures followed in courtrooms and develop an understanding of the adversary system of trial and the jury system, as well as pre-trial and post-trial procedures that operate in the Victorian legal system. Using the elements of an effective legal system, students consider the extent to which court processes and procedures contribute to the
effective operation of the legal system. They also consider reforms or changes that could further improve its effective operation.

**Areas of Study**
1. Dispute resolution methods
2. Court Processes and Procedures, and engaging in Justice

**Assessment and Reporting**
Units 1 and 2 will be assessed internally on course work and end-of-semester exams. Units 3 and 4: In Legal Studies, school-assessed course work and an end-of-year examination will determine the student’s level of achievement. Percentage contributions to the final assessment are as follows:
Unit 3 school assessed course work: 25%
Unit 4 school assessed course work: 25%
Units 3 and 4 examination: 50%

NB: Either Legal Studies OR Business Management will run based on student interest. But probably not both.

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**LOTE Japanese Second Language**

**Aims**
This study is designed to enable students to:
- use Japanese to communicate with others;
- understand and appreciate the cultural contexts in which Japanese is used;
- understand their own culture(s) through the study of other cultures;
- understand language as a system;
- make connections between Japanese and English, and/or other languages;
- apply Japanese to work, further study, training or leisure.

**Areas of Study**
The areas of study common to Units 1–4
There are three prescribed themes:
- The individual
- The Japanese-speaking communities
- The changing world
These themes have a number of prescribed topics and suggested sub-topics. The placement of the topics under one or more of the three themes is intended to provide a particular perspective or perspectives for each of the topics. The suggested sub-topics expand on the topics, and are provided to guide the student and teacher as to how topics may be treated.

**Levels of Achievement**
Unit 1 and 2 Individual school decision on levels of achievement.
Unit 3 and 4 School-assessed coursework and end-of-year examinations:
Unit 3 school-assessed coursework: 25%
Unit 4 school-assessed coursework: 25%
Examinations:
Oral component 12.5%
Written component 37.5%
Mathematics: General Mathematics 1&2

General Mathematics provides for different combinations of student interests and preparation for study of VCE Mathematics at the Unit 3 and 4 level. The areas of study for General Mathematics Unit 1 and Unit 2 are ‘Algebra and structure’, ‘Arithmetic and number’, ‘Discrete mathematics’, ‘Geometry, measurement and trigonometry’, ‘Graphs of linear and non-linear relations’ and ‘Statistics’.

For Units 1 and 2, content will be selected from the six areas of study using the following rules:
- For each unit, content covers four or more topics in their entirety, selected from at least three different areas of study
- Courses intended as preparation for study at the Units 3 and 4 level should include a selection of topics from areas of study that provide a suitable background for these studies
- Topics can also be selected from those available for Specialist Mathematics Units 1 and 2
- Content covered from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2.

Areas of Study
1. Algebra and structure
2. Arithmetic and number
3. Discrete mathematics
4. Geometry, measurement and trigonometry
5. Graphs of linear and non-linear relations
6. Statistics

Assessment and Reporting for all Mathematics Subjects
Units 1 and 2 will be assessed internally on course work and end-of-semester exams

Mathematics: Mathematical Methods

Aims
This study enables students to:
- develop mathematical concepts, knowledge and skills
- apply mathematics to analyse, investigate and model a variety of contexts and solve practical and theoretical problems in situations that range from well-defined and familiar to open-ended and unfamiliar
- use technology effectively as a tool for working mathematically.

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

**Areas of study**
1. Functions and graphs
2. Algebra
3. Calculus
4. Probability and statistics

**Unit 2**
In Unit 2 students focus on the study of simple transcendental functions and the calculus of simple algebraic functions. The areas of study are ‘Functions and graphs’, ‘Algebra’, ‘Calculus’, and ‘Probability and statistics’. At the end of Unit 2, students are expected to have covered the material outlined in each area of study. Material from the ‘Functions and graphs’, ‘Algebra’, ‘Calculus’, and ‘Probability and statistics’ areas of study should be organised so that there is a clear progression of skills and knowledge from Unit 1 to Unit 2 in each area of study.

**Areas of study**
1. Functions and graphs
2. Algebra
3. Calculus
4. Probability and statistics

**Unit 3 and 4**
In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation, anti-differentiation, integration and inference with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

**Areas of Study**
1. Function & Graphs
2. Algebra
3. Calculus
4. Probability and statistics

**Assessment and Reporting**
Units 1 and 2 will be assessed internally on course work and end-of-semester exams
Units 3 and 4: In Mathematics
Unit 3 School-assessed Coursework: 17 %
Unit 4 School-assessed Coursework: 17%  
Units 3 and 4 examination 1: 22 %
Units 3 and 4 examination 2: 44 %

**Assessment and Reporting for Mathematical Methods**
Units 1 and 2 will be assessed internally on course work and end-of-semester exams
Mathematics: Specialist

**Aims**
This study enables students to:

- develop mathematical concepts, knowledge and skills
- apply mathematics to analyse, investigate and model a variety of contexts and solve practical and theoretical problems in situations that range from well-defined and familiar to open-ended and unfamiliar
- use technology effectively as a tool for working mathematically.

Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem solving and reasoning. This study has a focus on interest in the discipline of mathematics in its own right and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields.

**Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction,** provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. The areas of study for Units 1 and 2 of Specialist Mathematics are ‘Algebra and structure’, ‘Arithmetic and number’, ‘Discrete mathematics’, ‘Geometry, measurement and trigonometry’, ‘Graphs of linear and non-linear relations’ and ‘Statistics’.

For Units 1 and 2, to suit the range of students entering the study, and cover the four prescribed topics, content must be selected from the six areas of study using the following rules:

- For each unit, content covers four or more topics in their entirety, selected from at least three different areas of study
- Each unit must include two of the prescribed topics: Number systems and recursion; Vectors in the plane; Geometry in the plane and proof; and Graphs of non-linear relations
- Other topics can be selected from those included in the areas of study for Specialist Mathematics Units 1 and 2 and/or General Mathematics Units 1 and 2
- Courses intended as preparation for study at the Units 3 and 4 level should include selection of content from areas of study that provide a suitable background for these studies
- Content from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2.

**Area of Study 2**
Arithmetic and number
Number systems and recursion

**Area of Study 4**
Geometry, measurement and trigonometry
Geometry in the plane and proof
Vectors in the plane

**Area of Study 5**
Graphs of linear and non-linear relations
Graphs of non-linear relations
Other topics are to be selected from the following additional advanced mathematics topics and/or topics from General Mathematics Units 1 and 2

**Area of Study 2**
- Arithmetic and number
- Principles of counting

**Area of Study 3**
- Discrete mathematics
- Graph theory

**Area of Study 5**
- Graphs of linear and non-linear relations
- Kinematics

**Area of Study 6**
- Statistics
- Simulation, sampling and sampling distributions

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

**Area of Study**
1. Functions and graphs
2. Algebra
3. Calculus
4. Vectors
5. Mechanics
6. Probability and Statistics

**Assessment and Reporting**
Units 1 and 2 will be assessed internally on course work and end-of-semester exams
Unit 3 School-assessed Coursework: 17 %
Unit 4 School-assessed Coursework: 17%
The level of achievement for Units 3 and 4 will also be assessed by two end-of-year examinations. The examinations will contribute 22 and 44 per cent respectively.
Further Mathematics consists of two areas of study, a compulsory Core area of study to be completed in Unit 3 and an Applications area of study to be completed in Unit 4. The Core comprises ‘Data analysis’ and ‘Recursion and financial modelling’. The Applications comprises two modules to be completed in their entirety, from a selection of four possible modules: ‘Matrices’, ‘Networks and decision mathematics’, ‘Geometry and measurement’ and ‘Graphs and relations’. ‘Data analysis’ comprises 40 per cent of the content to be covered, ‘Recursion and financial modelling’ comprises 20 per cent of the content to be covered, and each selected module comprises 20 per cent of the content to be covered. Assumed knowledge and skills for the Core are contained in the General Mathematics Units 1 and 2 topics: ‘Computation and practical arithmetic’, ‘Investigating and comparing data distributions’, ‘Investigating relationships between two numerical variables’, ‘Linear graphs and modelling’, ‘Linear relations and equations’, and ‘Number patterns and recursion’. For each module there are related topics in General Mathematics Units 1 and 2.

**Area of Study 1**
- Data analysis
- Investigating data distributions
- Recursion and financial modelling

**Area of Study 2**

**Applications**
Students must complete two modules selected from the following four modules.
- Matrices
- Networks and decision mathematics
- Geometry and measurement
- Graphs and relations

**Assessment and Reporting**
Unit 3 School-assessed Coursework: 20%
Unit 4 School-assessed Coursework: 14%
Units 3 and 4 examination 1: 33 %
Units 3 and 4 examination 2: 33%
Music Performance

Students who wish to undertake this study must have several years of performance experience and an external instrumental/vocal teacher.

Aims
This study enables students to:
• perform, compose, arrange and/or improvise music from diverse styles and traditions
• demonstrate musicianship
• engage with diverse music genres, styles, contexts and practices
• communicate understanding of cultural, stylistic, aesthetic and expressive qualities and characteristics of music
• use electronic and digital technologies in making and sharing music and communicating ideas about music
• explore and expand personal music interests, knowledge and experiences
• use imagination, creativity and personal and social skills in music making
• access pathways for further education, training and employment in music
• participate in life-long learning in music and involvement in the musical life of their community.

Unit 1
This unit focuses on building performance and musicianship skills. Students also develop skills in performing previously unseen music. Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances.

Area of Study
1. Performance
2. Performance techniques
3. Musicianship

Unit 2
In this unit students build their performance and musicianship skills. They present performances of selected group and solo music works using one or more instruments. Students study the work of other performers through listening and analysis and use specific strategies to optimise their own approach to performance. They also study strategies for developing technical and expressive performance skills.

Area of Study
1. Performance
2. Performance techniques
3. Musicianship
4. Organisation of sound

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

1. Performance
2. Performance techniques
3. Musicianship

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

Area of Study

1. Performance
2. Performance techniques
3. Musicianship

Assessment and Reporting

Units 1 and 2 will be assessed internally on course work and end-of-semester exams

Unit 3 School-assessed Coursework: 20%
Unit 4 School-assessed Coursework: 10%
Units 3 and 4 Performance examination: 50 %
Units 3 and 4 Written and Aural examination 2: 20%

Physical Education

Aims

This study enables students to:

- Understand the social, environmental, cultural, biological, psychological and physiological factors that influence participation in physical activity
- Develop a critical perspective on physical activity across the lifespan
- Investigate the promotion of physical activity in a variety of settings
- Examine how the body systems work together to produce movement
- Examine performance enhancement in terms of training programming and recovery, biomechanics, sports psychology, risk management and ethics
- Analyse the processes associated with skill development and coaching, and strategies and tactics used within game situations
- Use practical activities to underpin theoretical understanding.

Unit 1: The human body in motion

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

Students evaluate the social, cultural and environmental influences on movement, and how the capacity and functioning of the muscular and skeletal systems may act as an enabler or barrier to participation in physical activity. Sedentary behaviour, overtraining and participation at the elite
and recreational level are investigated as possible causes of illness and injury to the musculoskeletal system. Students consider a variety of legal and illegal practices and substances used to enhance performance from an ethical and a biophysical perspective. Students apply biomechanical principles to improve and refine movement. They use practical activities to demonstrate biomechanical principles and how the correct application of biomechanics can lead to improved performance in sport and physical activity.

Areas of Study
1. How does the musculoskeletal system work to produce movement?
2. How does the cardiorespiratory system function at rest and during physical activity?

Unit 2: Physical activity, sport and society
This unit develops students’ understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people’s lives in different population groups.

Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups. They gain an appreciation of the level of physical activity required for health benefits. Students investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence and facilitate participation in regular physical activity. They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various communities, social, cultural and environmental contexts. Students investigate individual and population-based consequences of physical inactivity and sedentary behaviour. They then create and participate in an activity plan that meets the physical activity and sedentary behaviour guidelines relevant to the particular population group being studied.

Areas of Study
1. What are the relationships between physical activity, sport, health and society?
2. What are the contemporary issues associated with physical activity and sport?

Unit 3: Movement skills and energy for physical activity
This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport.

Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery of fatigue and consider different strategies used to delay and manage fatigue and to promote recovery.

Areas of Study
1. How are movement skills improved?
2. How does the body produce energy?

Unit 4: Training to improve performance
In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within
physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program.

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

Areas of Study
1. What are the foundations of an effective training program?
2. How is training implemented effectively to improve fitness?

Assessment and Reporting
Unit 3 School Assessed course work: 25%
Unit 4 School Assessed course work: 25%
Unit 3 and 4 End of Year Examination: 50%

Physics

Aims
This study enables students to:
- apply physics models, theories and concepts to describe, explain, analyse and make predictions about diverse physical phenomena
- understand and use the language and methodologies of physics to solve qualitative and quantitative problems in familiar and unfamiliar contexts and more broadly to:
- understand the cooperative, cumulative, evolutionary and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations and political and sociocultural influences
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
- develop an informed perspective on contemporary science-based issues of local and global significance
- apply their scientific understanding to familiar and to unfamiliar situations, including personal, social, environmental and technological contexts
- develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions
- understand and apply the research, ethical and safety principles that govern the study and practice of the discipline in the collection, analysis, critical evaluation and reporting of data
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

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

Students undertake quantitative investigations involving at least one independent, continuous variable.

**Areas of Study**

1. How can thermal effects be explained?
2. How do electric circuits work?
3. What is matters and how is it formed?

**Unit 2: What do experiments reveal about the physical world?**

This unit requires that students undertake a core study related to motion, one option from a choice of twelve options, and a student-designed investigation related to motion and/or one of the twelve options.

In this unit, students explore the power of experiments in developing models and theories. They make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored including through indirect observations. Students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. They choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science.

Students design and undertake investigations involving at least one independent, continuous variable. A student-designed practical investigation related to content drawn from Area of Study 1 and/or Area of Study 2 is undertaken in Area of Study 3.

**Areas of Study**

1. How can motion be described and explained?
2. Options
   - What are stars?
   - Is there life beyond Earth’s Solar System?
   - How do forces act on the human body?
   - How can AC electricity charge a DC device?
   - How do heavy things fly?
   - How do fusion and fission compare as viable nuclear energy power sources?
   - How is radiation used to maintain human health?
   - How do particle accelerators work?
   - How can human vision be enhanced? How do instruments make music?
   - How can performance in ball sports be improved?
   - How does the human body use electricity?
3. Practical investigation

**Unit 3: How do fields explain motion and electricity?**

In this unit students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators. They explore the interactions, effects and applications of gravitational, electric and magnetic fields. Students use Newton’s laws to investigate motion in one and two dimensions, and are introduced to Einstein’s theories to explain the motion of very fast objects. They consider how developing technologies can challenge existing explanations of the physical world, requiring a review of conceptual models and theories. Students design and undertake investigations involving at least two continuous independent variables.
Areas of Study
1. How do things move without contact?
2. How are fields used to move electrical energy?
3. How fast can things go?

Unit 4: How can two contradictory models explain both light and matter?
A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. Wave theory has classically been used to explain phenomena related to light; however, continued exploration of light and matter has revealed the particle-like properties of light. On very small scales, light and matter – which initially seem to be quite different – have been observed as having similar properties. In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students learn to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. Students design and undertake investigations involving at least two continuous independent variables.

Areas of Study
1. How can waves explain the behaviour of light?
2. How are light and matter similar?
3. Practical investigation

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams.

In Units 3 and 4, school-assessed course work and examinations will determine the student’s level of achievement. Percentage contributions to the final assessment are as follows:
Unit 3 school-assessed course work: 20%
Unit 4 school-assessed course work: 20%
End-of-year examination: 60%

Psychology

Aims
This study enables students to:
• apply psychological models, theories and concepts to describe, explain and analyse observations and ideas related to human thoughts, emotions and behaviour
• examine the ways that a biopsychosocial approach can be applied to organise, analyse and extend knowledge in psychology
• and more broadly to:
• understand the cooperative, cumulative, evolutionary and interdisciplinary nature of science as a human endeavour, including its possibilities, limitations and political and sociocultural influences
• develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
• develop an informed perspective on contemporary science-based issues of local and global significance
• apply their scientific understanding to familiar and to unfamiliar situations, including personal, social, environmental and technological contexts
• develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions
• understand and apply the research, ethical and safety principles that govern the study and practice of the discipline in the collection, analysis, critical evaluation and reporting of data
• communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats

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

Areas of Study
1. How does the brain function?
2. What influences psychological development?

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

Areas of Study
1. What influences a person’s perception of the world?
2. How are people influenced to behave in particular ways?
3. Student directed practical investigation

Unit 3: How does the experience affect behaviour and mental processes?
The nervous system influences behaviour and the way people experience the world. In this unit students examine both macro-level and micro-level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person’s psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved. Students examine the contribution that classical and contemporary research has made to the understanding of the structure and function of the nervous system, and to the understanding of biological, psychological and social factors that influence learning and memory.

Areas of Study
1. How does the nervous system enable psychological functioning?
2. How do people learn and remember?
Unit 4: How is wellbeing developed and maintained?
Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person’s functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual’s mental functioning and wellbeing.

Areas of Study
1. How do levels of consciousness affect mental processes and behaviour?
2. What influences mental wellbeing?
3. Practical investigation.

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams. Units 3 and 4 the student’s level of achievement will be determined by school-assessed course work and examinations. Percentage contributions to the final assessment are as follows:
- Unit 3 school-assessed course work: 20%
- Unit 4 school-assessed course work: 20%
- End-of-year examination: 60%

PRODUCT DESIGN AND TECHNOLOGY
(Textiles or Wood)

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

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

Structure
The study is made up of four units:
- Unit 1: Product re-design and sustainability
- Unit 2: Collaborative design

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Unit 1: Product re-design and sustainability
This unit focuses on the analysis, modification and improvement of a product design with consideration of the materials used and issues of sustainability. Finite resources and the proliferation of waste require sustainable product design thinking. Many products in use today have been redesigned to suit the changing needs and demands of users but with little consideration of their sustainability.

Outcome 1
On completion of this unit the student should be able to re-design a product using suitable materials with the intention of improving aspects of the product’s aesthetics, functionality or quality, including consideration of sustainability.

Outcome 2
On completion of this unit the student should be able to use and evaluate materials, tools, equipment and processes to make a re-designed product or prototype, and compare the finished product or prototype with the original design.

Unit 2: Collaborative design
In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including: human needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution.

Outcome 1
On completion of this unit the student should be able to design and plan a product, a product range or a group product with component parts in response to a design brief based on a common theme, both individually and within a team.

Outcome 2
On completion of this unit the student should be able to justify, manage and use appropriate production processes to safely make a product and evaluate, individually and as a member of a team, the processes and materials used, and the suitability of a product or components of a group product against the design brief.

Unit 3: Applying the Product design process
In this unit students are engaged in the design and development of a product that meets the needs and expectations of a client and/or an end-user, developed through a design process and influenced by a range of complex factors. These factors include the purpose, function and context of the product; human centred design factors; innovation and creativity; visual, tactile and aesthetic factors; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology. Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a ‘one-off situation’ in a small ‘cottage’ industry or a school setting. Although a product design process may differ in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the Product design process as they design for others.
In the initial stage of the Product design process, a design brief is prepared. It outlines the context or situation around the design problem and describes the needs and requirements in the form of constraints or considerations.
Outcome 1
On completion of this unit the student should be able to explain the roles of the designer, client and/or end-user/s, the Product design process and its initial stages, including investigating and defining a design problem, and explain how the design process leads to product design development.

Outcome 2
On completion of this unit the student should be able to explain and analyse influences on the design, development and manufacture of products within industrial settings.

Outcome 3
On completion of this unit the student should be able to present a folio that documents the Product design process used while working as a designer to meet the needs of a client and/or an end-user, and commence production of the designed product.

Unit 4: Product development and evaluation
In this unit students learn that evaluations are made at various points of product design, development and production. In the role of designer, students judge the suitability and viability of design ideas and options referring to the design brief and evaluation criteria in collaboration with a client and/or an end-user. Comparisons between similar products help to judge the success of a product in relation to a range of Product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the Product design factors.
In Area of Study 1, students use comparative analysis and evaluation methods to make judgments about commercial product design and development.
In Area of Study 2, students continue to develop and safely manufacture the product designed in Unit 3, Outcome 3, using materials, tools, equipment and machines, and record and monitor the production processes and modifications to the production plan and product.
In Area of Study 3, students evaluate the effectiveness and efficiency of techniques they used and the quality of their product with reference to evaluation criteria and client and/or end-user feedback.
Students make judgments about possible improvements. They produce an informative presentation to highlight the product’s features to the client and/or an end-user and explain its care requirements.

Outcome 1
On completion of this unit the student should be able to compare, analyse and evaluate similar commercial products, taking into account a range of factors and using appropriate techniques.

Outcome 2
On completion of this unit the student should be able to safely apply a range of production skills and processes to make the product designed in Unit 3, and manage time and resources effectively and efficiently.

Outcome 3
On completion of this unit the student should be able to evaluate the outcomes of the design, planning and production activities, explain the product’s design features to the client and/or an end-user and outline its care requirements.
Unit 1: Studio inspiration and techniques
In this unit students focus on developing an individual understanding of the stages of studio practice and learn how to explore, develop, refine, resolve and present artworks. Students explore sources of inspiration, research artistic influences, develop individual ideas and explore a range of materials and techniques related to specific art forms. Using documented evidence in a visual diary, students progressively refine and resolve their skills to communicate ideas in artworks. Students also research and analyse the ways in which artists from different times and cultures have developed their studio practice to interpret and express ideas, source inspiration and apply materials and techniques in artworks. The exhibition of artworks is integral to Unit 1 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

Outcome 1
On completion of this unit the student should be able to identify sources of inspiration and artistic influences and outline individual ideas, art forms and aesthetic qualities, and translate these into visual language.

Outcome 2
On completion of this unit the student should be able to produce at least one finished artwork and progressively record the development of their studio practice, conveying individual ideas through the exploration of materials and techniques in the selected art form/s.

Outcome 3
On completion of this unit the student should be able to discuss the artistic practice of artists from different times and cultures, their sources of inspiration, materials and techniques for at least two artworks by each artist.

All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. For this unit students are required to demonstrate three outcomes. As a set these outcomes encompass the areas of study in the unit.

Suitable tasks for assessment may be selected from the following:

Outcomes 1 and 2
- An outline of a proposed investigation of studio practice using visual language.
- A selection of exploratory work and a visual diary, showing sources of ideas and inspiration.
- Translated into visual form through the use of a variety of materials and techniques.
- A presentation of at least one finished artwork.

Outcome 3
At least one of:
- An extended response.
- A short-answer responses.
- A presentation using digital technologies.
- An oral presentation.
Unit 2: Studio exploration and concepts
In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms. Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process. Through the study of art movements and styles, students begin to understand the use of other artists’ work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art. Analysis is used to understand the artists’ ideas and how they have created aesthetic qualities and subject matter. Comparisons of contemporary art with historical art styles and movements should be encouraged. The exhibition of artworks is integral to Unit 2 and students are encouraged to visit a variety of exhibition spaces throughout the unit, reflect on the different environments and examine how artworks are presented to an audience.

Outcome 1
On completion of this unit the student should be able to develop an individual exploration proposal to form the basis of a studio process, and from this produce and document a variety of potential directions in a visual diary for at least one artwork.

Outcome 2
On completion of this unit the student should be able to compare a range of historical and contemporary art periods, styles or movements, and analyse the ways in which artists communicate ideas, develop styles and demonstrate aesthetic qualities in artworks.

For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

A suitable task for assessment includes:
Outcome 1
• undertaking an exploration proposal.
• undertaking studio process.
• producing at least one artwork.
Suitable tasks for assessment may be selected from the following:
Outcome 2
• an extended response.
• short-answer responses.
• a presentation using digital technologies.
• an oral presentation.

Unit 3: Studio practices and processes
In this unit students focus on the implementation of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a studio process to explore and develop their individual ideas. Analysis of these explorations and the development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4.

For this study, the exploration proposal supports the student to identify a direction for their studio process. The student determines the studio process. This process records trialling, experimenting, analysing and evaluating the extent to which art practices successfully communicate ideas presented in the exploration proposal. From this process students progressively develop and identify a range of potential directions. Students will select some of these potential directions from which to develop at least two artworks in Unit 4.
The exhibition of artworks is integral to Unit 3 and students are expected to visit a variety of exhibitions throughout the unit, reflect on the different environments where artworks are exhibited and examine how artworks are presented to an audience. Students are expected to visit at least two different exhibitions and study specific artworks displayed in these exhibitions during their current year of study.

Outcome 1
On completion of this unit the student should be able to prepare an exploration proposal that formulates the content and parameters of an individual studio process including a plan of how the proposal will be undertaken.

Outcome 2
On completion of this unit the student should be able to progressively present an individual studio process recorded in written and visual form that produces a range of potential directions, and reflects the concepts and ideas documented in the exploration proposal and work plan.

Outcome 3
On completion of this unit the student should be able to examine the practice of at least two artists, with reference to two artworks by each artist, referencing the different historical and cultural context of each artwork.

Unit 4: Studio practice and art industry contexts
In this unit students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4. The development of these artworks should reflect refinement and skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities discussed in the exploration proposal in Unit 3. Once the artworks have been made, students provide an evaluation about the cohesive relationship between the artworks.

This unit also investigates aspects of artists’ involvement in the art industry, focusing on at least two different exhibitions, that the student has visited in the current year of study with reference to specific artworks in those exhibitions. Students investigate the methods and considerations of the artist and/or curator involved in the preparation, presentation and conservation of artworks displayed in exhibitions in at least two different galleries or exhibitions. Students examine a range of environments for the presentation of artworks including public galleries and museums, commercial and private galleries, university art galleries, artist-run spaces, alternative art spaces and online gallery spaces.

Outcome 1
On completion of this unit the student should be able to present at least two finished artworks based on selected and evaluated potential directions developed through the studio process, which demonstrate refinement and application of materials and techniques, and that realise and communicate the student’s ideas expressed in the exploration proposal.

Outcome 2
On completion of this unit the student should be able to provide visual and written documentation that identifies and evaluates the extent to which the artworks reflect the selected potential directions, and effectively demonstrates a cohesive relationship between the works.

Outcome 3
On completion of this unit the student should be able to compare the methods used by artists and considerations of curators in the preparation, presentation, conservation and promotion of specific artworks in at least two different exhibitions.
Areas of Study
1. Folio of Artworks
2. Focus, Reflection and Evaluation
3. Art Industry Contexts

Assessment
Units 1 and 2: Individual school decision on levels of achievement
Unit 3 School-assessed Task: 33 per cent
Unit 4 School-assessed Task: 33 per cent
End-of-year examination: 34 per cent.

Visual Communication Design

Aims
This study enables students to:
• develop and apply drawing skills using a range of techniques to make their design thinking visible
• develop a range of skills in selecting and applying media, materials, and manual and digital methods to suit design purposes
• apply a design process to create visual communications
• understand how key visual communication design elements, design principles, media, materials, and manual and digital methods contribute to the creation of their own visual language
• develop a capacity to undertake ongoing design thinking while conceiving, communicating and presenting ideas
• understand how historical, social, cultural, environmental and contemporary factors influence visual communications

Unit 1: Introduction to visual communication design
This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications.

Area of Study
1. Drawing as a means of communication
2. Design elements and design principles
3. Visual communication design in context

Unit 2: Applications of visual communication design
This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields.

Areas of study
1. Technical drawing in context
2. Type and imagery
3. Applying the design process
Unit 3: Design thinking and practice
In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media, materials and the application of design elements and design principles can create effective visual communications for specific audiences and purposes. They investigate and experiment with the use of manual and digital methods, media and materials to make informed decisions when selecting suitable approaches for the development of their own design ideas and concepts.

Areas of Study
1. Analysis and practice in context
2. Design Industry Practice
3. Developing a Brief and generating ideas

Unit 4: Design development and presentation
The focus of this unit is the development of design concepts and two final presentations of visual communication to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated needs.

Areas of Study
1. Development of Design Concepts
2. Final Presentations
3. Evaluation and Explanation

Assessment and Reporting
Units 1 and 2 will be assessed internally on course work and end-of-semester exams In Units 3 and 4, school-assessed course work and an end-of-year examination will determine the student’s level of achievement. Percentage contributions to the final assessment are as follows:

Unit 3 school-assessed course work: 25%
Unit 4 school-assessed task: 40%
Units 3 and 4 examination: 35%

VCAL Work Related Skills (WRS)

Aims
The Work Related Skills units are designed to:
• integrate learning about work skills with prior knowledge and experiences
• enhance the development of employability skills through work related contexts
• develop critical thinking skills that apply to problem solving in work contexts
• develop planning and work related organisational skills
• develop OH&S awareness
• develop and apply transferable skills for work related contexts

Work Related Skills units have been developed to recognise learning that is valued within community and work environments as preparation for employment. The unit will develop the interests and employability skills of the students. They will understand about work skills with prior knowledge and experiences. They will enhance the development of employability skills in work related contexts and develop critical thinking skills that apply to problem solving in work contexts.
Also planning and work related organisational skills will be improved and the students will develop OH&S awareness.

**VCAL Industry Specified Skills**

**Aims**
Study in this strand is designed to:

- develop key knowledge and skills in a vocational context that assists the student in making informed choices regarding further learning and/or employment
- provide vocational experiences relevant to student interests and abilities
- provide pathways to further study through credit gained that articulates into VCE or VET courses

Industry Specific Skills is to enable the development of skills, knowledge and attitudes related to a chosen vocation in preparation for progression to further learning or employment. This is shown through students completing VET modules/units of competence that are in total approximately 100 nominal hours. The students will develop key knowledge and skills in a vocational context that assists the student in making informed choices regarding further learning and/or employment and will provide vocational experiences relevant to student interests and abilities.

**VCAL Literacy & Numeracy**

**Aims**
Study in this strand is designed to:

- develop knowledge, skills and understanding relevant to reading, writing and oral communication in the social contexts of family, employment, further learning and community
- develop knowledge, skills and understanding relevant to the practical application of numeracy in the contexts of home, work and the community
- provide pathways to further study and work

This will include English and Mathematics at an appropriate level for the students, aiming to provide skills that enable progression to work, or further study. Units in this strand may include VCAL Literacy units, VCE English, VCE Foundation English, VCAL Numeracy units, VCE Mathematics and Further Education & Training Certificates such as the Certificate in General Education for Adults.

The Literacy Skills units are premised on the understanding that effective literacy and numeracy skills development occurs within social contexts. The application of literacy skills cannot be separated from social context. The overall purpose is to provide an applied ‘real life’ approach to literacy development.
VCAL Personal Development Skills

Aims
The Personal Development Skills units are designed to develop:

• self-awareness
• improved health and wellbeing
• commitment to, and achievement of, personal goals
• social and community awareness
• civic and civil responsibility

Learning programs selected and developed for young people for VCAL units in the Personal Development Skills Strand will be consistent with youth development principles that include:

• valuing and engaging the contribution of young people
• building competence and resilience in individuals including minimising risk factors and enhancing the promotion of protective behaviours for young people
• civic and civil participation and the promotion of active citizenship
• partnership approaches to program planning and delivery that link young people with the broader community and its members

The curriculum principles underpinning learning programs include:

• student-centred approaches and decision making regarding program design, delivery and evaluation
• opportunities for experiential learning and skill development through activities that are structured and sequential in their learning outcomes
• program design that has high relevance to personal strengths and experiences and that is responsive to diverse needs
• program delivery that builds resilience, confidence and self-worth
• learning environments that strengthen connections with the community

Many programs delivered in this unit will involve students in out of school activities and/or community based projects. Learning programs that incorporate a youth development philosophy will require a commitment to flexible learning and delivery.