Senior School Handbook 2019
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# VCE Units Offered in 2019

Descriptions of the following units are contained in this handbook.

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## VET in Schools Programs

For a full list of VET courses offered see page 37.

*NB: VCE and VET units will run depending on; student choices, availability of staff, the provision of a sequential program.*
Choosing your VCE Program

Your VCE program is a complete list of the VCE units you complete over two years – or longer if you choose. The minimum number of units to pass VCE is 16 units. You cannot get your VCE by doing fewer. Regardless of how many units you do altogether, you must pass:

- At least three units of English over the two years (which must include Units 3 & 4)
- And three other sequences of 3 & 4 units

Mirboo North Secondary College Guidelines

The school timetable will be organised to enable students to undertake up to six units in any one semester. The normal program will be 6, 6, 5, 5 units in sequence in semesters 1, 2, 3 and 4.

The timetable is arranged in Vertical Module Grouping (VMG). This structure allows students to choose programs from other year levels.

Whilst many Year 11 students will attempt twelve units 1 and 2 over the year, it is envisaged that some students in Year 11 will attempt Year 12 units (3 & 4) or VET units.

Many Year 12 students will attempt five units 3 & 4 sequences over the year, but some students may complete units 1 & 2, VET or university enhancement units as part of their program.

Selecting and Organising your VCE

We run a number counselling sessions to help you choose the most appropriate pathway though Senior School.

Use the following checklist and you should be well on your way to choosing a program that meets your needs. Many of the suggestions apply whether you are considering the usual two-year program or a longer one. Remember, you are not expected to come up with a program out of thin air. Your Senior School Coordinators and Careers teacher will be there to help you.

**Step 1: Find out what is possible**
- Which units am I interested in doing?
- Which units are available at my school?

**Step 2: Make the Choice**
Choose units that
- Interest you
- You are good at
- Lead to employment that you find appealing
- Are prerequisites for further training or tertiary courses that you are considering
- Give you an advanced standing in a VET course or are part of a VET in Schools program leading to a VET qualification within your VCE

Accelerated Learning

It is possible for Year 10 students to enrol in a Unit 1 & 2 VCE study, for Year 11 students to undertake a 3 & 4 unit sequence and for Year 12 students to undertake university studies as part of their program.

Approval for acceleration in subjects will be made in consultation with:
- Senior School Team
- Subject Teacher
University Studies
Links have been established with Monash University and the University of Melbourne, which enable talented Year 12 students to undertake a first-year university subject whilst completing their VCE, and thus gain credit towards a first-year degree course.

The enhancement studies are inappropriate for most secondary students whose academic needs can be met by normal progression through the secondary school system.

The associated university provides assessment.

The general guidelines for student eligibility for enhancement studies include:
- Students may have completed units 3 & 4 of the associated study in Year 11
- Students will have achieved exceptionally high results across all subjects in Year 11; and
- Students must be undertaking units 3 & 4 of at least four VCE studies in Year 12, and must have completed at least five VCE studies at this level by the end of Year 12.

University enhancement studies count as a student’s sixth VCE study. On successful completion of the entire first year study (i.e. two semester subjects) the student will have their ATAR credited with 4 – 5.5 bonus points, depending upon the level of performance.

Completion of the course is credited towards a first-year degree course at either Monash University or the University of Melbourne (there is agreement between the universities to accept cross-accreditation).

VCE Unit Descriptions

Only the VCE units offered by Mirboo North Secondary College for 2019 are described and are alphabetically listed.

Students should take advantage of resources such as the Job Guide, VICTER Guide, VTAC Courselink, OZJAC, Career Voyager and the Careers Room to fully explore the career opportunities that are open to them.

Biology

Rationale
VCE Biology enables students to investigate the processes involved in sustaining life at cellular, system, species and ecosystem levels. In undertaking this study, students examine how life has evolved over time and understand that in the dynamic and interconnected system of life all change has a consequence that may affect an individual, a species or the collective biodiversity of Earth. The study gives students insights into how knowledge of molecular and evolutionary concepts underpin much of contemporary biology, and the applications used by society to resolve problems and make advancements.

VCE Biology provides for continuing study pathways within the discipline and leads to a range of careers. Branches of biology include botany, genetics, immunology, microbiology, pharmacology and zoology. In addition, biology is applied in many fields of endeavour including biotechnology, dentistry, ecology, education, food science, forestry, health care, horticulture, medicine, optometry, physiotherapy and veterinary science. Biologists also work in cross-disciplinary areas such as bushfire research, environmental management and conservation, forensic science, geology, medical research and sports science.
Unit 1 – How do living things stay alive?

Course Description
In this unit students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. They analyse types of adaptations that enhance the organism’s survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat. The role of a keystone species in maintaining the structure of an ecosystem is explored. Students consider how the planet’s biodiversity is classified and the factors that affect the growth of a population.

Areas of Study
- How do organisms function?
- How do living systems sustain life?
- Practical Investigation

Unit 2 – How is continuity of life maintained?

Course Description
In this unit students focus on cell reproduction and the transmission of biological information from generation to generation. Students learn that all cells are derived from pre-existing cells through the cell cycle. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies, and consider the advantages and disadvantages of these two types of reproduction. 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.

Areas of Study
- How does reproduction maintain the continuity of life?
- How is inheritance explained?
- Investigation of an issue

Unit 3 – How do cells maintain life?

Course Description
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.

Students study the synthesis, structure and function of nucleic acids and proteins as key molecules in cellular processes. They explore the chemistry of cells by examining the nature of biochemical pathways, their components and energy transformations. Cells communicate with each other using a variety of signalling molecules. Students consider the types of signals, the transduction of information within the cell and cellular responses. At this molecular level, students study the human immune system and the interactions between its components to provide immunity to a specific antigen.

A student practical investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

Areas of Study
- How do cellular processes work?
- How do cells communicate?
Unit 4 – How does life change and respond to challenges over time?

Course Description
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.

Students examine the structural and cognitive trends in the human fossil record and the interrelationships between human biological and cultural evolution. The biological consequences, and social and ethical implications, of manipulating the DNA molecule and applying biotechnologies is explored for both the individual and the species.

Areas of Study
- How are species related?
- How do humans impact on biological processes?

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Business Management

Rationale
In contemporary Australian society, there are a range of businesses managed by people who establish systems and processes to achieve a variety of objectives. These systems and processes are often drawn from historical experience and management theories designed to optimise the likelihood of achieving success.

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

Unit 1 – Planning a Business

Course Description
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.

Areas of Study
- The business idea
- External environment
- Internal environment
Unit 2 – Establishing a Business
Course Description
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.

Areas of Study
- Legal requirements and financial considerations
- Marketing a business
- Staffing a business

Unit 3 – Managing a Business
Course Description
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.

Areas of Study
- Business foundations
- Managing employees
- Operations management

Unit 4 – Transforming a Business
Course Description
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.

Areas of Study
- Reviewing performance – the need for change
- Implementing change

Chemistry

Rationale
VCE Chemistry enables students to examine a range of chemical, biochemical and geophysical phenomena through the exploration of the nature of chemicals and chemical processes. In undertaking this study, students apply chemical principles to explain and quantify the behaviour of matter, as well as undertake practical activities that involve the analysis and synthesis of a variety of materials.
VCE Chemistry provides for continuing study pathways within the discipline and leads to a range of careers. Branches of chemistry include organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry and biochemistry. In addition, chemistry is applied in many fields of endeavour including agriculture, bushfire research, dentistry, dietetics, education, engineering, environmental sciences, forensic science, forestry, horticulture, medicine, metallurgy, meteorology, pharmacy, sports science, toxicology, veterinary science and viticulture.

Unit 1 – How can the diversity of materials be explained?
Course Description
The development and use of materials for specific purposes is an important human endeavour. In this, unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms.

Areas of Study
• How can knowledge of elements explain the properties of matter?
• How can the versatility of non-metals be explained?
• Research investigation

Unit 2 – What makes water such a unique chemical?
Course Description
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.

Areas of Study
• How do substances interact with water?
• How are substances in water measured and analysed?
• Practical investigation
  ▪ The origin of the elements
  ▪ The development of the periodic table
  ▪ The lanthanoids and actinoids
  ▪ Using light to solve chemical puzzles
  ▪ Glass
  ▪ Crude oil
  ▪ Surfactants
  ▪ Polymers and composite materials
  ▪ Nanomaterials
  ▪ The life cycle of a selected material or chemical

Unit 3 – How can chemical processes be designed to optimise efficiency?
Course Description
The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment.

Students compare and evaluate different chemical energy resources, including fossil fuels, biofuels, galvanic cells and fuel cells. They investigate the combustion of fuels, including the energy transformations involved, the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions, and calculations of the amounts of energy released and their representations. Students consider the purpose, design and operating principles of galvanic cells, fuel cells and electrolytic cells. In this context they use the electrochemical series to predict and write half and overall redox equations, and apply Faraday’s laws to calculate quantities in electrolytic reactions.
A student practical investigation related to energy and/or food is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

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

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

Course Description
Students study the ways in which organic structures are represented and named. They process data from instrumental analyses of organic compounds to confirm or deduce organic structures, and perform volumetric analyses to determine the concentrations of organic chemicals in mixtures. Students consider the nature of the reactions involved to predict the products of reaction pathways and to design pathways to produce particular compounds from given starting materials.

Students investigate key food molecules through an exploration of their chemical structures, the hydrolytic reactions in which they are broken down and the condensation reactions in which they are rebuilt to form new molecules. In this context, the role of enzymes and coenzymes in facilitating chemical reactions is explored. Students use calorimetry as an investigative tool to determine the energy released in the combustion of foods.

Areas of Study
- How can the diversity of carbon compounds be explained and categorised?
- What is the chemistry of food?

English

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

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

Unit 1
Course Description
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.

Areas of Study
- Reading and creating texts
- Analysing and presenting argument

Unit 2
Course Description
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.
Areas of Study
- Reading and comparing texts
- Analysing and presenting argument

Unit 3
Course Description
In this unit students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts.

Areas of Study
- Reading and creating texts
- Analysing argument

Unit 4
Course Description
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
- Reading and comparing texts
- Presenting argument

Food Studies

Rationale
Australia has a varied and abundant food supply, and food and cooking have become prominent in digital media and publishing. Globally, many people do not have access to a secure and varied food supply and many Australians, amid a variety of influences, consume food and beverage products that may harm their health. This study examines the background to this abundance and explores reasons for our food choices.

VCE Food Studies 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. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, food manufacturing and hospitality.

Materials Cost: Students who undertake Units 1 & 2 and Units 3 & 4 will be required to pay $120 per unit to cover the cost of food. Additional costs may be incurred if students choose food items for their folios that are expensive or hard to source.

Unit 1 – Food Origins
Course Description
This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world. In Area of Study 1 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 and global trade in food. Students consider the origins and significance of food through inquiry into particular food-producing regions of the world.

In Area of Study 2 students focus on Australia. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia’s culinary identity today and reflect on the concept of an Australian cuisine.
Areas of Study
- Food around the world
- Food in Australia

Unit 2 – Food Makers
Course Description
In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in small-scale domestic settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. They consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life. In demonstrating their practical skills, students design new food products and adapt recipes to suit particular needs and circumstances. They consider the possible extension of their role as small-scale food producers by exploring potential entrepreneurial opportunities.

Areas of Study
- Food industries
- Food in the home

Unit 3 – Food in Daily Life
Course Description
This unit investigates the many roles and everyday influences of food. Area of Study 1 explores the science of food: our physical need for it and how it nourishes and sometimes harms our bodies. Students investigate the physiology of eating and appreciating food, and the microbiology of digestion. They also investigate the functional properties of food and the changes that occur during food preparation and cooking. They analyse the scientific rationale behind the Australian Dietary Guidelines and the Australian Guide to Healthy Eating and develop their understanding of diverse nutrient requirements.

Area of Study 2 focuses on influences on food choice: 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.

Areas of Study
- The science of food
- Food choice, health and wellbeing

Unit 4 – Food Issues, Challenges and Futures
Course Description
In this unit students examine debates about global and Australian food systems. Area of Study 1 focuses on issues about 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 research a selected topic, seeking clarity on current situations and points of view, considering solutions and analysing work undertaken to solve problems and support sustainable futures.

Area of Study 2 focuses on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. Students consider how to assess information and draw evidence-based conclusions. They apply this methodology to navigate contemporary food fads, trends and diets. They practise and improve their food selection skills by interpreting food labels and analysing the marketing terms used on food packaging.
German

Rationale
This study develops students’ ability to understand and use a language that has long been recognised as a world language of culture, music, theology and philosophy, as well as a key language in the fields of science, medicine, economics and technology. As well as being extensively used within communities in Europe, Latin America, the Far East, and Africa there is a significant German heritage within Australia. Studying a language other than English contributes to the overall education of students, particularly in the area of communication, but also in cross-cultural understanding, cognitive development, and literacy.

Unit 1
Course Description
In this unit students develop an understanding of the language and culture/s of German-speaking communities through the study of three or more topics from the prescribed themes listed. Each area of study in the unit must focus on a different subtopic. Students access and share useful information on the topics and subtopics through German and consolidate and extend vocabulary and grammar knowledge and language skills. They focus on analysing cultural products or practices including visual, spoken or written texts.

Areas of Study
- Interpersonal communication
- Interpretive communication
- Presentational communication

Unit 2
Course Description
In this unit students develop an understanding of aspects of language and culture through the study of three or more topics from the prescribed themes. Each area of study must focus on a different subtopic. Students analyse visual, spoken and written texts. They access and share useful information on the topics and subtopics through German and consolidate and extend vocabulary, grammar knowledge and language skills.

Areas of Study
- Interpersonal communication
- Interpretive communication
- Presentational communication

Unit 3 & 4
Course Description
The areas of study comprise themes and topics, grammar text types, vocabulary and kinds of writing. In these units students undertake a detailed study of Language and Culture through texts. Students should be able to express ideas through the production of original texts, analyse and use information from spoken and written texts and exchange information, opinions and experiences. They should also be able to respond critically to spoken and written texts, which reflect aspects of the language and culture of German-speaking communities.

Areas of Study
- Themes and topics
  The individual
The German-speaking communities

The changing world

- Kinds of writing
- Vocabulary

# Health & Human Development

## Rationale

VCE Health and Human Development provides students with broad understandings of health and wellbeing that reach far beyond the individual. Students learn how important health and wellbeing is to themselves and to families, communities, nations and global society. Students explore the complex interplay of biological, sociocultural and environmental factors that support and improve health and wellbeing and those that put it at risk. The study provides opportunities for students to view health and wellbeing, and development, holistically – across the lifespan and the globe, and through a lens of social equity and justice.

## Unit 1 – Understanding Health and Wellbeing

### Course Description

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

In this, unit students identify personal perspectives and priorities relating to health and wellbeing, and enquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islanders.

### Areas of Study

- Health perspectives and influences
- Health and nutrition
- Youth health and wellbeing

## Unit 2 – Managing Health and Development

### Course Description

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

### Areas of Study

- Developmental transitions
- Health care in Australia

## Unit 3 – Australia’s Health in a Globalised World

### Course Description

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

Areas of Study
- Understanding health and wellbeing
- Promoting health and wellbeing

Unit 4 – Health and Human Development in a Global Context
Course Description
This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Area of Study 2 looks at global action to improve health and wellbeing and human development, focusing on the United Nations’ (UN’s) Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO). Students also investigate the role of non-government organisations and Australia’s overseas aid program. Students evaluate the effectiveness of health initiatives and programs in a global context and reflect on their capacity to take action.

Areas of Study
- Health and wellbeing in a global context
- Health and the Sustainable Development Goals

History

Rationale
The study of VCE History assists students to understand themselves, others and their world, and broadens their perspective by examining people, groups, events, ideas and movements. Through studying VCE History, students develop social, political, economic and cultural understanding. They also explore continuity and change: the world is not as it has always been, and it will be subject to change in the future. In this sense, history is relevant to contemporary issues. It fosters an understanding of human agency and informs decision making in the present.

We can never know the whole past. Historical knowledge rests on the interpretation of sources that are used as evidence. Furthermore, judgments of historical significance made by historians are central to the discipline. Historians do not always agree about the meaning that is taken from the past: historical interpretations are often subject to academic and public debate. The study of history equips students to take an informed position on such matters, helping them develop as individuals and citizens.

Unit 1 – Twentieth Century History (1918-1939)
Course Description
In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars.

World War One is regarded by many as marking the beginning of twentieth century history since it represented such a complete departure from the past and heralded changes that were to have an impact for decades to come. The post-war treaties ushered in a period where the world was, to a large degree, reshaped
with new borders, movements, ideologies and power structures. These changes affected developments in Europe, the USA, Asia, Africa and the Middle East. Economic instability caused by the Great Depression also contributed to the development of political movements. Despite ideals about future peace, reflected in the establishment of the League of Nations, the world was again overtaken by war in 1939.

The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarised and anti-western. In the USA, the consumerism and material progress of the 1920s was tempered by the Great Crash of 1929. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

Areas of Study
- Ideology and conflict
- Social and cultural change

Unit 2 – Twentieth Century History (1945-2000)

Course Description
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
- Competing ideologies
- Challenge and change

Units 3 & 4 – Revolutions

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

In these units, students develop an understanding of the complexity and multiplicity of causes and consequences in the revolutionary narrative. They construct an argument about the past using primary sources as evidence and evaluate the extent to which the revolution brought change to the lives of people. They consider how perspectives of the revolution give an insight into the continuity and change.
experienced by those who lived through dramatic revolutionary moments. Students evaluate historical interpretations about the causes and consequences of revolution and the effects of change instigated by the new order.

Areas of Study
- **Causes of revolution**
  The periods for this area of study are:
  - The Russian Revolution from 1896 to October 1917 (Coronation of Tsar Nicholas to the 25th October Revolution 1917)
  - The Chinese Revolution from 1912 to 1949 (The Chinese Republic to the Communist victory in the Civil War on the 1 October 1949)

- **Consequences of revolution**
  The periods for this area of study are:
  - The Russian Revolution from October 1917 to 1927 (Sovnarkom decrees to the end of the NEP)
  - The Chinese Revolution from 1949 to 1971 (Communist victory to the death of Lin Biao)

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**Legal Studies**

**Rationale**
In contemporary Australian society, there is a range of complex laws that exist to protect the rights of individuals and to achieve social cohesion. These laws are made by bodies such as parliament and the courts and are upheld by a number of institutions and processes within the legal system. Members of society interact with the laws and the legal system in many aspects of their lives and can influence lawmakers.

**Unit 1 – Guilt and Liability**

**Course Description**
Criminal law and civil law aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order and infringing criminal law can result in charges. Civil law deals with the infringement of a person’s or group’s rights and breaching civil law can result in litigation.

In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

**Areas of Study**
- Legal foundations
- The presumption of innocence
- Civil liability

**Unit 2 – Sanctions, Remedies and Rights**

**Course Description**
Criminal law and civil law aim to protect the rights of individuals. When rights are infringed, a case or dispute may arise which needs to be determined or resolved, and sanctions or remedies may be imposed. This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness.

Students undertake a detailed investigation of two criminal cases and two civil cases from the past four years to form a judgment about the ability of sanctions and remedies to achieve the principles of justice. Students develop their understanding of the way rights are protected in Australia and in another country,
and possible reforms to the protection of rights. They examine a significant case in relation to the protection of rights in Australia.

**Areas of Study**
- Sanctions
- Remedies
- Rights

**Unit 3 – Rights and Justice**

**Course Description**
The Victorian justice system, which includes the criminal and civil justice systems, aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. In this unit students examine the methods and institutions in the justice system and consider their appropriateness in determining criminal cases and resolving civil disputes. Students consider the Magistrates’ Court, County Court and Supreme Court within the Victorian court hierarchy, as well as other Victorian legal institutions and bodies available to assist with cases. Students explore matters such as the rights available to an accused and to victims in the criminal justice system, the roles of the judge, jury, legal practitioners and the parties, and the ability of sanctions and remedies to achieve their purposes. Students investigate the extent to which the principles of justice are upheld in the justice system. They discuss recent reforms from the past four years and recommended reforms to enhance the ability of the justice system to achieve the principles of justice. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

**Areas of Study**
- The Victorian criminal justice system
- The Victorian civil justice system

**Unit 4 – The People and the Law**

**Course Description**
The study of Australia’s laws and legal system involves an understanding of institutions that make and reform our laws, and the relationship between the Australian people, the Australian Constitution and law-making bodies. In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments and protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationship between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing law reform. Throughout this unit, students apply legal reasoning and information to actual scenarios.

**Areas of Study**
- The people and the Australian Constitution
- The people, the parliament and the courts

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**Mathematics**

**Prerequisites**
Students need to be aware of the necessity to be committed to this subject throughout their senior schooling if they intend to use it as an entry subject to further study. Students will have a mathematics subject recommended to them near the completion of each semester. This recommendation is made on the basis of what the current Mathematics teacher feels the student is capable of, in light of their observations of the student and their results over the semester. It is unlikely that a student who fails to meet the pre-requisite level will be allowed into that subject. Past experience has shown us that these grades are a very realistic assessment of future success in the various subjects.
Rationale
This study is designed to provide access to worthwhile and challenging mathematical learning in a way which takes into account the interests, needs, dispositions and aspirations of a wide range of students, and introduces them to key aspects of the discipline. It is also designed to promote students’ awareness of the importance of mathematics in everyday life in a technological society, and to develop confidence and the disposition to make effective use of mathematical concepts, processes and skills in practical and theoretical contexts.

Unit 1 & 2 – General Mathematics
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 these units of study students must have a TI-Nspire CX CAS calculator

Areas of Study
- Algebra and structure
- Arithmetic and number
- Discrete mathematics
- Geometry, measurement and trigonometry
- Graphs of linear and non-linear relations
- Statistics

Mathematical Methods – 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.
*For these units of study students must have a TI-Nspire CX CAS calculator

Areas of Study
- Functions and graphs
- Algebra
- Calculus
- Probability and statistics

Mathematical Methods – 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.
*For this unit of study students must have a TinSpire calculator.

Areas of Study
- Functions and graphs
- Algebra
- Calculus
- Probability and statistics
Unit 3 & 4 – Further Mathematics

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.

*For these units of study students must have a TI-Nspire CX CAS calculator

Areas of Study
- Data analysis
- Recursion and financial modelling
- Applications

Unit 3 & 4 – Mathematical Methods

Mathematical Methods Units 3 and 4 are completely prescribed and extend the introductory study of simple elementary functions of a single real variable, to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. Units 3 and 4 consist of the areas of study ‘Functions and graphs’, ‘Calculus’, ‘Algebra’ and ‘Probability and statistics’, which must be covered in progression from Unit 3 to Unit 4, with an appropriate selection of content for each of Unit 3 and Unit 4. Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and skills for the outcomes of Mathematical Methods Units 3 and 4.

*For these units of study students must have a TI-Nspire CX CAS calculator

Areas of Study
- Functions and graphs
- Algebra
- Calculus
- Probability and statistics

Media

Rationale

VCE Media provides students with the opportunity to analyse media products and concepts in an informed and critical way. Students consider media texts, technologies and processes from various perspectives, including an analysis of structure and features. They examine industry production and distribution context, audience reception and the media’s contribution to and impact on society. This aspect of the study is integrated with the individual and collaborative design and production of media representations and products.

VCE Media supports students to develop and refine their analytical, critical, creative thinking and expression. Students strengthen their communication skills and technical knowledge. This study is relevant for students who wish to pursue further formal study at tertiary level or in vocational education and training settings. The study provides knowledge and skills in creative thinking, planning, analysis, creative expression and communication valuable for participation in and contribution towards contemporary society.
**Materials Cost:** Students who undertake Units 1 & 2 and Units 3 & 4 will be required to pay $50 for rental, wear and tear on equipment.

**Unit 1 – Representation and Technologies of Representation**

**Course Description**
In this unit students develop an understanding of the relationship between the media, technology and the representations present in media forms. They study the relationships between media technologies, audiences and society. Students develop practical and analytical skills, including an understanding of the contribution of codes and conventions to the creation of meaning in media products, the role and significance of selection processes in their construction, the role audiences play in constructing meaning from media representations, and the creative and cultural impact of new media technologies.

**Areas of Study**
- Representation
- Technologies of representation
- New media

**Unit 2 – Media Production and the Media Industry**

**Course Description:** The main purpose of this unit is to enable students to develop an awareness of the specialist production stages and roles within the collaborative organisation of media production. Students develop practical skills and analyse issues concerning the media production process.

**Areas of Study**
- Media production
- Media industry production
- Australian media organisations

**Unit 3 – Narrative and Media Production Design**

**Course Description**
In this unit students develop an understanding of film, television or radio drama production and story elements, and learn to recognise the role and significance of narrative organisation in fictional film, television or radio drama texts. Students examine how production and story elements work together to structure meaning in narratives to engage audiences. Students also develop practical skills through undertaking exercises related to aspects of the design and production process. They complete a media production design plan for a specific media form and audience. They present the relevant specifications as a written planning document, with visual representations that employ media planning conventions appropriate to the media form in which the student chooses to work.

**Areas of Study**
- Narrative
- Media production skills
- Media production design

**Unit 4 – Media: Process, Influence and Society’s Values**

**Course Description**
In this unit students further develop practical skills in the production of media products to realise the production design plan completed during Unit 3. Organisational and creative skills are refined and applied throughout each stage of the production process. Students analyse the relationship between media texts, social values and discourses in the media. The nature and extent of media influence, the relationship between the media, media audiences and media regulation are also critically analysed in this unit.

**Areas of Study**
- Media process
- Media texts and society’s values
- Media influence
Music Performance

Rationale
Music is an integral part of all cultures from the earliest of times, expressing and reflecting human experience. Music exists in a myriad of forms, each able to elicit an array of intellectual and emotional responses from its audience. A study of music enables students to strengthen their own relationship with music and to be personally enriched as they develop greater control of their own musical expression.

Music learning requires students’ active engagement in the practices of listening, performing and composing. As they learn in music, students apply critical and creative thinking skills to analyse and critique the work of contemporary and historical practitioners and develop their understanding of the diverse ways in which music ideas can be shaped to communicate artistic and expressive intent. Students also develop insights into the music traditions of contemporary and historical global cultures and form understandings of ways in which music can interact with other arts forms and fields of endeavour.

When students perform the works of other musicians, they develop skills in communicating and in working cooperatively and communally to achieve creative outcomes. Through analysing and responding to the work of other musicians, students develop knowledge of music, skills in critical thinking and greater confidence in written and oral expression. Students use communications and music technologies to achieve considered musical outcomes.

VCE Music equips students with personal and musical skills that enable them to follow pathways into tertiary music study or further training in a broad spectrum of music related careers. VCE Music also offers students opportunities for personal development and encourages them to make an ongoing contribution to the culture of their community through participation in life-long music making.

Materials Cost: Students who undertake Units 1 & 2 and Units 3 & 4 will be required to pay $60 fee to cover online subscription costs.

Additional Information
All students undertaking Music Performance must be having regular lessons on their main instrument, either privately or through the SGSMP.

Unit 1
Course Description
This unit focuses on building students’ performance and musicianship skills to present performances of selected group and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Areas of Study
- Performance
- Preparing for Performance
- Music Language

Unit 2
Course Description
This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these
challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Areas of Study
- Performance
- Preparing for performance
- Music language
- Organization of sound

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

Areas of Study
- Performance
- Preparing for Performance
- Music Language

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

Areas of Study
- Performance
- Preparing for performance
- Music language

Outdoor and Environmental Studies

Rationale
VCE Outdoor and Environmental Studies provides students with the skills and knowledge to safely participate in activities in outdoor environments and to respect and value diverse environments. The blend of direct practical experience of outdoor environments with more theoretical ways of knowing, enables informed understanding of human relationships with nature.

Materials Cost: All units have a semester fee of $400 (Units 1 & 2) to cover the costs of camps and excursions.
Unit 1 – Exploring Outdoor Experiences
Course Description
This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to and experiences of outdoor environments.

Students are provided with the opportunity to explore the many ways in which nature is understood and perceived. Students develop a clear understanding of the range of motivations for interacting with outdoor environments and the factors that affect an individual’s access to outdoor experiences and relationships with outdoor environments.

Areas of Study
- Motivations for outdoor experiences
- Experiencing outdoor environments

Unit 2 – Discovering Outdoor Environments
Course Description
This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impacts on outdoor environments.

Students examine a number of case studies of specific outdoor environments, including areas where there is evidence of human intervention. They develop the practical skills required to minimise human impact on outdoor environments. Students are provided with practical experiences as the basis for comparison between outdoor environments and reflection to develop theoretical knowledge about natural environments.

Areas of Study
- Investigating Outdoor Environments
- Impact on Outdoor Environments

Physical Education

Rationale
The study of VCE Physical Education enables students to integrate a contemporary understanding of the theoretical underpinnings of performance and participation in physical activity with practical application. Through engagement in physical activities, VCE Physical Education enables students to develop the knowledge and skills required to critically evaluate influences that affect their own and others’ performance and participation in physical activity.

This study equips students with the appropriate knowledge and skills to plan, develop and maintain their involvement in physical activity, sport and exercise across their lifespan and to understand the physical, social, emotional and cognitive health benefits associated with being active. The study also prepares students for employment and/or further study at the tertiary level or in vocational education and training settings in fields such as exercise and sport science, health science, education, recreation, sport development and coaching, health promotion and related careers.

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

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

Unit 2 – Physical Activity, Sport and Society

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

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

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

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

Unit 3 – Movement Skills and Energy for Physical Activity

Course Description
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.

Areas of Study
- How are movement skills improved?
- How does the body produce energy?
Unit 4 – Training to Improve Performance
Course Description
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
- What are the foundations of an effective training program?
- How is training implemented effectively to improve fitness?

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Physics

Rationale
Physics is a natural science based on observations, experiments, measurements and mathematical analysis with the purpose of finding quantitative explanations for phenomena occurring from the subatomic scale through to the planets, stellar systems and galaxies in the Universe. While much scientific understanding in physics has stood the test of time, many other areas continue to evolve. In undertaking this study, students develop their understanding of the roles of careful and systematic experimentation and modelling in the development of theories and laws. They undertake practical activities and apply physics principles to explain and quantify both natural and constructed phenomena.

VCE Physics provides for continuing study pathways within the discipline and leads to a range of careers. Physicists may undertake research and development in specialist areas including acoustics, astrophysics and cosmology, atmospheric physics, computational physics, education, energy research, engineering, instrumentation, lasers and photonics, medical physics, nuclear science, optics, pyrotechnics and radiography. Physicists also work in cross-disciplinary areas such as bushfire research, climate science, forensic science, geology, materials science, neuroscience and sports science.

Unit 1 – What ideas explain the physical world?
Course Description
Ideas in physics are dynamic. As physicists explore concepts, theories evolve. Often this requires the detection, description and explanation of things that cannot be seen. In this unit students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter.

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

Areas of Study
- How can thermal effects be explained?
- How do electric circuits work?
- What is matter and how is it formed?
Unit 2 – What do experiments reveal about the physical world?

Course Description
In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments. Students make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored through indirect observations.

In the core component of this unit students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. Students choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science. The option enables students to pursue an area of interest by investigating a selected question.

Areas of Study
- How can motion be described and explained?
- 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?
- 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. A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

Areas of Study
- How do things move without contact?
- How are fields used to move electrical energy?
- 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**
- How can waves explain the behaviour of light?
- How are light and matter similar?
- Practical investigation

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### Product Design & Technology – Wood

**Rationale**
Designers play an important part in our daily lives. They determine the form and function of the products we use. They transform ideas into drawings and plans for the creation and manufacture of useful products that fulfil human needs and wants. In recent history the use of resources to create an ever-increasing array of products has given designers an increased responsibility to think sustainably.

Students develop an understanding of the consequences of product design choices. They develop the necessary skills to critically analyse existing products and to develop their own creative solutions.

**Materials Cost:** Students who undertake Units 1 and Units 3 & 4 will be required to pay $110 per year in material costs. When undertaking any major pieces, students will need to purchase/supply the necessary materials for their chosen projects.

**Unit 1 – Product Re-design and Sustainability**

**Course Description**
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.

Knowledge of material use and suitability for particular products is essential in product design. Additionally, knowledge of the source, origin and processing of materials is central to sustainable practices. Students consider the use of materials from a sustainable viewpoint. Sustainable practices claimed to be used by designers are examined.

**Areas of Study**
- Product re-design for improvement
- Producing and evaluating a re-designed product

**Unit 2 – Collaborative Design**

**Course Description**
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.
Teamwork encourages communication between students and mirrors professional design practice where designers often work within a multi-disciplinary team to develop solutions to design problems. Students also examine the use of ICT to facilitate teams that work collaboratively but are spread across the globe.

In Area of Study 1, students work both individually and as members of a small design team to address a problem, need or opportunity and consider the associated human-centred design factors. They design a product within a range, based on a theme, or a component of a group product. They research and refer to a chosen style or movement. In Area of Study 2 the product produced individually or collectively is evaluated.

**Areas of Study**
- Designing within a team
- Producing and evaluating a collaboratively designed product

**Unit 3 – Applying the Product Design Process**

**Course Description**
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.

**Areas of Study**
- The Designer, client and/or end-user in product development
- Product development in industry
- Designing for Others

**Unit 4 – Product Development and Evaluation**

**Course Description**
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.

**Areas of Study**
- Product Analysis and Comparison
- Product Manufacture
- Product Evaluation

**Psychology**

**Rationale**
VCE Psychology provides students with a framework for exploring the complex interactions between biological, psychological and social factors that influence human thought, emotions and behaviour. In undertaking this study, students apply their learning to everyday situations including workplace and social relations. They gain insights into a range of psychological health issues in society.
VCE Psychology provides for continuing study pathways within the discipline and leads to a range of careers. Opportunities may involve working with children, adults, families and communities in a variety of settings such as academic and research institutions, management and human resources, and government, corporate and private enterprises. Fields of applied psychology include educational, environmental, forensic, health, sport and organisational psychology. Specialist fields of psychology include counselling and clinical contexts, as well as neuropsychology, social psychology and developmental psychology. Psychologists also work in cross-disciplinary areas such as medical research or as part of on-going or emergency support services in educational, institutional and industrial settings.

Unit 1 – How are behaviour and mental processes shaped?
Course Description
Human development involves changes in thoughts, feelings and behaviours. In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person’s psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours.

A student-directed research investigation related to brain function and/or development is undertaken in this unit. The research investigation draws on content from Area of Study 1 and/or Area of Study 2.

Areas of Study
- How does the brain function?
- What influences psychological development?
- Student-directed research investigation
  - Biopsychology
  - Brain and the use of technology
  - Cognition
  - Psychological development
  - Mental health and disorder
  - Changing thoughts, feelings and behaviour

Unit 2 – How do external factors influence behaviour and mental processes?
Course Description
A person’s thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person’s attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways.

A student practical investigation related to internal and external influences on behaviour is undertaken in this unit. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

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

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

A student practical investigation related to mental processes and psychological functioning is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3. The findings of the investigation are presented in a scientific poster format.

**Areas of Study**
- How does the nervous system enable psychological functioning?
- How do people learn and remember?

**Unit 4 – How is wellbeing developed and maintained?**

**Course Description**
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**
- How do levels of consciousness affect mental processes and behaviour?
- What influences mental wellbeing?
- Practical investigation

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**Studio Art**

**Rationale**
The creative nature of the visual arts provides individuals with the opportunity for personal growth, the expression of ideas and a process for examining identity. Exhibitions of artworks offer an insight into the diverse interpretations of life and experiences of artists. Engagement with artworks facilitates creative thinking and the development of new ideas; it also supports connection and exchange within local, national and global communities.

VCE Studio Arts encourages and supports students to recognise their individual potential as artists and develop their understanding and development of art making.

VCE Studio Arts broadens students’ understanding of, and ability to engage with, artworks. It equips students with the knowledge and skills to pursue an art studio practice and follow tertiary and industry pathways in fine art, research and education. The study also offers students opportunities for personal development and encourages them to make an ongoing contribution to society and the culture of their community through lifelong participation in the making and viewing of artworks.
Materials Cost: Students who undertake Units 1 & 2 will be required to pay $65 and $100 (Units 3 & 4) per year in material costs. When undertaking any major pieces for Unit 3 & 4, students will need to purchase/supply the necessary materials for these projects.

Unit 1 – Studio Inspiration and Techniques
Course Description
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.

Areas of Study
- Researching and recording ideas
- Studio practice
- Interpreting art ideas and use of materials and techniques

Unit 2 – Studio Exploration and Concepts
Course Description
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.

Areas of Study
- Exploration of studio practice and development of artworks
- Ideas and styles in artworks

Unit 3 – Studio Practices and Processes
Course Description
In this unit students focus on the implementation of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a studio process to explore and develop their individual ideas. Analysis of these explorations and the development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4.
For this study, the exploration proposal supports the student to identify a direction for their studio process. The student determines the studio process. This process records trialling, experimenting, analysing and evaluating the extent to which art practices successfully communicate ideas presented in the exploration proposal. From this process students progressively develop and identify a range of potential directions. Students will select some of these potential directions from which to develop at least two artworks in Unit 4.

The study of artists and their work practices and processes may provide inspiration for students’ own approaches to art making. Students investigate and analyse the response of artists to a wide range of source material and examine their use of materials and techniques. They explore professional art practices of artists from different historical and cultural contexts in relation to particular artworks and art forms.

The exhibition of artworks is integral to Unit 3 and students are expected to visit a variety of exhibitions throughout the unit, reflect on the different environments where artworks are exhibited and examine how artworks are presented to an audience. Students are expected to visit at least two different exhibitions and study specific artworks displayed in these exhibitions during their current year of study.

**Areas of Study**
- Exploration proposal
- Studio process
- Artists and studio practices

**Unit 4 – Studio Production and Art Industry Contexts**

**Course Description**
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.

**Areas of Study**
- Production and presentation of artworks
- Evaluation
- Art industry contexts

**Visual Communication & Design**

**Rationale**
Visual communicators in fields such as architecture, engineering, graphic design, multimedia design, industrial design, cartography, advertising and fashion all depend on graphics to develop and communicate ideas and information. Visual communication uses text and image (though not necessarily both in the same presentation) in either two- or three-dimensional form to communicate messages to audiences. Such
information can be presented in imaginative and original ways while conforming to conventions or accepted rules.

This study is intended to assist students in the understanding, use and interpretation of a range of visual communications. It involves a study of the vocabulary and grammar of visual communication, which includes an understanding of, and application of, drawing and drawing conventions, design elements and principles and function of design in communication.

Materials Cost: Students who undertake Units 1 & 2 and Units 3 & 4 will be required to pay $65 per year in material costs. When undertaking any major pieces for Unit 3 & 4, students will need to purchase/supply the necessary materials for these projects.

Unit 1 – Visual Communication
Course Description
The main purpose of this unit is to enable students to prepare instrumental drawings of objects and explore freehand drawing from direct observation. This unit also introduces students to the diversity of visual communication and the role of the design process in visual communication production.

Areas of Study
- Instrumental drawing
- Freehand drawing and rendering
- Design elements and design principles
- Design process

Unit 2 – Communication in Context
Course Description
The main purpose of this unit is to enable students to develop practical skills by generating images and developing them through freehand and instrumental drawing. The ways in which information and ideas are communicated visually will be explored through analysing the work of others. The visual communication production process will be applied by modifying existing final presentations for specified audiences.

Areas of Study
- Representing and communication form
- Developing imagery
- Developing visual communication solutions
- Visual communication in context

Unit 3 – Visual Communication Practices
Course Description
The main purpose of this unit is to enable students to apply the visual communication production process to satisfy specific communication needs. Students will investigate the production of visual communications in a professional setting, and evaluate examples of visual communications produced.

Areas of Study
- Communication design
- Communication analysis
- Investigating professional practice

Unit 4 – Designing to a Brief
Course Description
The main purpose of this unit is to enable students to prepare one brief, and design and produce developmental work and two final presentations based on the brief.

Areas of Study
- Developing a brief
- Developmental work
- Final presentations
The Victorian Certificate of Applied Learning (VCAL) is a Senior Secondary Certificate that sits alongside the VCE and is based on vocationally orientated applied learning principles. The course will provide an accredited program of studies in the following four compulsory strands:

- literacy and numeracy
- industry-specific skills
- work-related skills
- personal development skills

At Mirboo North Secondary College, VCAL builds on the successful Year 9 Community Breakout program by developing students’ independence, leadership and work readiness.

Students will enrol in a VET program, delivered by our education partners and have the opportunity of completing one VCE subject. Students will undertake a work placement and participate in team based community projects that will support them to develop independence, problem solving and leadership skills. Projects could include establishing small enterprises, sports coaching, and charity fundraising or community connections.

Successful completion of the VCAL will provide students with skills that are important for life, work and further study as well as a VCAL Certificate and/or Statement of Attainment. In Year 11, students will receive their Intermediate VCAL Certificate and in Year 12 their Senior Certificate.

The VCAL will develop and extend pathways for students from school to further education, training and work. For example upon completion of VCAL, students can enter into a traineeship, an apprenticeship and/or a TAFE course.

To apply to enrol in VCAL for 2019, complete the application form in the Information Evening pack and included in the Senior School Policies and Procedures Handbook. Details about individual subjects are included in the following pages.

The school levy for VCAL is $400 for Year 11 students and $300 for Year 12 students. This includes travel expenses for most excursions; class resources, some guest speakers and activities. (Please note that there will be an additional cost for the food component of the Year 12 Personal Development Skills strand).

Further information about VCAL is available from the following Website: [http://www.vcaa.vic.edu.au/vcal/students/index.html](http://www.vcaa.vic.edu.au/vcal/students/index.html)

### Literacy & Numeracy Strand

The purpose of this strand is to develop students’ literacy and numeracy skills. At Mirboo North Secondary College accredited units will include:

- VCAL Literacy and Numeracy Units – Normally 4 periods, and undertaken at Intermediate or Senior level, depending on the student’s learning plan.

**Students must demonstrate competence in 6 of the Learning Outcomes for Senior Literacy and Numeracy to achieve a ‘Competent’ for the Strand. For the Intermediate Numeracy Strands students must demonstrate competency in 5 out of the 6 Learning Outcomes.**

### Industry Specific Skills Strand

The purpose of this strand is to develop skills, knowledge and behaviours that enable development of industry specific skills and progression to further learning and work.

The Intermediate/Senior VCAL learning program must include industry specific units from Vocational Education and Training (VET) programs. At Mirboo North Secondary College, students are expected to complete one VET certificate.
The range of VET options is extensive with recognized training packages available from industries including automotive, engineering, building and construction, hospitality, agriculture, horticulture, and electrical.

*Students undertaking Industry Specific Strands must meet the Learning Outcomes for each unit/module in their learning program to gain a credit towards their VCAL.*

**Work Related Skills Strand**
The purpose of this strand is to develop skills, knowledge and personal attributes valued by employers. At Mirboo North Secondary College, students Work Related skills training will include OH&S, working in teams, applying for jobs, interview techniques and using ICT.

In addition, students will complete at least 100 hours of work placement in an appropriate industry. They will document particular details about the placement to meet the Learning Outcomes.

External, non-accredited programs or experiences can be included in a student’s learning program if it enables the achievement of the Learning Outcomes of a Work Related Skills unit. It can include:

- Work experience
- Part-time work undertaken
- TAFE Taster programs

Work related skills tasks will be assessed at a level appropriate to each VCAL level – Intermediate or Senior. Students must meet the Learning Outcomes for each unit/module in their learning program to gain a credit towards their VCAL.

**Personal Development Skills Strand**
The purpose of this strand is to develop skills, knowledge and behaviours that lead toward:

- social responsibility
- building community
- civic responsibility & participation, and
- improved self-confidence and self esteem

This strand of VCAL is delivered through elective units. Each unit is aimed at developing:

- Planning and organisational skills
- Problem solving skills
- Knowledge and skills for goal/activity achievement
- Interpersonal, communication and teamwork skills

Personal Development units are delivered over 4 periods per week and over full day workshops. Units are developed in consultation with students and could include:

- Outdoor Education
- Community Development
- Catering
- Performing Arts
- Media
- Art
- Horticulture
Vocational Education & Training (VET)

Students considering doing a VET subject need to be aware that they will be required to catch up on work missed because of their VET day (1 period per subject) during their study periods.

What does a course involve?
Students can complete a VET program as part of their VCE or VCAL certificate. This allows students to gain two certificates at the end of Year 12. They will receive their VCE/VCAL Certificate and a TAFE qualification.

Students will normally complete the following number of VCE studies as well as their VET program.

- Year 11: 5 VCE Studies (student would usually complete 6)
- Year 12: 4 VCE Studies (students would usually complete 5)

Many VET programs will count in students ATAR. Some VET certificates generate a study score at Year 12 and have an exam. Other VET certificates such as Automotive and Agriculture are counted as a 5\textsuperscript{th} or 6\textsuperscript{th} study (i.e. 10\%).

Programs such as Building and Electrotechnology do not contribute to a student’s ATAR score, however they allow a student to complete a pre-apprenticeship course during VCE. This will give them an advantage when seeking employment because they have already achieved an industry recognised skill level.

All VCAL students must complete one VET subject.

Attendance
It is compulsory for students to attend all VET days. Students who miss days risk not successfully completing their VCAL or VCE Certificate and may further risk being enrolled in a VET course for Senior VCAL.

Levy
A non-refundable Administrative Services Levy of $450 is payable to the school to secure your place in the VET course.

Applying for a VET or Vocational Course
VET and Vocational Courses are proving to be very popular among students in Gippsland. Students will not automatically be accepted into VET courses and they must do the following:

- Complete an application form (available from the careers teacher)
- Students will be notified if they are successful in gaining a VET position
- Payment of the Administrative Services Levy – paid by February 9\textsuperscript{th} 2020 to ensure your place in the VET course

Students needing assistance with the application should see Mrs Barns.
VET Programs

This is a selection of some of the VET course on offer. See the VET coordinator for a full list.

- Agriculture - Certificate II in Agriculture
- Animal Handling - Certificate II in Animal Studies
- Automotive - Certificate II in Automotive Studies
- Carpentry - Certificate II in Building & Construction (Carpentry, Painting & Civil Construction)
- Child Care – Certificate II in Early Childhood Education and Care
- Community Services - Certificate II in Allied Health Assistance
  Certificate II in Community Services
- Electrical - Certificate II in Electrotechnology - Pre-Vocational
- Engineering - Certificate II in Engineering Studies
- Hairdressing – Certificate II in Hairdressing
- Hospitality - Certificate II in Hospitality, Catering Operations
- Information Technology - Certificate III in Information & Communications Technology
  Certificate III in Media
- Plumbing - Certificate II in Plumbing (Pre Vocational)

Providers of VET used by Mirboo North Secondary College include:

- Federation Training
- NCDEA
- Community College Gippsland (CCG)
- Apprenticeship Group Australia (AGA)
- Foundation Education (Online Provider)
- GO TAFE (Online Provider)
Contact Us

Principal: Karen Lanyon
Assistant Principal: Scott Moorhouse
Senior School Leader: Marina Bruzzese
Junior School Leader: Kay Chandler
Careers / VET: Leah Barns

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