

# Mirboo North Secondary College



## Senior School Handbook 2022



# VCE Units Offered in 2022

Descriptions of the following units are contained in this handbook.

## Arts

Media Studies	<i>Unit 1-4</i>
Studio Art	<i>Unit 1-4</i>
Visual Communication & Design	<i>Unit 1-4</i>

## English

English	<i>Unit 1-4</i>
English Literature	<i>Unit 1-4</i>

## Health & Physical Education

Health & Human Development	<i>Unit 1-4</i>
Physical Education	<i>Unit 1-4</i>

## Humanities

Business Management	<i>Unit 1-4</i>
History	<i>Unit 1-4</i>
Legal Studies	<i>Unit 1-4</i>

## Languages

German	<i>Unit 1-4</i>
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## Mathematics

General Maths	<i>Unit 1-2</i>
Mathematical Methods	<i>Unit 1-4</i>
Further Maths	<i>Unit 3-4</i>

## Music

Music Performance	<i>Units 1-4</i>
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## Science

Biology	<i>Unit 1-4</i>
Chemistry	<i>Unit 1-4</i>
Physics	<i>Unit 1-4</i>
Psychology	<i>Unit 1-4</i>

## Technology Studies

Food Studies	<i>Unit 1-4</i>
Product Design & Tech: Wood	<i>Unit 1-4</i>

# VET in Schools Programs

For a full list of VET courses offered see page 22.

*NB: VCE and VET units will run depending on; student choices, availability of staff, and 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 several counselling sessions to help you choose the most appropriate pathway through 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 2022 are briefly described and are alphabetically listed.

For full unit descriptions, visit the VCAA website at:

<https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/Pages/vce-study-designs.aspx>

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**

### **Unit 1 – How do organisms regulate their functions?**

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

### **Unit 2 – How does inheritance impact on diversity?**

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

### **Unit 3 – How do cells maintain life?**

In this unit students investigate the workings of the cell from several perspectives. They explore the relationship between nucleic acids and proteins as key molecules in cellular processes. Students analyse the structure and function of nucleic acids as information molecules, gene structure and expression in prokaryotic and eukaryotic cells and proteins as a diverse group of functional molecules. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies.

### **Unit 4 – How does life change and respond to challenges?**

In this unit students consider the continual change and challenges to which life on Earth has been, and continues to be, subjected to. They study the human immune system and the interactions between its components to provide immunity to a specific pathogen. Students consider how the application of biological knowledge can be used to respond to bioethical issues and challenges related to disease.

## **Business Management**

### **Unit 1 – Planning a Business**

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

### **Unit 2 – Establishing a Business**

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

### **Unit 3 – Managing a Business**

In this, unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives.

### **Unit 4 – Transforming a Business**

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

## **Chemistry**

### **Unit 1 – How can the diversity of materials be explained?**

The development and use of materials for specific purposes is an important human endeavour. In this, unit students investigate the chemical properties 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.

### **Unit 2 – What makes water such a unique chemical?**

Water is the most widely used solvent on Earth. In this, unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis.

### **Unit 3 – How can chemical processes be designed to optimise efficiency?**

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.

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

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

## **English**

### **Unit 1**

In this unit students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts and create their own texts intended to position audiences.

## **Unit 2**

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

## **Unit 3**

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

## **Unit 4**

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

# **English Literature**

## **Unit 1 – Approaches to Literature**

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

## **Unit 2 – Contexts and Connections**

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

## **Unit 3 – Form and Transformation**

In this unit students consider how the form of a text affects meaning, and how writers construct their texts. They investigate ways writers adapt and transform texts and how meaning is affected as texts are adapted and transformed. They consider how the perspectives of those adapting texts may inform or influence the adaptations. Students draw on their study of adaptations and transformations to develop creative responses to texts.

## **Unit 4 – Interpreting Texts**

In this unit students develop critical and analytic responses to texts. They consider the context of their responses to texts as well as the ideas explored in the texts, the style of the language and points of view. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches. Specifically, for Unit 4 Outcome 1, the literary criticism selected must reflect different perspectives, assumptions and ideas about the views and values of the text/s studied.

## Food Studies

**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

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

### Unit 2 – Food Makers

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.

### Unit 3 – Food in Daily Life

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.

### Unit 4 – Food Issues, Challenges and Futures

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.

## German

### Unit 1

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.

## **Unit 2**

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.

## **Unit 3 & 4**

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.

# **Health & Human Development**

## **Unit 1 – Understanding Health and Wellbeing**

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and 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.

## **Unit 2 – Managing Health and Development**

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

## **Unit 3 – Australia's Health in a Globalised World**

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

## **Unit 4 – Health and Human Development in a Global Context**

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a

global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people.

## History

### Units 1 & 2 – Empires

In Units 1 and 2 Empires, students investigate the foundations and features of empires and the significant global changes they brought to the wider world in the early modern period. Empires at their core were expansionist, dominating trade and political influence in their regional or global contexts. A range of key factors arising from the social, political, economic, cultural, religious, environmental and technological features of Empires played a role in the ambition and quest for power, prestige and influence over rival and competing states.

Russian Empire (1552–1894)

Qing Dynasty (1644–1911)

### Units 3 & 4 – Revolutions

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point in the collapse and destruction of an existing political order which results in extensive change to society. Revolutions are caused by the interplay of events, ideas, individuals and popular movements, and the interplay between the political, social, cultural, economic and environmental conditions. 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 regime attempts to create political, social, cultural and economic change and transformation based on the regime's ideology.

- The Russian Revolution
- The Chinese Revolution.

## Legal Studies

### Unit 1 – Guilt and Liability

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

### Unit 2 – Sanctions, Remedies and Rights

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

### Unit 3 – Rights and Justice

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.

## **Unit 4 – The People and the Law**

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.

## **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.

## **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**

### **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**

### **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.**

## **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**

## **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**

## **Media Studies**

**Materials Cost:** Students who undertake Units 1 & 2 will be required to pay **\$30** and **\$50** (Units 3 & 4) per year in material costs. for rental, wear and tear on equipment.

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

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.

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

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.

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

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.

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

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.

## **Music Performance**

**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**

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.

### **Unit 2**

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.

### **Unit 3**

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

## **Unit 4**

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

## **Physical Education**

### **Unit 1 – The Human Body in Motion**

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

### **Unit 2 – Physical Activity, Sport and Society**

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

### **Unit 3 – Movement Skills and Energy for Physical Activity**

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

### **Unit 4 – Training to Improve Performance**

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

## **Physics**

### **Unit 1 – What ideas explain the physical world?**

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

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

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.

### **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.

### **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.

## **Product & Design Technology - Wood**

**Materials Cost:** Students who undertake Units 1 and Units 3 & 4 will be required to pay \$135 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**

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.

### **Unit 2 – Collaborative Design**

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

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

In this unit students are engaged in the design and development of a product that meets the needs and expectations of a client and/or an end-user, developed through a design process and influenced by a range of complex factors. These factors include the purpose, function and context of the

product; human centred design factors; innovation and creativity; visual, tactile and aesthetic factors; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology. Design and product development and manufacture occur in a range of settings. An industrial setting provides a marked contrast to that of a 'one-off situation' in a small 'cottage' industry or a school setting. Although a product design process may differ in complexity or order, it is central to all of these situations regardless of the scale or context. This unit examines different settings and takes students through the product design process as they design for others.

## **Unit 4 – Product Development and Evaluation**

In this unit students learn that evaluations are made at various points of product design, development and production. In the role of designer, students judge the suitability and viability of design ideas and options referring to the design brief and evaluation criteria in collaboration with a client and/or an end-user. Comparisons between similar products help to judge the success of a product in relation to a range of Product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the Product design factors.

## **Psychology**

### **Unit 1 – How are behaviour and mental processes shaped?**

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

### **Unit 2 – How do external factors influence behaviour and mental processes?**

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

### **Unit 3 – How does experience affect behaviour and mental processes?**

The nervous system influences behaviour and the way people experience the world. In this unit students examine both macro-level and micro-level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. 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.



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

Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual's mental functioning and wellbeing.

## **Studio Arts**

**Materials Cost:** Students who undertake Units 1 & 2 will be required to pay **\$70** 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**

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.

### **Unit 2 – Studio Exploration and Concepts**

In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms. Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process.

### **Unit 3 – Studio Practices and Processes**

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

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

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

# Visual Communication & Design

**Materials Cost:** Students who undertake Units 1 & 2 will be required to pay **\$50** and **\$70** (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 – Visual Communication**

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.

## **Unit 2 – Communication in Context**

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.

## **Unit 3 – Visual Communication Practices**

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.

## **Unit 4 – Designing to a Brief**

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.

# Victorian Certificate of Applied Learning (VCAL)

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.

The school levy for VCAL is **\$150** for Year 11 students and **\$150** for Year 12 students. (Please note that there will be an additional cost of **\$120** 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>

## 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

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 units may include:

- Outdoor Education
- Community Development
- Catering
- Media
- 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<sup>th</sup> or 6<sup>th</sup> study (i.e. 10%).

Programs such as Building and Electrotechology 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.

***NB:** 2022 VET Administration Fee yet to be confirmed.*

## 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 11<sup>th</sup> 2022** to ensure your place in the VET course

Students needing assistance with the application should see Ms. Underwood.

# 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:

- TAFE Gippsland
- Community College Gippsland (CCG)
- Apprenticeship Group Australia (AGA)
- Foundation Education (Online Provider)
- GO TAFE (Online Provider)

## **Contact Us**

**Principal:** Brad Hutchinson

**Assistant Principal:** Angela Fitzgerald

**Senior School Leader:** Marina Bruzzese

**Middle School Leader:** Lisa Benn

**Careers / VET:** Leah Underwood

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