

## **VCE/VCAL Studies 2015**

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## SELECTION OF UNITS

The selection of units is very important.

Entry to tertiary courses and to the job market has become increasingly competitive. Therefore students need to select units which give them the maximum chance of utilising the skills and abilities they have, therefore maximising the VCE score they receive.

Students expecting to complete or start their VCE in 2015 will be required to satisfactorily complete the equivalent of 16 units, including 3 units from the English group and three pairs of units at a 3 & 4 level other than English. These 16 units may include an unlimited number of units found in Vocational Educational Training.

Students should select a list of units which best suits their needs.

Students should consider the following:

- \* Prerequisite studies for any courses they may be interested in doing.
- \* Additional studies which would be valuable for those courses.
- \* Those studies which suit their interests - studies they enjoy.
- \* Those studies which are strengths for them. It is important to seek teachers' advice in this regard. Year 11 students should not take on studies at a 3/4 level without teacher recommendation.

Students will participate in a careers' advice session prior to selecting their subjects and they will be counselled about their selections. Parents are encouraged to attend the interview.

Students must guard against selecting studies simply because someone else has said they would like that study. **They should read the following outlines carefully and find out as much as they can from the teachers in charge of those subjects.** Their decision should then be based on the content and type of work that unit of study offers and how that relates to their individual needs and skills. It must be an individual decision and not one based on what older brothers or sisters may have liked or studied.

**Enhancement Studies:** Available for students who have studied a unit 3/4 sequence in Year 11. These studies are undertaken off campus from a University such as Monash.

## VCE ASSESSMENT

- Outcomes:** The skills that you must demonstrate and achieve to pass.
- School Assessed Coursework:** An assessment that is reported as a grade for a Unit 3 and 4 sequence.
- School Assessment Task:** A school-based assessment for a VCE Unit 3 and 4 sequence set by VCAA and assessed by teachers.
- External Exams:** In Units 3 and 4 in November.
- GAT – General Assessment Task:** A test of knowledge and skills in writing, mathematics, science and technology, humanities, and social science and the arts.
- ATAR:** Australian Tertiary Admission Rank (formerly known as the ENTER)
- *Each study has 2 to 4 outcomes*
  - *Assessment tasks are set to check whether students have achieved these outcomes.*
  - *In Units 1 and 2 all of the assessment is internal. Satisfactory achievement of the outcomes will be shown by S or N. Students will gain grades from the school which will appear on their school report, but the VCAA certificate will only indicate which outcomes were achieved.*
  - *In Units 3 and 4 some of the assessment will be internal, and some of it will be external such as exams. Grades will be given for all assessment at this level as well as the S or N for outcomes.*

## VCAL - VICTORIAN CERTIFICATE OF APPLIED LEARNING

In 2002 the Victorian Government introduced a new qualification called the **Victorian Certificate of Applied Learning (VCAL)** to improve the pathways for young people from secondary school into work or further education and training. Students completing this course gain a lot of experience that is useful in work and a recognized qualification. We are hoping to offer the VCAL Intermediate and Senior Certificates at Terang College next year.

The Certificate will be of benefit to those students wishing to develop skills to prepare themselves for employment, apprenticeships, traineeships or TAFE courses. The program is **not** suitable for those wishing to go on to a university course.

A student will be able to gain a VCAL certificate on the successful completion of one full year of study. There are three levels to the VCAL Certificate – Foundation, Intermediate and Senior.

There are four strands to the VCAL Certificate – Literacy and Numeracy, Industry Specific Skills, Work Related Skills and Personal Development Skills. This year students doing VCAL studied Maths, English, Design and Technology or Accounting, a VET subject at TAFE or a School Based Apprenticeship and VCAL Units. The VCAL Projects are selected each year after a considerable amount of discussion with the VCAL teachers and the students. This year students participated in driving lessons, ran a ‘Keys Please’ evening, completed a unit on ANZACS, before commencing projects of their choosing. The projects for next year will be planned with the participating students at the end of this year and the beginning of next year.

It is expected that students will be out in the workplace or at TAFE every Thursday and Friday. For Intermediate and Senior Certificates, a TAFE training or minimum of 100 hours of VET accredited training is required.

VCAL is an excellent course for many students. It is not **easier** than the VCE as it requires a high level of commitment and active participation at school and in the workplace. Students need to consider this program carefully and make sure that it is the best choice for them. Entry into the course will be based on a number of factors. It is not automatic. The subjects for VCAL Intermediate students (Year 11) are likely to be:

1. Foundation / Intermediate English and Literacy
2. Foundation / Intermediate Maths and Numeracy
3. Product Technology – Wood / Metal or Food
4. VET / ASBA Work Placement
5. Oral Communication
6. PDS – Personal Development Skills
7. WRS – Work Related Skills
8. VCAL PROJECT – includes hands-on activities and personal development units

The subjects for VCAL Senior students (Year 12) are likely to be:

1. Senior Literacy
2. Senior Numeracy
3. Technology – Wood / Metal or Food
4. VET / ASBA Work Placement
5. Oral Communication
6. WRS – Work Related Skills
7. Skills – Further Study
8. PDS – Personal Development Skills
9. VCAL PROJECT – includes hands-on activities and personal development units.

On Thursdays and Fridays VCAL students will not attend school, but will be on work placement or attending TAFE. All Yr 11 students complete a week of work experience in Melbourne during Term Three.

## **VETiS AND SCHOOL BASED APPRENTICESHIPS**

**VETiS Courses:** These courses allow students to study for TAFE certificates while they are still at school. They are attractive to students who would like more ‘hands on’ learning in their VCE program. These courses usually run for 2 years and are suitable not only for students who are thinking of TAFE or apprenticeships, but also for some of those going on to university. VET courses contribute to the student’s Year 11 results and their ENTER at the end of Year 12. *Please note there has been a major change in the funding of these programs for 2015 and beyond. This means that the cost to the individual to study a particular area will increase markedly.*

In 2015 the following VET programs that could be available:

- Agriculture
- Automotive
- Business Administration
- Building
- Community Services
- Conservation & Land Management
- Engineering
- Equine
- Fashion
- Furnishing
- Hairdressing
- Hospitality
- Information Technology
- Landscaping
- Make Up
- Media
- Music

Retail  
Sport and Recreation

The programs that available are dependent upon the number of students interested right across the region. Fees are charged for VET programs.

**Australian School Based Apprenticeships:** These involve working one day per week under a training agreement with an employer. As well as learning practical work skills students also complete written units of work. Programs can be counted as a 5<sup>th</sup> or 6<sup>th</sup> study for the ATAR. Students are paid for the hours they work in this program. The difficulty, at times, is finding an employer who is able to take the student on under this arrangement.

SCHOOL APPRENTICESHIP programs in 2015 that could be available:

Agriculture  
Retail  
Automotive  
Building  
Bricklaying  
Plumbing  
Business  
Food Processing  
Engineering  
Horticulture  
Info & Technology  
Community Services  
Seafood  
Sport & Recreation

*Note that entry to these programs is not automatic. VET programs depend on what is being offered by the South West Institute of TAFE or the Westvic Group Training. Willing employers must be found to begin a School Based Apprenticeship. Students may elect VET or ASBA as a preference, but they must also select an alternative VCE subject.*

## ENGLISH

This study aims to develop competence in the understanding and use of English for a variety of purposes sufficient to meet the demands of post-school employment, further education, and participation in a democratic society.

The study of English encourages the development of literate individuals capable of critical and imaginative thinking, aesthetic appreciation and creativity. The mastery of the key knowledge and skills described in this study design underpins effective functioning in the contexts of study and work as well as productive participation in a democratic society in the twenty-first century. Students will read and respond to set texts, analyse the use of persuasive language and write persuasively, write for a range of different purposes and audiences, and use oral language in different contexts.

### Structure

There are still three areas of study in Units 1-3 and two areas of study in Unit 4, but they have been renamed. The study of texts has now been divided into two areas: **Area of study 1**: reading and responding and **Area of study 3**: using language to persuade. **Area of study 2** has been renamed ‘creating and presenting’ and it focuses on writing for different purposes and audiences. ‘Effective oral communication’ is no longer a separate area of study; relevant key knowledge and skills have now been included in all areas of the revised areas of study.

### Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

### Unit 1 (Yr 11)

The focus of this unit is on the reading of a range of texts, particularly narrative and persuasive texts, in order to comprehend, appreciate and analyse the ways in which texts are constructed and interpreted. Students will develop competence and confidence in creating written, oral and multimodal texts.

### Unit 2 (Yr 11)

The focus of this unit is on reading and responding to an expanded range of text types and genres in order to analyse ways in which they are constructed and interpreted, and on the development of competence and confidence in creating written, oral or multimodal texts.

### **Units 1 & 2: Reading and Responding**

In the area of study one, students are required to identify and discuss key aspects of set texts, and to understand the ways in which authors and readers create meaning. Key knowledge and skills focus on the analysis of set texts.

### **Units 1 & 2: Creating and Presenting**

The focus of this area is still on writing, but students now choose to explore one or two of three contexts: **Exploring and presenting themes or ideas; Exploring technology and communication, or Exploring workplace communication.** There will be set texts for each ‘context’ which the student will be required to read.

### **Units 1 & 2: Using Language to Persuade**

This area focuses on the use of language in the presentation of a point of view. Students will be required to read a wide range of persuasive texts, identify a variety of persuasive strategies used in the texts and then produce a reasoned argument.

### **Unit 3 (Yr 12)**

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

### **Unit 4 (Yr 12)**

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

### **Units 3 & 4: Reading and Responding**

As in units 1 & 2 (Year 11) the focus of this area is on the analysis of set texts.

### **Units 3 & 4: Creating and Presenting**

Students focus on reading and writing, and in particular, how they are connected. In this area they will create their own folio pieces that will address a variety of audiences and purposes.

### **Unit 3 & 4: Using Language to Persuade**

This area focuses on the use of language in the presentation of a point of view. While still focusing on a topical issue, students now read a wider range of persuasive texts, and greater emphasis has been given to identifying logical persuasive techniques and developing a reasoned point of view.

The study of literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations and those of others.

The study is based on the premise that meaning is derived from the relationship between the text, the context in which it was produced and the experience of life and literature the reader brings to the texts. Accordingly, the study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form. The study of literature encourages independent and critical thinking in students' analytical and creative responses to texts, which will assist students in the workforce and in future academic study.

### **Unit 1 (Yr11): Texts studied**

One novel

One fictional television, film or radio text

One play

Four poems

#### **Areas of Study:**

**1. Readers and their responses:** In this area of study, students develop informed responses to texts. They explore the relationship between their response and the ways texts represent human experience.

**2. Ideas and concerns in texts:** In this area of study, students consider how texts reflect or comment on the interests of individuals and particular groups in society.

**3. Interpreting non-print texts:** In this area of study students examine the beliefs, concerns and views expressed in a non-print text.

### **Unit 2 (Yr 11): Texts studied**

One prose text (short stories, biographies, memoirs etc.)

Four poems – Australian

One play

One additional text.

#### **Areas of Study:**

**1. The text, the reader and their contexts:** In this area of study, students focus on the interrelationship between the text, readers and the social and cultural concerns and values of a text from a past era.

**2. Comparing Texts:** In this area of study, students make comparisons between the way different texts are constructed and the way that these factors affect the reader's interpretation.

### **Units 3 & 4 (Yr 12)**

The study of Literature is a means of exploring and making sense of human experience. The process of making meaning involves asking questions such as: Whose experience and what experience is being given voice in the texts? What seem to be the main ideas

and preoccupations of the texts? How are they created through the texts' use of language and literary devices? In what ways, if any, does the text appear to be shaped by the cultural context in which it was produced?

These units examine such questions and involve students in analysing a range of texts, developing skills in reading closely and critically discussing and debating various ways of interpreting and evaluating texts.

### **Unit 3**

#### **Areas of Study:**

**1 Adaptations and Transformations:** Students will focus on the ways in which various forms of literature are constructed and the way in which meaning is changed when the form is changed.

**2. Views, values and contexts in literature:** This involves consideration of the ways in which texts represent and comment on human experience and ideas, the views and values expressed through texts and the relationship between texts and the social, historical and cultural contexts in which they were produced and in which they are read.

**3. Considering alternative viewpoints:** Students will focus on how various interpretations and judgements about a text can contribute to the student's own understanding and reading of a text.

### **Unit 4**

#### **Areas of Study:**

**1. Creative response to texts:** This area of study focuses on the imaginative techniques used for creating and re-creating a literary work. In composing their own responses, students demonstrate how writers craft their work.

**2. Close analysis:** This area of study focuses on detailed analysis of the style, concerns and construction of a text.

## **FOUNDATION ENGLISH**

### **Units 1 & 2 (Yr 11)**

The Foundation English course is designed for students who may require a more vocationally orientated approach to English or may be aiming to directly enter the workforce upon completing their post-compulsory secondary studies. It is also suited to students who need additional time and assistance to strengthen and refine their literacy skills.

The Foundation English course is designed around one compulsory area of study, **Essentials of English**, and five optional areas of study.

- Communication in the workplace
- Technology and communication
- The study of texts

- The analysis and construction of argument
- Information literacy.

## ACCOUNTING

Accounting is **strongly recommended** for students who intend on studying business studies/commerce or accounting at tertiary level. Business courses at tertiary level open up many different career options such as tourism, management and marketing. VCE Accounting focuses on the financial recording, reporting and decision-making processes of a sole proprietor small business. Students study both theoretical and practical aspects of accounting. Financial data will be collected and recorded, and accounting information reported, using both manual and information and communications technology (ICT) methods. The preparation and presentation of financial statements is governed by Australian Accounting Standards and guided by the Framework for the Preparation and Presentation of Financial Statements (AASB Framework).

### **Unit 1 (Yr 11): Establishing and operating a service business**

This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of accounting information by internal and external users. The cash basis of recording and reporting is used throughout this unit. Using single entry recording of financial data and analysis of accounting information, students examine the role of accounting in the decision-making process for a sole proprietor of a service business. Where appropriate, the accounting procedures developed in each area of study should incorporate the application of accounting principles and the qualitative characteristics of accounting information.

### **Unit 2 (Yr11): Accounting for a trading business**

This unit extends the accounting process from a service business and focuses on accounting for a sole proprietor of a single activity trading business. Students use a single entry recording system for cash and credit transactions and the accrual method for determining profit. They analyse and evaluate the performance of the business using financial and non-financial information. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business. Students develop their understanding of the importance of ICT in the accounting process by using a commercial accounting software package to establish a set of accounts, record financial transactions and generate accounting reports.

### **Unit 3 (Yr12): Recording and reporting for a trading business**

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

### **Unit 4 (Yr 12): Control and analysis of business performance**

This unit provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process. The unit is based on the double entry accounting system and the accrual method of reporting for a single activity trading business using the perpetual inventory recording system. Students investigate the role and importance of budgeting for the business and undertake the practical completion of budgets for cash, profit and financial position. Students interpret accounting information from accounting reports and graphical representations, and analyse the results to suggest strategies to the owner on how to improve the performance of the business.

In Accounting the student's level of achievement will be determined by school-assessed coursework, and an end-of-year examination. Percentage contributions to the study score in Accounting are as follows:

## **BIOLOGY**

### **Units 1&2 (Yr 11)**

#### **Organisms and Their Environment:**

Unit 1 looks at living things and how they live in their environments. We learn how to identify and classify organisms and look at the effects a changing environment has on their chances of survival.

#### **Functioning Organisms:**

Unit 2 examines the functional and structural characteristics of organisms, and the similarities and differences between plants and animals. Particular areas studied include the requirements for life and reproduction and development (studying sexual and asexual reproduction and the development and growth of plants and animals).

### **Units 3 & 4 (Yr 12)**

#### **Challenge to Survival:**

Unit 3 looks at the enormous variety of cells in living things and how they work. It then investigates how plants and animals have special features to help them survive in different conditions as well as the way in which they respond to invasion by microorganisms.

#### **Biological Continuity and Change:**

Unit 4 looks at the functioning of DNA in cells, how it controls the way in which organisms develop, and how genes are passed from one generation to another. It also investigates the fossil record and theories of evolution to interpret genetic changes in living things throughout the history of the Earth.

## **BUSINESS MANAGEMENT**

Business management examines the ways people at different levels within an organisation manage resources to achieve the objectives of the organisation. In particular it looks at the importance of ‘*people skills*’ in the successful running of any organisation. It is strongly recommended for students who wish to work in business in any capacity including administration, finance, engineering, marketing, research and development or run their own business. In studying Business Management, students develop knowledge and skills that enhance their confidence and ability to participate effectively both in business and social settings.

### **Structure**

The study is made up of four units:

Unit 1: Small business management

Unit 2: Communication and management

Unit 3: Corporate management

Unit 4: Managing people and change

### **Units 1 & 2 (Yr 11)**

Small rather than large businesses make up the vast majority of all businesses in the Australian economy. This unit provides students with the opportunity to explore the operations of a small business and its likelihood of success.

Unit 1 examines the importance of small businesses in Australia. The course covers the different types of businesses, starting up a business and basic financial requirements of a business. The major requirement of this unit is for students to establish, operate and evaluate their own small business.

The focus of Unit 2 is the importance of effective communication in achieving business objectives. Students develop knowledge of fundamental aspects of business communication and are introduced to skills related to its effective use in different contexts. Students study and evaluate the different forms of communication within a business. Marketing and public relations are also covered as a form of communication with external stakeholders.

### ***Assessment – Units 1 and 2***

Individual school decision on levels of achievement.

### **Units 3 & 4 (Yr 12)**

The focus of Unit 3 is Corporate Management and covers the operations of large-scale organisations. Students examine the context and environments in which management conduct business including the important function of operations management. Students develop an understanding of the complexity and challenges of large organisations and have the opportunity to compare theoretical perspectives with practical applications.

Unit 4 commences with a focus on the human resource management function. It then progresses to the analysis of the management of change. Students learn about key change management processes and strategies and are provided with the opportunity to apply these to a contemporary issue of significance.

#### ***Assessment – Units 3 and 4***

The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Business Management the student's level of achievement will be determined by School-assessed Coursework and an end-of-year examination. Percentage contributions to the study score in Business Management are as follows:

## **CHEMISTRY**

Chemistry is the study of substances, their composition, their effects on one another and our interactions with them. A thematic approach to chemistry has been adopted, and throughout the study the contexts have been provided for the teaching of chemistry. Students will have the opportunity to investigate, explore and solve qualitative and quantitative problems and discuss chemical concepts and issues.

All areas of study involve the design and performance of experiments, including the generation, collection and evaluation of data.

#### **Unit 1 (Yr 11): The Big Ideas of Chemistry**

The unit maintains its focus on the structure and function of materials and includes a study of the Periodic Table. The application of surface chemistry and nanotechnology is included. Area of Study 1- The Periodic Table.

Area of Study 2 – Materials.

#### **Unit 2 (Yr 11): Environmental Chemistry**

The unit continues to focus on environmental chemistry with emphasis on green chemistry, desalination processes, and protocols related to greenhouse gases. There is also an emphasis on chemical reactions and processes that help to sustain life.

Area of Study 1 – Water.

Area of Study 2 – The Atmosphere.

#### **Unit 3 (Yr 12): Chemical Pathways**

This unit looks at chemical analysis and the work of an analytical chemist. The techniques and instruments that can be used in this area will be studied. The unit will also study organic chemicals including structure, bonding and properties. Examples of cutting-edge biochemical advances will also be introduced.

#### **Unit 4 (Yr 12): Chemistry at Work**

In this unit students will investigate the industrial production of chemicals and the energy changes associated with chemical processes. The use of chemical reactions to produce energy and the use of electricity to produce chemical reactions will be studied. The language and symbols used in chemistry will be learnt.

## **PRODUCT DESIGN & TECHNOLOGY – WOOD, METAL or TEXTILES**

Product design is part of people's responses to changing needs to improve quality of life by designing and creating artifacts. Product design is enhanced through knowledge of social, technological, economic, historic, ethical, legal, environmental and cultural factors. These factors affect the aesthetics, form and function of products developed in the past and those yet to be developed. Integral to VCE Product Design and Technology are three cross study specifications applicable to Units 1 to 4. These specifications comprise: the Product design process; the Product design factors; and the materials categories.

#### **Unit 1 (Yr 11): 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. 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.

#### **Unit 2 (Yr 11): 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. 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.

#### **Unit 3 (Yr 12): 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 centered 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 (Yr 12): 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.

### **FOOD & TECHNOLOGY**

Through this study students develop knowledge of the physical, chemical, sensory and functional properties of food and are able to apply this knowledge when using food in a practical situation. They develop and apply the knowledge and skills to prepare food safely and hygienically. Students use the design process, critical thinking and problem-solving skills to develop food products to suit specific situations or to meet the needs of individual consumers and their lifestyles. In this process, they also develop independent and cooperative learning skills. The study may provide a foundation for pathways to food science and technology, consumer science, home economics, child care and education, community services and aged care, the hospitality and food manufacturing industries, and nutrition and health studies.

The study is made up of four units:

Unit 1: Food safety and properties of food

Unit 2: Planning and preparation of food

Unit 3: Food preparation, processing and food controls

Unit 4: Food product development and emerging trends

#### **Unit 1 (Yr 11): Food Safety and Properties of Food**

In this unit students study safe and hygienic food handling and storage practices to prevent food spoilage and food poisoning, and apply these practices in the preparation of food. They consider food preparation practices suitable for use in a small-scale food operation, such as in the home, a school setting or in a small food business. Students consider the selection and use of a range of tools and equipment suitable for use in food preparation. Students examine the links between classification of foods and their

properties, and examine changes in properties of food when different preparation and processing techniques are used. Students apply this knowledge when preparing food. They investigate quality and ethical considerations in food selection. Students use the design process to meet the requirements of design briefs to maximise the qualities of key foods.

### **Unit 2 (Yr 11): Planning and Preparation of Food**

In this unit students investigate the most appropriate tools and equipment to produce optimum results, including the latest developments in food technology. Students research, analyse and apply the most suitable food preparation, processing and cooking techniques to optimise the physical, sensory and chemical properties of food.

Students work both independently and as members of a team to research and implement solutions to a design brief. They use the design process to respond to challenges of preparing food safely and hygienically for a range of contexts and consumers, taking into account nutritional considerations, social and cultural influences, and resource access and availability. Students also explore environmental considerations when planning and preparing meals.

### **Unit 3 (Yr 12): Food Preparation, Processing and Food Controls**

In this unit students develop an understanding of food safety in Australia and the relevant national, state and local authorities and their regulations, including the Hazard Analysis and Critical Control Points (HACCP) system. They investigate the causes of food spoilage and food poisoning and apply safe work practices while preparing food. Students demonstrate understanding of key foods, analyse the functions of the natural components of key foods and apply this information in the preparation of foods. They investigate cooking techniques and justify the use of the techniques they select when preparing key foods. Students develop an understanding of the primary and secondary processes that are applied to key foods, including food processing techniques to prevent spoilage. They also preserve food using these techniques. Students devise a design brief from which they develop a detailed design plan. Evaluation criteria are developed from the design brief specifications. In preparing their design plan, students conduct research and incorporate their knowledge about key foods, properties of food, tools, equipment, safety and hygiene, preparation, cooking and preservation techniques. They make decisions related to the specifications of the brief. In developing the design plan, students establish an overall production timeline to complete the set of food items (the product) to meet the requirements of the brief for implementation in Unit 4.

### **Unit 4 (Yr 12): Food Product Development and Emerging Trends**

In this unit students develop individual production plans for the proposed four to six food items and implement the design plan they established in Unit 3. In completing this task, students apply safe and hygienic work practices using a range of preparation and production processes, including some which are complex. They use appropriate tools and equipment and evaluate their planning, processes and product. Students examine food product development, and research and analyse driving forces that have contributed to product development. They investigate issues underpinning the emerging trends in product development, including social pressures, consumer demand, technological

developments, and environmental considerations. Students also investigate food packaging, packaging systems and marketing.

**Hospitality (Operations): A possible VET unit in 2015.**

VET in the VCE  
HOSPITALITY (OPERATIONS)  
VCE VET Units 1–2

The aim of this course is to

- ❖ Provide access to a range of potential career paths within the hospitality industry including part-time work while completing tertiary studies
- ❖ Provide training and skill development for the achievement of competence in areas such as commercial cookery and food and beverage service

**Areas of study will include:**

Working with Colleagues and Customers, Working in a Socially Diverse Environment Following Health, Safety and Security Procedures, Developing and Updating Hospitality Industry Knowledge, Following Workplace Hygiene Procedures, Using Basic Methods of Cookery, Organizing and Preparing Food, Presenting Food, Cleaning and Maintaining Kitchen Premises, Providing Responsible Service of Alcohol Developing and Updating Local Knowledge.

A cost will be involved. This cost will include hire of knife kit \$30-40, kitchen uniform including leather shoes, black pants and chef jacket.

Some competences will be taught at Terang College and some will be taught at South West TAFE at a time to be negotiated.

<b>GEOGRAPHY</b>
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**Unit 1 (Yr 11): Natural Environments**

This unit investigates the geographic characteristics of natural environments and landforms and the natural processes that shape and change the Earth's surface. The world's physical environments are composed of four natural systems: atmosphere, biosphere, lithosphere, hydrosphere, which are fundamental to the operation of all interactions within the environment. There are few places in the world where only natural processes operate. Human activities interact with natural processes, each affecting the other. The nature of change caused by the interaction between natural processes and human activities varies at a range of scales, over space and over time.

Students must investigate at least two natural environments in each area of study. The natural environments selected for investigation may be the same in each area of study. Each environment selected for investigation must focus on physical geography at two different scales.

### **Unit 2 (Yr 11): Human Environments**

This unit investigates the characteristics of rural and urban environments which are developed by human activities and their interactions with natural environments. Rural environments are those produced by human activities such as farming, forestry, tourism, mining, fishing and rural settlements. Rural and urban environments are dynamic. They can be changed in the long or short term by advances in technology, individual and organisational decisions, as well as by natural and human processes and events. Students must investigate at least two human environments in each area of study. The environments selected for investigation may be the same in each area of study, but one of the environments must be a rural environment and one an urban environment; one must be from Australia and one must be from another country. Each environment selected for investigation must focus on human geography at two different scales.

### **Unit 3 (Yr 12): Regional resources**

This unit investigates the characteristics of resources and the concept of region. A resource is anything which occurs naturally or is created by humans provided that people use it to satisfy a need or want. Resources found within regions mean different things to different people over place and time. Regions are areas of various scales that have characteristics and features that distinguish them from other areas according to the elements used to define them. The use and management of resources is dynamic and changes spatially over time in response to the interactions between human activities, natural processes and the legislative processes put into place by humans. Governments and other organisations often use the concept of region for planning purposes when determining allocation of resources and development of policies. The availability and utilisation of water resources influences settlement patterns, infrastructure development and decision making in many Australian regions. Students must investigate a regional resource and a local resource in Australia

### **Unit 4 (Yr 12): Global perspectives**

This unit investigates the geographic characteristics of global phenomena and responses to them. Global phenomena are major natural or human events, processes or activities. Human population studies are significant to understanding the challenges facing our globalised world. Governments, organisations, groups and individuals respond to global phenomena in different ways. Policy developed to deal with a global phenomenon and its effects results in the formation of a global perspective. This unit investigates the distribution patterns of selected global phenomena. Students must investigate two global phenomena in each area of study, one of which must be human population.

## **HEALTH & HUMAN DEVELOPMENT**

The central focus of the Health and Human Development study is to examine the factors that promote wellbeing in individuals, families and communities. The study aims to develop an understanding of the relationship between health and human development.

### **Units 1&2 (Yr 11)**

In Unit one students are introduced to the concepts of health and individual human development. This unit focuses on the health and individual human development of Australia's youth. For the purposes of this study, 'youth' is defined as twelve to eighteen years of age; however, it should be acknowledged that some agencies may use differing age classifications for the stage of youth. Unit two focuses on the health and individual human development for the lifespan stages of prenatal, childhood and adulthood. The prenatal stage is characterised as the most rapid time of growth and physical development during the human lifespan. During this stage the health and development of the embryo/foetus is shaped by a range of determinants, which in turn can have an impact on future health and development.

### **Units 3 & 4 (Yr 12)**

Australians generally enjoy good health and are among the healthiest people in the world. The health status of Australians can be measured in many ways, such as consideration of burden of disease, health adjusted life expectancy, disability adjusted life years (DALYs), life expectancy, under-five mortality rate, mortality and morbidity rates, incidence and prevalence of disease. Despite Australia's good health status, there is still potential for improvements. The National Health Priority Areas (NHPAs) initiative provides a national approach that aims to improve health status in the areas that contribute most of the burden of disease in Australia. Regardless of how health is measured, health is not shared equally by all Australians. Different levels of health are experienced by different groups, which can be attributed to the determinants of health, including the physical environment, biological, behavioural and social. Funding for the Australian health system involves a combination of both government and nongovernment sources. Both government and non-government organisations play an important role in the implementation of a range of initiatives designed to promote health in Australia.

Unit 4 takes a global perspective on achieving sustainable improvements in health and human development. In the context of this unit human development is about creating an environment in which people can develop to their full potential and lead productive, creative lives in accord with their needs and interests. It is about expanding people's choices and enhancing capabilities (the range of things people can be and do), having access to knowledge, health and a decent standard of living, and participating in the life of their community and decisions affecting their lives (adapted from the United Nations Development Programme, 1990). Sustainability 'implies meeting the needs of the present without compromising the ability of future generations to meet their own needs' (96th plenary meeting of the UN, December 1987). The United Nations (UN) human development work is encapsulated in the Millennium Development Goals, where the world's countries have agreed to a set of measurable goals and targets for combatting poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. A significant focus of the Millennium Development Goals is reducing the inequalities that result in human poverty and lead to inequalities in health status and human development.

**There are no prerequisites for entry into Units 1, 2 & 3. Students must undertake Unit 3 prior to undertaking Unit 4**

## **HISTORY**

### **Unit 1 and 2 (Yr 11): 20<sup>th</sup> Century History**

Learn about some of the greatest events and most interesting people of the last century:

- World War 1 and The Anzacs
- Hitler and the Nazis
- Australia in World War 11
- Protest movements of the 20<sup>th</sup> Century, Women's Liberation, Civil Rights in America or Gay Liberation, Greenpeace
- Music and Popular Culture as an expression of the times

If there is one VCE subject you could do for the sheer enjoyment of learning about the past – this is it! Students choose the topics they wish to study as a group.

### **Unit 3 and 4 (Yr 12): Revolutions**

Revolutions share the common aim of breaking with the past by destroying regimes and societies that endanger who and embarking on a program of political and social transformation. Revolutions have a profound impact on a country in which they occur as well as important international repercussions. During the year students study both the French and Russian revolutions.

## **LEGAL STUDIES**

### **Unit 1 (Yr 11): Criminal law in action**

In this unit students examine the need for law in society. They investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts of crime. Students learn about different types of crimes and explore rights and responsibilities under criminal law. Students also consider the role of parliament and subordinate authorities in law-making, as well as the impact of the Victorian Charter of Rights and Responsibilities on law enforcement and adjudication in Victoria. There is also an investigation into the processes and procedures followed by the courts in hearing and resolving criminal cases; as well as looking at how criminal courts operate and their effectiveness in achieving justice.

### **Unit 2 (Yr 11): Issues in Civil Law**

Students examine the rights that are protected by civil law, as well as obligations that laws impose. They investigate different types of civil laws and related cases and issues, and develop an appreciation of the role of civil law in society and how it affects the

individual. This unit also focuses on the resolution of civil disputes through judicial determination and alternative methods in courts, tribunals and independent bodies. Students examine the methods used by these bodies and evaluate their effectiveness. Students will focus on cases that have had an impact on the legal system and on the rights of individuals.

### **Unit 3 (Yr 12): Law – Making**

In this unit there is a focus on understanding the institutions that determine our laws, and their law-making powers and processes. Students undertake an informed evaluation of the effectiveness of law-making bodies and examine the need for the law to keep up to date with changes in society. Students develop an appreciation of the complex nature of law-making by investigating the key features and operation of parliament, and influences on law-making, with a focus on the role of the individual. There is a focus on the role of the Commonwealth Constitution and its importance within society. Students also focus on the role of the High Court and how it interprets and enforces the Constitution; ensuring that parliaments do not act outside of their areas of power. Students also investigate the nature and importance of courts as law-makers and undertake an evaluation of their effectiveness as law-making bodies. They also investigate the relationships that exist between parliaments and courts.

### **Unit 4 (Yr 12): Resolution and Justice**

This unit examines institutions that adjudicate criminal and civil disputes and the methods of dispute resolution that can be used as an alternative to civil litigation. Students investigate the processes and procedures followed in courtrooms and develop an understanding of the adversary system of trial and the jury system. They also look at pre-trial and post-trial procedures that operate in the Victorian legal system. Using the elements of an effective legal system, students consider which court processes and procedures contribute to the effective operation of the legal system. They also consider reforms or changes that could further improve its effective operation.

## **LOTE – FRENCH**

### **LOTE – French 1&2 (Yr 11)**

The study of French focuses on further language development in conjunction with increased awareness of cultural aspects of the French people, including social and environmental issues.

### **Units 1&2**

Across units 1 and 2 students' language learning will enable them to establish and maintain a spoken and written exchange related to personal areas of experience.

Review past and present tense of verbs and introduce the future and conditional tenses. Use a range of questions and answers. Communicate in a range of text types, such as by letter, fax, e-mail, telephone.

- Vary both written and spoken language according to audience.

- Read a variety of French materials including magazines, books and journals.
- Write personal and imaginative essays.
- Explore issues concerning France, such as cultural diversity, youth and environment. Assessment will be through a variety of reading comprehension exercises, writing, speaking and listening tasks within class culminating in an end-of-year oral and written examination.

### **LOTE – French 3&4 (Yr 12)**

The study of French focuses on developing written and spoken language in conjunction with increased knowledge of France during World War 2.

#### **Units 3&4**

Across units 3 and 4 students learning French will develop the skills they attained in units 1 & 2 to enable them to analyse texts, express ideas and exchange opinions in both written and oral work. They will also undertake a detailed study involving film and spoken and written texts to do with France during the Second World War. The curriculum will follow the Distance Education units and classes will run with both a classroom teacher and Distance Education assistance.

- Practise spoken French on a regular basis
- Write in and analyse a variety of written forms, informal and formal, such as, letters, prose, newspaper articles and excerpts from novels
- Watch and report on a French film as part on the detailed study
- Read and write on a selection of French materials as part of the Detailed Study
- Write personal and imaginative essays.

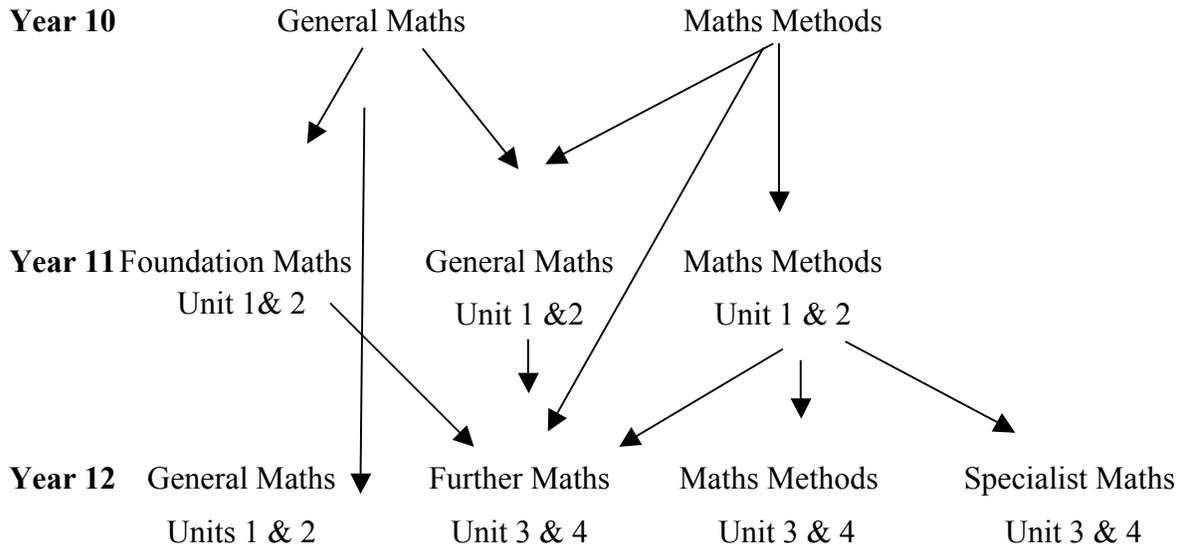
Assessment will be through a variety of reading comprehension exercises, writing, speaking and listening tasks within class culminating in an end of year external oral and written examination

## **MATHEMATICS**

The range of options in mathematics has been designed to provide access to worthwhile and challenging mathematical learning in a way that takes into account the wide range of needs of the student. To decide which units of mathematics to undertake at VCE students require a good understanding of their own capabilities and also some idea of the direction they intend to take after completing their school career.

It is strongly advised that all students' complete mathematics at year 11 and 12 as this proves to be a great asset and often a requirement if they intend on leaving school after year 11, take up an apprenticeship/traineeship, study further at TAFE or University.

**Sequences: possible pathways for Maths are outlined below.**



### NOTES ON SELECTION

- Students may complete Further Maths in conjunction with Maths Methods (1& 2)
- Students may complete Further Maths in conjunction with Maths Methods (3 &4)
- Students may complete Maths Methods (3 & 4), Further Maths (3 & 4) and Specialist Maths (3 & 4) all in year 12
- Students studying Specialist Maths must have studied Maths Methods (3 & 4) or study the two subjects simultaneously in year 12.

**All students should consult a senior mathematics teacher to ensure they make an informed decision about the mathematics they choose to study in VCE / VCAL.**

#### **Units 1 & 2 (Yr 11): Foundation Mathematics**

Foundation Mathematics provides for continuing mathematics development of students entering VCE, who will need mathematics skills to support their other VCE studies.

In this subject there is a strong emphasis on using mathematics in practical contexts relating to everyday life, recreation and work. This subject would be recommended to students completing VET and VCAL studies as the areas covered are practical and relate to their work placements and also personal and familiar situations.

#### **Unit 1 & 2 (Yr 11): General Mathematics**

General Mathematics introduces students to a range of concepts which provide the basic knowledge and skills which will be required to study Further Mathematics in year 12.

The areas of study for Unit 1 and Unit 2 of General Mathematics are Financial Arithmetic, Data analysis and simulation, Matrices, Graphs of linear and non-linear relations, Networks' and 'Geometry, Measurement and Trigonometry.

Units 1 and 2 are to be constructed to suit the range of students entering the study by selecting material from the six areas of study.

### **Unit 1 & 2 (Yr 11): Mathematical Methods (CAS)**

Mathematical Methods Units 1 and 2 are designed as preparation for Mathematical Methods Units 3 and 4. To enrol in these units students need to have successfully completed the Mathematical Methods stream in year 10, the skills introduced here will form the assumed knowledge for this area of study.

Students will develop skills and knowledge from each of the four areas of study and need to apply this across all areas.

Unit 1 & 2 mathematics may lead to Further Mathematics or Mathematical Methods units 3 & 4 in year 12. Students studying this unit in year 11 may have the option to complete Further Mathematics unit 3 & 4 in conjunction with these units.

### **Unit 3 & 4 (Year 12): Further Mathematics**

Further Mathematics consists of a compulsory core area of study Data analysis and then a selection of three from six modules in the Applications area of study.

Areas that have been covered in Unit 1 & 2 General Mathematics are assumed knowledge and students will continue to develop a deeper understanding of this material in these units.

*Year 11 students who are strong in mathematics will be encouraged to undertake Further Mathematics alongside Year 11 Mathematics Methods. This may also be in the best interest of students wishing to study Specialist Mathematics in year 12.*

### **Unit 3 & 4 (Year 12): Mathematical Methods (CAS)**

Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and these 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.

The selection of content from the areas of study is constructed so that there is a development in the complexity and sophistication of problem types and mathematical processes used in application to contexts related to these areas of study.

### **Unit 3 & 4 (Year 12): Specialist Mathematics**

Specialist Mathematics consists of the following areas of study: Functions, Relations and graphs, Algebra, Calculus, Vectors and Mechanics. The development of course content should highlight mathematical structure and proof.

Specialist Mathematics Units 3 and 4 assumes concurrent or previous study of Mathematical Methods Units 3 and 4. They contain assumed knowledge and skills for Specialist Mathematics, which will be drawn on as applicable in the development of content from the areas of study and key knowledge and skills for the outcomes.

## **MUSIC PERFORMANCE**

### **VCE Music Performance: Solo**

It is strongly recommended that students have the equivalent of **AMEB** or **ANZCA** 5<sup>th</sup> Grade standard on their solo instrument.

### **Unit 1 (Yr11): Music Performance**

This unit focuses on building performance and musicianship skills. Students 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 practise technical work to address these challenges. They also develop skills in performing previously unseen music. Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances.

### **Unit 2 (Yr 11): Music Performance**

In this unit students build their performance and musicianship skills. They present performances of selected group and solo music works using one or more instruments. Students study the work of other performers through listening and analysis and use specific strategies to optimise their own approach to performance. They also study strategies for developing technical and expressive performance skills. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practise related technical work. They develop skills in performing previously unseen music and study specific concepts to build their musicianship knowledge and skills. Students also devise an original composition or improvisation.

### **Unit 3 (Yr12): Music Performance**

This unit prepares students to present convincing performances of group and solo works. In this unit students select a program of group and solo works representing a range of

styles and diversity of character for performance. They develop instrumental techniques that enable them to interpret the works and expressively shape their performances. They also develop an understanding of performance conventions they can use to enhance their performances. Students develop skills in unprepared performance, aural perception and comprehension, transcription, music theory and analysis.

#### **Unit 4 (Yr 12): Music Performance**

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

### **OUTDOOR & ENVIRONMENTAL STUDIES**

VCE Outdoor and Environmental Studies is concerned with the ways humans interact with and relate to outdoor environments. ‘Outdoor environments’ include environments that have minimum influence from humans, as well as those environments that have been subject to different levels of human intervention. The study enables students to make critically informed comment on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts.

#### **Unit 1(Yr 11): Exploring outdoor experiences**

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. Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments.

#### **Unit 2 (Yr 11): Discovering outdoor environments**

This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impacts on outdoor environments.

In this unit students study nature’s impact on humans, as well as the ecological, social and economic implications of human impact on outdoor environments. Students develop a clear understanding of the impact of technologies and changing human lifestyles 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.

### **Unit 3 (Yr 12): Relationships with outdoor environments**

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia. Students consider a number of factors that influence contemporary relationships with outdoor environments. They also examine the dynamic nature of relationships between humans and their environment. Students are involved in one or more experiences in outdoor environments, including in areas where there is evidence of human interaction. Through these practical experiences students are provided with the basis for comparison and reflection, and opportunities to develop theoretical knowledge and skills about specific natural environments.

### **Unit 4 (Yr 12): Sustainable outdoor relationships**

In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues in relation to the capacity of outdoor environments to support the future needs of the Australian population. Students examine the importance of developing a balance between human needs and the conservation of outdoor environments and consider the skills needed to be environmentally responsible citizens. They investigate current agreements and environmental legislation, as well as management strategies and policies for achieving and maintaining healthy and sustainable environments in contemporary Australian society. Students engage in one or more related experiences in outdoor environments.

## **PHYSICAL EDUCATION**

### **Unit 1(Yr 11): Bodies in motion**

In this unit students explore how the body systems work together to produce movement and analyses this motion using biomechanical principles. Through practical activities students explore the relationships between the body systems and physical activity. They are introduced to the aerobic and anaerobic pathways utilised to provide the muscles with the energy required for movement and the basic characteristics of each pathway. Students apply biomechanical principles to improve and refine movement. They use practical activities to demonstrate biomechanical principles and how the correct application of biomechanics can lead to improved performance in sport and physical activity.

### **Unit 2 (Yr 11): Sports coaching and physically active lifestyles**

This unit explores a range of coaching practices and their contribution to effective coaching and improved performance of an athlete. The way in which a coach influences an athlete can have a significant effect on performance. The approach a coach uses, the methods applied and the skills used will **have an impact on the degree** of improvement experienced by an athlete. By studying various approaches and applying this knowledge to a practical session, students gain a practical insight into coaching.

Students are introduced to physical activity and the role it plays in the health and wellbeing of the population. Through a series of practical activities, students gain an appreciation of the level of physical activity required for health benefits and investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence participation in regular physical activity, and collect data to identify perceived barriers and the ways in which these barriers can be overcome.

### **Unit 3 (Yr 12): Physical activity participation and physiological performance**

This unit introduces students to an understanding of physical activity and sedentary behaviour from a participatory and physiological perspective. Students apply various methods to assess physical activity and sedentary levels, and analyse the data in relation to adherence to the National Physical Activity Guidelines. Students study and apply the social-ecological model to identify a range of Australian strategies that are effective in promoting participation in some form of regular activity.

Students investigate the contribution of energy systems to performance in physical activity. In particular, **they investigate the characteristics of each system and the interplay** of the systems during physical activity. Students explore the multi-factorial causes of fatigue and consider different strategies used to delay and manage fatigue and to promote recovery

### **Unit 4 (Yr 12): Enhancing performance**

Improvements in performance, in particular fitness, depend on the ability of the individual or coach to gain, apply and evaluate knowledge and understanding of training. Students undertake an activity analysis. Using the results of the analysis, they then investigate the required fitness components and participate in a training program designed to improve or maintain selected components. Athletes and coaches aim to continually improve and use nutritional, physiological and psychological strategies to gain advantage over the competition. Students **learn to critically evaluate different techniques and practices that can be** used to enhance performance, and look at the rationale for the banning or inclusion of various practices from sporting competition.

## **PHYSICS**

Physics is the study of the physical universe from the minute building blocks of matter to the unimaginably broad expanses of the universe.

### **Unit 1 (Yr 11)**

This unit looks at study of Physics as a human endeavour in which observations and ideas about the physical world are organised and explained. The unit consists of two prescribed areas of study: Wave like properties of light; Nuclear and radioactivity physics; and a third area to be chosen from: Astronomy, Medical physics, or Energy from the nucleus.

### **Unit 2 (Yr 11)**

This unit looks at physics through the application of models to more complex phenomena. Once again there are two prescribed areas of study: Movement, Electricity and a third area chosen from: Astrophysics, Investigations: Aerospace, or Investigations: alternative energy sources.

### **Unit 3 (Yr 12)**

In this unit we look at the ideas that underpin much of the technology found in areas such as communications, commerce and industry. This unit consists of two prescribed areas of study: Motion in one and two dimensions: Electronics and Photonics, and a third study to be chosen from: Einstein's theory of relativity, Investigating structures and materials, or Further electronics.

### **Unit 4 (Yr 12)**

This unit consists of two prescribed areas of study: Interactions of light and matter: Electric power: and a third area of study to be chosen from one of three detailed studies: Synchrotron and applications, Photonics, or Recording and reproducing sound.

## **PSYCHOLOGY**

Psychology is the study of the nature and development of mind and behaviour in both humans and animals, including the biological structures and processes that underpin and sustain both. Students can develop an understanding of themselves and their relationships with others and their society through the study of Psychology.

### **Unit 1 (Yr 11)**

This unit looks at study of Psychology in general. What is the difference between a Psychologist and a Psychiatrist? What type of Psychologist is Dr Phil? Do you think the same way that other people do? We also look at how we can all look at the same object or event but see different things. Is what I see the same as what you see? We also look at how we develop our attitudes about and relationships toward others.

### **Unit 2 (Yr 11)**

This unit looks at the development of individual behaviour from when we are first born to when we die. Are you as smart as your parents? Or even smarter? What about your brother or sister? Is there a connection? Are you the type of person that will stand up for what you believe in, even if everyone else disagrees? We look at how groups influence the thinking and behaviour of individuals. We also look at differences between people in terms of normality, intelligence and personality.

### **Unit 3 (Yr 12)**

In this unit we look at the nervous system in detail with a major focus on the spinal cord and the brain's major structures and their functions. We look once again at human sensation and perception. Do we all see in the same way? Is what I see the same as what

you see? We finally look at the relationship between our consciousness and our thoughts, feelings and behaviour.

#### **Unit 4 (Yr 12)**

This unit starts by exploring how human memory works, including the various techniques for minimising forgetting. We then look at learning. Find out how we learn best, how to teach your ‘old dog new tricks’ and why some people become addicted to poker machines. We finish by looking at how Psychologists conduct research.

## **STUDIO ARTS**

#### **Unit 1 (Yr 11): Artistic Inspiration and Techniques**

This unit focuses on using sources of inspiration and individual ideas as the basis for developing artworks and exploring a wide range of materials and techniques as tools for communicating ideas, observations and experiences through artmaking. Students also explore and research the ways in which artists from different times and cultures have interpreted and expressed ideas, sourced inspiration and used materials and techniques in the production of artworks.

#### **Unit 2 (Yr 11): Design Exploration and Concepts**

This unit focuses on students establishing and using a design process to produce artworks. The design process includes the formulation and use of an individual approach to locating sources of inspiration, experimentation with materials and techniques, and the development of aesthetic qualities, directions and solutions prior to the production of artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand the artists’ ideas and how they have created aesthetic qualities and identifiable styles.

#### **Unit 3 (Yr 12): Studio Production and Professional Art Practices**

This unit focuses on the implementation of an individual design process leading to the production of a range of potential directions and solutions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a design 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 design process to support the making of finished artworks in Unit 4.

The study of artists and their work practices and processes may provide inspiration for students’ own approaches to artmaking. Students investigate and analyse the response of artists to a wide range of stimuli, and examine their use of materials and techniques. They explore professional art practices of artists in relation to particular artworks and art form/s and identify the development of styles in artworks. Throughout their study of art processes, students also consider the issues that may arise from the use of other artists’ work in the making of new artworks. Students are expected to visit at least two different exhibition spaces in the current year study.

### **Unit 4 (Yr 12): Studio Production and Art Industry Contexts**

This unit focuses on the production of a cohesive folio of finished artworks. To support the creation of the folio, students present visual and written documentation explaining how selected potential directions generated in Unit 3 were used to produce the cohesive folio of finished artworks. These artworks should reflect the skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities.

This unit also investigates aspects of artists' involvement in the art industry, focusing on a variety of exhibition spaces and the methods and considerations involved in the preparation, presentation and conservation of artworks. Students examine a range of environments for the presentation of artworks exhibited in contemporary settings.

## **VISUAL COMMUNICATION AND DESIGN (GRAPHICS)**

**GRAPHICS** is the visual language of presenting information, concepts and ideas. It involves the use and manipulation of images to carry a message to a selected audience. Career prospects in graphics are diverse. See the list below. The visual communication production process is an important aspect of the course and the function of design in everyday communication is studied and put into practice. The use of a variety of drawing techniques (including computer-aided drawing), systems and graphic are used. In each unit a folio of work is produced that covers the main areas of graphic communication, with a different emphasis on each folio.

**Unit 1 (Yr 11):** Emphasises technical and freehand drawing from observation.

**Unit 2 (Yr 11):** Covers the development of practical skills through the generation and manipulation of images.

**Unit 3 (Yr 12):** Is the application of the visual communication production process to satisfy specific needs. Professional practice is studied and examples of existing communications are analysed.

**Unit 4 (Yr 12):** Is to prepare and work to a design brief and produce two final presentations based on that brief.

The use of computers in Graphics at VCE is compulsory.

Careers that are open to **GRAPHICS** students include –

Production Art, Graphic Design, Industrial Design, Layout Art (Printing and Publishing), Web Designer, Desktop Publishing, Animation, Television and Video Production, Film Production, SFX Design, Multimedia, Game Design.

Graphics can also be of assistance in –

Architecture, Architectural Engineering, Drafting, Engineering, Public Relations, Hospitality.