Year 11

Subject and

Course Descriptions

SUBJECTS OFFERED IN 2019	
VCE Units 1 and 2	**VCE Units 3 and 4**
Accounting	Accounting
Global Politics	Global Politics
Biology	Biology
Business Management	Business Management
Chemistry	Chemistry
EAL	EAL
English	English
Food Studies	Food Studies
Foundation English (Options students only)	
Foundation Mathematics	
French	French
General Mathematics	Further Mathematics
Health and Human Development	Health and Human Development
History	History
Computing	Software Development
Japanese	Japanese
Legal Studies	Legal Studies
Literature	Literature
Mathematical Methods	Mathematical Methods
Media	Media
Music Performance	Music Performance
Outdoor and Environmental Studies	Outdoor and Environmental Studies
Physical Education	Physical Education
Physics	Physics
Product Design and Technology	Product Design and Technology
Psychology	Psychology
Specialist Mathematics	Specialist Mathematics
Studio Arts	Studio Arts
Visual Communication and Design	Visual Communication and Design
VET Year 11	**VET Year 12**
Business	Business
Hospitality	Hospitality
VCE Options	**VCAL**
Work and Personal Skills	Work Related Skills
	Personal Development Skills
	VCAL Literacy
	VCAL Numeracy

*Food Studies has a cost of $150.00

** Outdoor and Environmental Studies has a cost of $300.00

*** Studio Arts has a cost of $110

VCE Subject Descriptions

Accounting

Unit 1: Role of accounting in business

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

Unit 2: Accounting and decision-making for a trading business

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

Global Politics

Unit 1: Ideas, Actor and Power

Unit Description: In this unit students are introduced to the key ideas relating to the exercise of political power. They explore how these ideas shape political systems and in particular the characteristics of liberalism. They consider the nature of power in Australian democracy and in a non-democratic political system. They also explore the nature and influence of key political actors in Australia: political parties, interest groups and the media. All these forms of participation in Australian democracy influence the political agenda.

Unit 2: Global connections

Unit Description: This unit introduces students to the global community and the global actors that are part of this community. In Area of Study 1 students explore the myriad ways lives have been affected by the increased interconnectedness – the global links – of the world through the process of globalisation. In Area of Study 2, students consider the extent to which global actors cooperate and share visions and goals as part of the global community. They investigate the ability of the global community to manage areas of global cooperation and to respond to issues of global conflict and instability.

Future Prospects: Politics may be studied as part of an Arts, Law or Economics Degree at University. A study of politics may be an important component of training for occupations, which include: Archaeologist, Politician, Author, Journalist Barrister/Solicitor, Film/Television Producer, Playwright, Librarian, Publisher, Secondary Teacher, Tertiary Lecturer, Political Analyst, Research Officer, Foreign Affairs Officer, Sociologist and Social Worker.

Biology

Unit 1: How Do Living Things Stay Alive?

Unit Description: In this unit, students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. They analyse types of adaptations that enhance the organism's survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat. The role of a keystone species in maintaining the structure of an ecosystem is explored. Students consider how the planet's biodiversity is classified and the factors that affect the growth of a population. An extended student practical investigation related to the survival of an organism or species is undertaken in Area of Study 3.

Unit 2: How is Continuity of Life Maintained?

Unit Description: In this unit, students focus on cell reproduction and the transmission of biological information from generation to generation. Students learn that all cells are derived from pre-existing cells through the cell cycle. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies, and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered. Students use chromosome theory and terminology from classical genetics to explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes. They consider the role of genetic knowledge in decision making about the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions. In this context the uses of genetic screening and its social and ethical issues are examined. A student-directed research investigation into, and communication of, an issue related to genetics and/or reproductive science is to be undertaken in Area of Study 3.

The investigation draws on content from Area of Study 1 and/or 2.

Business Management

Unit 1: Planning a Business

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

Unit 2: Establishing a Business

Unit Description This unit focuses on the establishment phase of a business's life. Establishing a business involves complying with legal requirements as well as making decisions about how best to establish a system of financial record keeping, staff the business, establish a customer base and use essential marketing techniques. Students analyse the various management practices in this unit by applying this knowledge to contemporary business case studies from the past four years.

Chemistry

Unit 1: How Can the Diversity of Materials be Explained?

Unit Description: This unit focuses on the nature of chemical elements, their atomic structure and their place in the periodic table. Students will review how the model of the atom has changed over time and explore patterns, trends and the relationships between elements with reference to their properties including their chemical reactivity. Students will investigate the nature of metals and their properties, including metallic nanomaterials, investigate how a metal is extracted from its ore and how the properties of metals may be modified for a particular use. The formation of ionic compounds, their crystalline structures and how changing environmental conditions may change their properties are also explored. They will also cover introductory organic chemistry and polymers. The fundamental quantitative aspects of chemistry are introduced including the mole concept.

UNIT 2: What Makes Water Such a Unique Chemical?

Unit Description: This unit focuses on water, the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students examine the polar nature of a water molecule and the intermolecular forces between water molecules. They explore the relationship between these bonding forces and the physical and chemical properties of water, including solubility, concentration, pH, and precipitation, acid-base and redox reactions. Students are introduced to stoichiometry and to analytical techniques and instrumental procedures, and apply these to determine concentrations of different species in water samples, including chemical contaminants. They use chemistry terminology including symbols, units, formulas and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water.

Computing

Unit 1

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

Unit 2

Unit Description: In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. In Area of Study 1 students develop their computational thinking skills when using a programming or scripting language to create solutions. They engage in the design and development stages of the problem-solving methodology. In Area of Study 2 students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations

that are clear, usable and attractive, and reduce the complexity of data. In Area of Study 3 students apply all stages of the problem-solving methodology to create a solution using database management software and explain how they are personally affected by their interactions with a database system.

English and English as an Additional Language (EAL)

Unit 1

Unit Description: The focus of this unit is on the reading and viewing of narrative and persuasive texts. Students will investigate and analyse the ways in which texts are constructed and interpreted. They will develop competence in structuring and creating a range of written and oral responses in modes that are analytical, persuasive and creative.

Unit 2

Unit Description: The focus of this unit is on reading and responding in a more complex way to narrative and persuasive texts. Students will learn a formal way of analysing the key similarities and differences in pairs of texts and learn how comparing them can provide a deeper understanding of ideas, issues and themes. Students will respond in written form and practise their listening and speaking skills through discussions and formal presentations.

Food Studies

Unit 1: Food Origins

Unit Description: This unit focuses on food from historical and cultural perspectives; including its origins and the roles of food through time and across the world. The changing face of Australian eating patterns and cuisine is investigated with special focus on immigration, technology and globalization and their impacts on food. Students complete topical and contemporary practical tasks to enhance, demonstrate and share their learning with others.

Unit 2: Food Makers

Unit Description: This unit focuses on food systems in contemporary Australia; including comparing commercial and small-scale domestic settings, their role in food production and capacity to provide safe, high-quality food that meets the needs of consumers. There is special focus on the development of practical skills and knowledge to produce foods and compare them to commercial products. Students will design new food products and adapt recipes to suit particular needs and circumstances.

Further information: There are direct links to VCE Chemistry, Psychology and Health and Human

Development in this course. The directions in which this study could lead include: Tourism, Hospitality, Food and Wine, Hotel/Motel Management, Food (Wholesale and Retail). Small-scale entrepreneurial food production, Chef.

There is a levy to pay for food purchased for this subject.

Foundation English (VCE options students only)

Units 1 & 2

The Foundation English course is designed for students who may be aiming to directly enter the workforce or TAFE upon completing secondary school. It may also be suited to students who need additional assistance to strengthen and refine their literacy skills.

This area of study focuses on developing learning strategies and the fundamental understandings students need in order to read and write effectively. It integrates speaking, listening, reading, viewing and writing across all areas of study to enhance students' knowledge about the structures and functions of written and oral language. The course allows students to improve their skills in comprehending and responding to a variety of texts, and to enhance their communication skills.

Foundation Mathematics

Units 1 & 2

NOTE: This subject does not continue in Year 12.

Foundation Mathematics consists of the following areas of study:

- Space and Shape Patterns
- Number Handling
- Data Measurement
- Design

Use of appropriate technology is required throughout the course. This includes the use of spreadsheets and other software packages. Students must be able to apply mathematical processes in contexts relating to familiar situations, personal work and study, and to analyse and discuss these applications of mathematics.

Other Information: Students must have a Scientific Calculator.

French

Unit 1

Unit Description: In this unit students develop an understanding of the language and culture/s of French-speaking communities through the study of three or more topics from the prescribed themes listed on page 11. 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 French 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

Unit Description: In this unit students develop an understanding of aspects of language and culture through the study of three or more topics from the prescribed themes listed on page 11. 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 French and consolidate and extend vocabulary, grammar knowledge and language skills.

General Mathematics

Units 1 & 2

Unit Description: General Mathematics consists of the following areas of study:

- Applications of Arithmetic
- Univariate Data
- Bivariate Data
- Linear Graphs and Modelling
- Linear relations and equations
- Financial Arithmetic
- Trigonometry
- Shape and Measurement

Use of appropriate technology is required throughout the course. This includes the use of graphing calculators, spreadsheets, dynamic geometry packages and graphing packages.

Other Information: Students must have an appropriate Texas Instruments TiNSpire CAS Calculator.

Health and Human Development

Unit 1: Understanding Health and Wellbeing

Unit description: This unit looks at health and wellbeing as concepts that are always evolving. Students identify personal perspectives and priorities relating to health and wellbeing and enquire into factors that influence health attitudes, beliefs and practices. With a focus on youth, students consider their own health as individuals and as a group. They build health literacy through interpreting and using data, through investigating the role of food, and through extended inquiry into one youth health focus area.

Unit 2: Managing Health and Development

Unit description: This unit investigates transitions in health, wellbeing and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. Students explore 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. There is also a focus on the Australian healthcare system to extend students' capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

History

Unit 1: Twentieth Century History (1900-1945)

Unit Description: This unit involves an investigation of Nazism in Germany. It provides a fascinating study of the notorious Adolf Hitler and the political movement which ultimately plunged European civilisation into a whirlpool of death and destruction. Area of Study 1 incorporates a study of the post-World War 1 Weimar Republic, where economic, social and political factors leading to the rise of Nazism are explored. Area of Study 2 investigates the Nazi rule of Germany from 1933 and explores social, ideological and political aspects of German life at this time.

Unit 2: Twentieth Century History (since 1945)

Unit Description: This unit involves an investigation of the decades following World War 2. Area of Study 1 investigates the Cold War, the ideological battle between the capitalist Western nations and the communist Eastern Bloc. Various instances of the Cold War are explored, including the Space Race, the Vietnam War and the Cuban Missile Crisis. Area of Study 2 explores the rise of Feminism in the 20th Century, and analyses reasons for the movement's emergence and differences between the various 'waves' of the movement. Feminism in the 21st Century is also explored, and students investigate whether the movement needs to exist through analysing and evaluating source materials.

Japanese

Unit 1

Unit Description: This unit is designed to extend students' knowledge and skills in speaking and writing in Japanese. On completion of this unit the students should be able to: establish and maintain a spoken or written exchange related to personal areas of experience; be able to listen to, read and obtain information from written texts; be able to produce a personal response to a text focusing on real or imaginary experiences.

Unit 2

Unit Description: This unit is designed to extend students' knowledge and skills in speaking and writing in Japanese. On completion of this unit, the students should be able to: participate in a spoken or written exchange related to making arrangements and completing transactions; listen to, read, and extract and use information and ideas from spoken texts; give expression to real or imaginary experience in written or spoken form.

Legal Studies

Unit 1: Guilt and Liability

Unit Description: Criminal law and civil law aim to achieve social cohesion and protect the rights of individuals. Criminal law is aimed at maintaining social order and infringing criminal law can result in charges. Civil law deals with the infringement of a person's or group's rights and breaching civil law can result in litigation. In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

Unit 2: Sanctions, Remedies and Rights

Unit Description: Criminal law and civil law aim to protect the rights of individuals. When rights are infringed, a case or dispute may arise which needs to be determined or resolved, and sanctions or remedies may be imposed. This unit focuses on the enforcement of criminal law and civil law, the methods and institutions that

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

Literature

Unit 1

Unit Description: This unit focuses on the ways literary texts represent human experience. Students respond to a range of texts such as novels, poetry, drama and non-print texts. They investigate how authors create texts and how texts can be interpreted differently by different readers. Students will respond personally, critically and creatively in written and oral form.

Unit 2

Unit Description: The focus of this unit is to deepen students' understanding of the style of narrative, the characters, the language and structure of a variety of texts. Students extend their exploration of the ideas and concerns of the text. Students make comparisons between texts and identify some of the relationships that exist through features such as the language, characterisation and ideas.

Mathematical Methods

Units 1 and 2

Unit Description: Mathematical Methods consists of the following areas of study:

- Functions and Graphs
- Algebra
- Calculus
- Probability

Use of appropriate technology is required throughout the course. This includes the use of a graphing calculator and other technology as required.

Other Information: Students must have a Texas Instruments TiNspire CAS Calculator

Media

To find out more about Media you can also click here.

Unit 1: Media forms, representations and Australian stories

Unit Description: Is anything we see in the media real? To what extent can we really talk about 'reality' TV? How do media creators represent reality, and how can we use the technology of the media to create our own representations of the world around us?

Representation is one of the fundamental concepts in the study of the media. In this unit, we look at what representation means, how directors use film codes and conventions to create representations and we create our own representations in the form of short films. The theoretical knowledge and practical skills developed in this unit are a great forerunner to Units 3 and 4 Media.

We study two Australian media narratives and analyse their construction. This analysis then informs our own future media productions.

If you've ever wanted to make a short film then this is the course for you.

Unit 2: Narrative Across Media Forms

Unit Description: This unit focuses on the idea of Narrative, or storytelling in the Media. We investigate how narrative is constructed to position audiences, and look at the concepts of consumption and reception, and how cultural and historical concepts influence the construction of narratives. We develop and produce our own narrative media products in a variety of media forms. Finally, we look at how media has changed and the effect of changing technology on the way that media is consumed and understood by a range of audiences.

Music Performance

Unit 1

Prerequisites: An audition/Interview with the Music Coordinator. It is strongly advised that a student has studied a musical instrument or voice for at least two years.

Unit Description: This unit focuses primarily on the development of practical skills in music performance in both a solo and group context complemented with technical work, theory and analysis.

An excursion/incursion is organised to enable students to respond in an analytical way, to a professional performance – date to be advised.

Other Information: Students must study an instrument or voice as part of the College's Instrumental Music Program. Students may also become a member of the various ensembles and/or choirs. They are provided with the opportunity to perform at monthly lunchtime concerts, IWD (International Women's Day), the Gala Music night at the Clocktower Centre, the End-of-Year Concert in the school auditorium, various College assemblies, Grade 6 Orientation Program, NMR "School of Rock" competition, the Victorian State Schools Spectacular, 'Pascoe's Café' as well as countless festivals/fetes and local community events.

Unit 2

Unit Description: This unit is designed to continue developing all the components covered in Unit 1 as well as introducing basic methods of composition.

Outdoor and Environmental Studies

Unit 1: Exploring Outdoor Experiences

Unit Description: This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to, and experiences of, outdoor environments. Students are provided with the opportunity to explore the many ways in which nature is understood and perceived. Students develop a clear understanding of the range of motivations for interacting with outdoor environments and the factors that affect an individual's access to outdoor experiences and relationships with outdoor environments. Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments. Students understand the links between practical experiences and theoretical investigations, gaining insight into a variety of responses to, and relationships with, nature.

Other Information: This subject involves participation in adventure activities within a natural environment. These activities are a compulsory part of the course and will require approximately eleven days away from normal class time. This will include overnight camps.

Unit 2: Discovering Outdoor Environments

Unit Description: This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments. In this unit students study the impact of nature on humans, and the ecological, social and economic implications of the impact of humans 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 the impact of humans on outdoor environments. Through practical experiences students are able to make comparisons between and to reflect upon outdoor environments, as well as to develop theoretical knowledge about natural environments.

Physical Education

Unit 1: The Human Body in Motion

Unit Description: This unit explores how the body works together to produce movement and analyses this motion. Through practical activities students explore the relationships between the body systems and physical activity and how the systems adapt and adjust to the exercise demands.

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

Unit 2: Physical Activity, Sport and Society

Unit Description: Students are introduced to types of physical activity and the role participation in physical activity plays in their own health and wellbeing as well as in other people's lives. Through practical activities, students explore different types of physical activity promoted in different population groups. They gain an appreciation of the level of physical activity required for health benefits. They explore factors that influence participation in regular physical activity and investigate consequences of physical inactivity in society.

Physics

Unit 1: What Ideas Explain The Physical World?

Unit Description: Do you want to understand Sheldon's jokes? Would you like to be an honorary Mythbuster one day? Do you ever wonder why things happen the way they do? Why don't we fall off the Earth's surface? Exactly how dangerous is radiation? Where do the stars come from? How big is the Universe? Have the satisfaction of being the person who has the answer to these questions!

This subject explores ideas and concepts such as:

- *Thermodynamics*: How thermal effects can be explained, Thermodynamic principles, climate science

- *Electricity*: Electricity modelling, making circuits, how electrical things are put together (by pulling them apart)
- *Matter*: Origin of atoms, particles in the nucleus, Nuclear radiation, reactors and bombs, particle accelerators

You automatically become a member of our Telescopes in Schools Team in conjunction with Melbourne University and get to run sessions for other students as well as undertake projects of your own (including astrophotography).

If any of these ideas interest you, think about studying Physics. If you find them intriguing, or if you think you would like to study Science, Medicine, Engineering, Technology, Sport Science, Nursing, Astrophysics or even running NASA. Don't think "I can pick this up at Uni" – it's not that easy, give yourself a head start in Year 11 to reduce your future stress levels.

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

Unit Description: This subject explores ideas and concepts such as:

- *Motion*: measuring movement, how we are held to the Earth, Forces around us and how energy is used
- *Focus Study*: Choice of a detailed study on Astrophysics, Nuclear Energy, Aerospace or Medical Physics (Eg. The Big Bang or Nuclear Fusion).
- *Practical Investigation*: Design and undertake an investigation related to Motion studies (Eg. Newton's Laws or Terminal Velocity).

By studying Physics you also automatically become a member of our Telescopes in Schools Team in conjunction with Melbourne University and get to run sessions for other students as well as undertake projects of your own (including astrophotography).

You should think about studying Physics if any of these ideas interest you, if you find them intriguing or if you think you would like to study Science, Medicine, Engineering, Technology, Sport Science, Nursing, Astrophysics or even running NASA. Don't think "I can pick this up at Uni" – it's not that easy, give yourself a head start in Year 11 and reduce your future stress levels.

Product Design and Technology - Fabrics

Units 1 & 2

Unit Description: Product Design and Technology (Fabrics) gives students experience in working both individually and in teams to design and develop and produce garments and other fabrics products. In Unit 1, students work individually to redevelop, improve and produce an existing design. In Unit 2, students work as a member of a multidisciplinary team to design, develop and produce a garment of their choice.

Throughout the course theoretical knowledge is embedded within practical tasks so that on completion of Units 1 & 2, students are in a position from which to excel in Units 3 & 4.

Product Design and Technology helps students to develop their critical thinking, designing and collaborative skills as well as their creativity and their practical skills with fabrics tools and processes.

Psychology

Unit 1: How Are Behaviour And Mental Processes Shaped?

Unit Description: Do you wonder how your brain develops and how it works? Or do you want to learn about the following:

- Why people who have had a limb amputated continue to feel that limb as if it were still there?
- What does it means to have different psychological disorders such as addiction, anxiety, mood, personality and psychotic disorders.

Students also explore the psychological development of an individual which involves complex interactions between biological, psychological and social factors. They investigate how these factors influence different aspects of a person's psychological development. They consider the interactive nature of hereditary and environmental factors and investigate specific factors that may lead to development of typical or atypical psychological development in individuals, including a person's emotional, cognitive and social development and the development of psychological disorders.

A student-directed research investigation related to brain function and/or development is undertaken in this unit. Students can choose to study topics including but not limited to:

- 'Is the internet changing the way we think and behave?'
- "Are brain training programs effective?' or, 'How can brain trauma in sporting injuries affect cognitive function?'

Students examine how our understanding of brain structure and function has changed over time and how the brain enables us to interact with the external world. They analyse the roles of specific areas of the brain and the interactions between areas of the brain that enable complex cognitive tasks to be performed. Students explore how brain plasticity and brain damage can affect a person's functioning.

In this unit, students will visit the Cunningham Dax Centre at the University of Melbourne to help understand the perspective of people with a mental disorder. The Dax Centre uses engaging programs to explore life stories of artists who have represented their lived experience of mental illness or trauma through art. The program includes an interactive session about how to look after your mental health, a presentation by a mental health advocate and a tour of the exhibition on show.

Unit 2: How Do External Factors Influence Behaviour And Mental Processes?

Unit Description: Are you interested in why people sometimes conform to others people's way of thinking even when they don't agree with them, or why people obey commands when they think they are wrong? Maybe you want to know about how vision works, and what makes the 'Magic Eye' pictures work. Do you know if food packaging and appearance affects our taste of it, or does our age, our culture, or even our genes affect our taste? These and other mysteries will be explored.

In this unit, students explore two aspects of human perception – vision and taste – and analyse the relationship between sensation and perception of stimuli. They consider how biological, psychological and social factors can influence a person's perception of visual and taste stimuli, and explore circumstances where perceptual distortions of vision and taste may occur.

Students will also explore the interplay of biological, psychological and social factors that shape the behaviour of individuals and groups. They consider how these factors can be used to explain the cause and dynamics of particular individual and group behaviours, including attitude formation, prejudice, discrimination, helping behaviour and bullying.

A student practical investigation related to sensation and perception is undertaken in this unit. In Year 11, students will visit Melbourne Zoo to collect data and consider ethical issues.

Specialist Mathematics

Units 1 & 2

Unit Description: Specialist Mathematics consists of the following areas of study:

- Linear graphs and modelling
- Linear relations and equations
- Non-linear relations and equations
- Complex numbers
- Kinematics
- Sequences and series
- Mechanics
- Trigonometric functions Vectors

Use of appropriate technology is required throughout the course. This includes the use of a graphing calculator and other technology as required.

Other Information: Students must have a Texas Instruments TiNspire CAS Calculator

Studio Arts

Unit 1: Studio inspiration and techniques

Unit Description: In this unit, students focus on developing an individual understanding of the stages of studio practice and learn how to explore, develop, refine, resolve and present artworks. Students explore sources of inspiration, research artistic influences, develop individual ideas and explore a range of materials and techniques related to specific art forms. Using documented evidence in a visual diary, students progressively refine and resolve their skills to communicate ideas in artworks. Students also research and analyse the ways in which artists from different times and cultures have developed their studio practice to interpret and express ideas, source inspiration and apply materials and techniques in artworks.

Unit 2: Studio exploration and concepts

Unit Description: In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms. Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process. Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art. Analysis is used to understand the artists' ideas and how they have created aesthetic qualities and subject matter. Comparisons of contemporary art with historical art styles and movements should be encouraged.

Visual Communication and Design

Unit 1: Introduction to Visual Communication Design

Unit Description: This unit focuses on acquiring and applying design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practice their ability to draw what they observe and they use visualisation-drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation

drawings to clearly communicate their final visual communications. Through experimentation and through exploration of the relationship between design elements and design principles, students develop an understanding of how design elements and principles affect the visual message and the way information and ideas are read and perceived. Students review the contextual background of visual communication through an investigation of design styles. This research introduces students to the broader context of the place and purpose of design. In this unit, students are introduced to three stages of the design process: researching designers, generating ideas and applying design knowledge and drawing skills to develop concepts.

The study examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. Designers create and communicate through visual means to shape the everyday quality of life for individuals, communities and societies. Visual communication design relies on drawing as the primary component of visual language to support the conception and visualisation of ideas. Consequently, the study emphasizes the importance of developing a variety of drawing skills to visualise thinking.

Unit 2: Applications of Visual Communication Design

Unit Description: This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields. Students use presentation drawing methods that incorporate the use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design. They investigate how typography and imagery are used in visual communication design. They apply design thinking skills when exploring ways in which images and type can be manipulated to communicate ideas and concepts in different ways in the communication design field. Students develop an understanding of the design process as a means of organising their thinking about approaches to solving design problems and presenting ideas. In response to a brief, students engage in the stages of research, generation of ideas and development of concepts to create visual communications.

VET Course Descriptions

Business

Units 1 & 2: Certificate II in Business

Unit Description: This is an office skills course. Students learn skills to enable them to become effective Office workers. The Certificate II in Business is a Vocational Education and Training (VET) program. This means that students are able to gain work skills whilst doing their VCE. Units 1 & 2 of VET Business contribute to the VCE graduation requirements. Students benefit by gaining their VCE and a nationally recognised business certificate. To gain the Certificate II in Business, students must satisfactorily complete the Business course in Year 11. Units 3 and 4 in Year 12 contribute to Certificate III Business, VCE graduation requirements and a student's tertiary entrance score. Students complete their VET Business studies entirely at the College. Students are enrolled for the subject at IVET Institute so they receive a TAFE Business certificate. It is recommended that Year 11 VET Business students complete a 5 to 10 day work placement. This placement can be completed during a school term, a term break or after Year 11 has finished in November/December. To cover the IVET Institute enrolment and associated course costs, a fee is payable via your college statement.

Hospitality

Units 1 & 2: Certificate II in Hospitality

Unit Description: The Certificate II in Hospitality is a Vocation Education and Training (VET) program. This means that students are able to gain work skills whilst doing their VCE. Students benefit by gaining their VCE and a nationally recognised TAFE Hospitality certificate.

To gain the Certificate II in Hospitality, students must satisfactorily complete Hospitality in Year 11. Hospitality students must complete an out of school industry work placement and an allocated number of shifts in the college Coffee Shop.

To cover the enrolment at William Angliss Institute of TAFE and associated course costs, a fee is payable via your College statement. The College will lend each student a college restaurant jacket to wear whilst working in the College Coffee Shop. You are also required to wear either a black knee length skirt or pants.

The course aims to: provide a general overview of the hospitality industry and the potential career paths within it; develop interpersonal, analytical, organisational, communication, planning, teamwork and problem solving skills; and provide training and skill development in food and beverage service.

VCE Options Subject Descriptions

Work and Personal Skills

Students study three VCAL units in this subject: Units 1 and 2 Work Related Skills and Unit 1 Personal Development Skills. The purpose of the Work Related Skills strand is to develop employability skills, knowledge and attributes valued within the community and work environments as a preparation for employment. Students examine Occupational Health and Safety and the conditions and entitlements in workplaces, and they develop their work skills by planning and organising team based work-related activities and participating in one-week of structured workplace learning in industry. The purpose of the Personal Development Skills strand is to develop knowledge, skills and attributes that lead towards: the development of self, social responsibility, building community, civic and civil responsibility, improved self-confidence and self-esteem, and valuing civic participation in a democratic society. Students develop their skills by planning and organising a complex personal development project.