MOUNT ALEXANDER COLLEGE

2017 WHOLE SCHOOL SUBJECT HANDBOOK

Contents

Arts Student Led Electives

Semester Length

Subjects which have a skills grid but students negotiate the content and the activities undertaken with the teacher.

Animation

In this subject, student will learn how to create 2D and 3D animated products. They will explore different animation techniques and will be able to plan, design and develop animated products designed for a specific audience. Stop Motion Animation techniques will be also explored.

Analyse Animation	Stop Motion	Live Action Animation	Composition
Flash	Unity	Key Framing	Studio Lighting
Tweening	Advertising and Promoion	Hand Drawn and Cell Animation	Convergent Media

Drama

In this subject students will develop an understanding of different performance styles, explore a variety of stimulus material, manipulate dramatic elements and devise and perform pieces in front of an audience and for the screen.

Skills Grid

Improvisation	Physical theatre	Stagecraft	Directing	Performance Appreciation
Non-naturalistic theatre	Shakespeare	Lighting and Stage Design	Character Development	Personal and Peer Reflection
Solo performance	Mime	Script Writing	Theatre Styles	Presenting performance
Dramatic Elements	Voice	Tension and Conflict	Movement and Expression	Developing Mood
Performance analysis	Developing Focus	Space and Proxemics	Devising Theatre	Working collaboratively

Film Making

Ever wondered what goes into making a film? Film Making can offer you an insight into this exciting and diverse industry. Students will get to explore and discover what it takes to produce a short-film, advertisements and other media products.

Students are also encouraged to exhibit their work online through our YouTube channel or vimeo, and enter their films in the many short film festivals throughout Australia. Students may also have the opportunity to participate in the production of a community television program featuring their films.

Skills Grid

Film Analysis	Narrative Development	Camera Techniques	Critical Review	Genre
Mise en Scene	Film poster design	Composition	Editing	Audience
Representation	Lighting	Marketing and Promotion	Audience Awareness	Development and Production
Props, Set and Costume	News Production	Special Effects	Documentary	Production Elements
Media Industry	Sound Recording	Storyboard	Recording and Capturing Dialogue	Story Elements

Subject cost: $50

This goes towards the purchase, maintenance and depreciation of video equipment

Photography

In this subject, students will learn the use of digital cameras, image manipulation and photographic editing software, as well as exploring different photography genres including portraiture, street photography and macro photography. Students learn the codes and conventions of photography, including design and composition, study and analyse the images of others and produce images to be printed or displayed online.

Skills Grid

Analyse photography	Concept and Development	SLR Camera Operation	Composition
Shutter Speed and Aperture	Attend Exhibitions	Portraiture	Studio Lighting
Sports Photography	Tripod and Accessories	Print Production	Collage and Design
Editing and Manipulating	City and landscapes	Photo Journalism	Presentation

Proposed subject cost: NIL

Pre-VCE Drama

This course provides a clear pathway into VCE Drama. In this course students will:

- students will develop an understanding of performance styles and conventions from a diversity of cultures
- explore the process used to develop the dramatic potential of stimulus material
- develop, through practice and analysis, an understanding of drama as a way of communicating stories and meaning
- manipulate dramatic elements and stagecraft in devising and performing dramatic works
- develop and refine expressive and performance skills
- devise, perform and evaluate solo and ensemble dramatic works.

Pre-VCE Media

This subject enables students to further their media skills and knowledge. In this course students will:

- investigate and analyse their own and others' experiences of media
- analyse media products to understand how meaning is constructed
- develop an understanding of production processes involved in the construction of media products through practical and theoretical applications
- develop and refine skills in the areas of production and critical analysis to express their ideas through media forms
- understand the relationship between media products, their production context and the audiences that consume them

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3D ART AND ARCHITECTURE

Examine the history of the building design both locally and in the international context. Explore a range of techniques in the creation of 3 Dimensional Art and Sculpture.

Skills Grid

Elements of Art	Materials/ Mediums	Tone	Balance	Pattern and Repetition
Proportion	Shape	Space	Colour	Movement
Emphasis	Contrast	Art Terms	Form	Skills and techniques
Line	Principles of Art	Texture	Composition	Art forms

Cost: $20

Painting and Drawing

Explore a range of drawing and painting techniques including oil painting and portrait painting.

Skills Grid

Elements of Art	Materials/ Mediums	Tone	Balance	Pattern and Repetition
Proportion	Shape	Space	Colour	Movement
Emphasis	Contrast	Art Terms	Form	Skills and Techniques
Line	Principles of Art	Texture	Composition	Art Forms

Cost: $50

Turn it to 11 - Music Performance (Instrumental and Vocal)

This course gives students the freedom to Rock, Groove or Swing to their own beat. Students will develop their skills and awareness of music in a practical driven class with the chance to learn musical instruments (including voice) and rehearse as part of a group.

Performance	Techniques	Creativity
Analysis	Research	Artistic Development
Stagecraft	Teamwork	The Audience

Music Industry

The Music Industry class lets you take charge of your Music career with a course specifically designed to enhance the knowledge of band managers, music marketers, music event organisers, writers, composers, performers and those who would like to increase their experience in the many and varied business areas of the music industry.

Skills Grid

Performance	Digital/Acoustic Techniques	Songwriting/Composition
Analysis	Research	Artistic Development
Management Skills	Teamwork	Recording Techniques

The Hit Factory (A Music Technology class)

In the Music Technology course you will hone your skills as DJ, composer, sound designer and/or sound producer. You will have the opportunity to record music, mix live sound and lights or perform your own digital creations. During this you will work in a State-of –the-art facility at an off campus recording studio with industry professionals assisting and guiding your ideas/creations.

Performance	Digital/Acoustic Techniques	Songwriting/Composition
21st Century Music Techniques	Research	Communication Skills
Production Techniques	Team Work	Recording/Mixing Techniques

Technology Student Led Electives

Catering

Catering aims to develop the skills needed to cater successfully for a client and to secure an income in doing so.

Aspects covered will include; small business set up, menu development; food preparations and cooking skills, costing, advertising, customer relations, presentation and evaluation.

Once basic modules in relations to the skills have been mastered, students will work individually or as a team catering for clients they have secured.

Students will budget and order required materials through he College Food Technology department.

Throughout the semester students will maintain a portfolio of their ideas, the recipes they have completed, photos of their word and an evaluation of their outcomes.

The following skill and topic grid represents the mandatory modules. Once mastered, students can explore extension areas of personal interest.

Subject cost: $110

Skills Grid

Health and Safety	Tools of the trade	Food preparation
Food presentation	Service	Ordering
Menu design and planning	Dining room organisation	Basic cooking principles
Mise en place	Functions of catering	Customer service
Quality control	Costing and budgets	Small business operation
Evaluation	Ingredients	Special dietary needs

Jewellery Making and Clay Constructions (One semester)

Learn to make Jewellery using a variety of techniques. Learn to use clay as a modelling medium. Advanced students will progress to Pottery using the school kiln.

Skills Grid

Design	Cultural Study	Creativity
Concept Development	Looking At Materials	Research
Using Colour	Photographic Documentation	Individual And Group Work

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Printmaking and T-Shirt Design

Explore a range of printmaking techniques applied to paper and fabrics. Create a range of wearable art focusing on T Shirt production.

Skills Grid

Design	Techniques	Creativity
Concept Development	Research	Artistic Development
Photographic Documentation	Presentation	The Audience

Cost: $50

Vogue: Fashion Design

Are you interested in fashion? Do you like to be creative? Did you know that Melbourne is the fashion capital of Australia? Then you should be in Vogue - our fashion design course.

All students will gain basic skills in the following areas:

- Fashion design
- Garment construction
- Pattern making
- Hand sewing
- Sewing machine/Overlocker use
- Knitting
- Embroidery/tapestry

Subject cost: $50 per semester

Skills Grid

Creative Design	Wearable Art	Fashion And Culture
Concept Development	Principles Of Art	High Fashion
Individuality	Creativity	Problem Solving

Makers Workshop: Design technology

In this student-led subject students will focus on making things of their choice. Students undertaking this subject will be encouraged to explore their innate creativity.

Over a period of time students may explore a larger project or complete a number of smaller projects.

The focus of this elective will be on achievable projects that can be undertaken with the available resources at the school.

Students will be expected to share their expertise with other students and may work collaboratively in groups.

Possible projects:

- Kite
- Bird-box
- Tapestry
- Assemble a model
- Knit a jumper
- Assemble a picture frame
- Make a wind sock
- Print a t-shirt

The possibilities are endless!

Subject cost: $50

Students will cost projects as they progress. Larger or more expensive projects beyond the levy may require students to purchase their own materials.

Skills Grid

Creativity	Planning	Application Of Knowledge
Developing Skills	Working With Materials	Imagination
Time- Management	Research	Documentation

MasterChef

Have you ever watched MasterChef or Jamie Oliver and wished that you could create spectacular meals from simple ingredients?

This elective will cover healthy cooking, cooking for friends and cooking delicious 'quick and easy' meals. Students will learn the basic skills of food preparation such as cutting, blending, steaming, frying, poaching and much more.

Culinary terms will be learnt as recipes are explored and cooking takes places. Students in MarsterChef will also learn the art of presenting their meals and take part in catering for selected College events.

Once students have mastered the basics, they are then able to have significant input into the food they create. Students may explore a range of different cooking styles and cooking from different cultures.

Over the course of the semester, students will participate in their own 'Masterchef' competition. By the final week – only one person can be crowed the MAC Masterchef.

Subject cost: $140 per semester

Students will cost projects as they progress. Total project costs beyond the levy may require students to purchase their own materials or to pay additional money.

Skills Grid

Safety hygiene	Equipment	Decoding a recipe	Measurement	Portfolios
Salad	Batter	Eggs	Butter	Knife skills
	Preservation	Bread	Pastry	Pasta
Pie	Biscuit	Pan frying	Stir frying	Deep frying
Poaching	Sugar	Salt	Steaming	Garnishing
Sauce	Braising	Roasting	Baking	Seasonal cooking

DIY Minecraft - Computer Game Design

Do you like to play games? If you enjoy games and want to get started with game design, then this elective provides a good start.

We will have fun creating computer games. Entering the world of game design will be the beginning of a fascinating journey. You will be challenged to think logically and abstractly, while at the same time encouraged to be creative.

In this subject, students will be introduced to the concept of computer and video game design and development. They will be using state of the art game design platforms such as Gamestar Mechanic, Stencyl, GameMaker and Unity to develop interesting and exciting video and PC games.

Objectives

- Discuss the history of electronic game development.
- Distinguish between the different game platforms and player modes.
- Distinguish between the different game goals and genres.
- Define elements related to game strategy, theory, and gameplay.
- Apply story and character development to games.
- Discuss various aspects of gameplay that can be used to design game interaction.
- Discuss the design and use of levels.
- Discuss the use of the interface for game design.
- Use audio to enrich the game atmosphere.
- Identify the distinct roles and responsibilities of game development team members.
- Discuss the production and management of the game design process.
- Evaluate the game industry and market.
- Discuss the future of game design.
- Analyse games.
- Use game design software.
- Develop game design documentation.
- Design Games

Subject cost: NIL

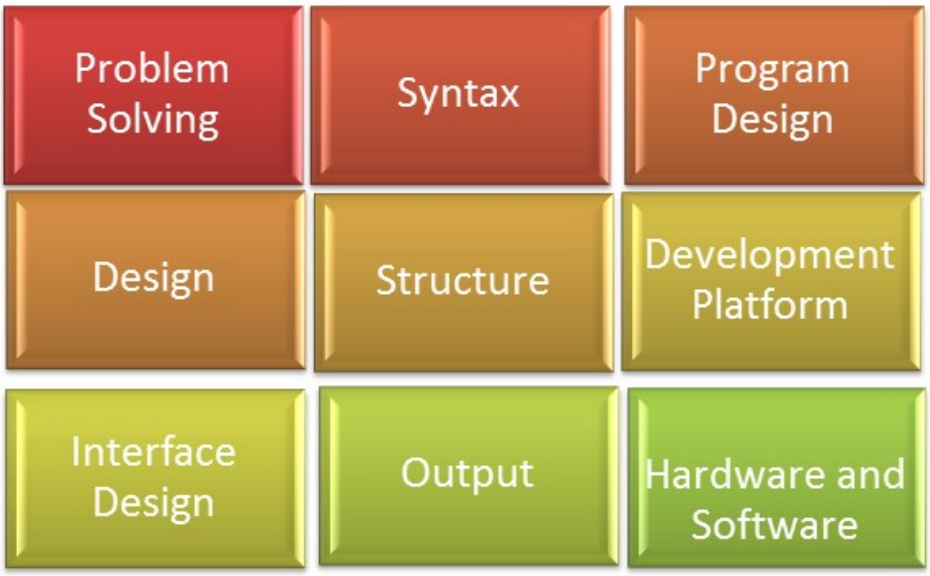
Skills Grid

Drones, Coding And Mobile Apps

In this subject, students will be learning the basics of Computer Science and Programming through some fun and engaging activities. We will have fun programming drones, use state of the art game design platforms such as Unity to develop 3D models for games and creating application for mobile devices.

Subject cost: NIL

Skills Grid



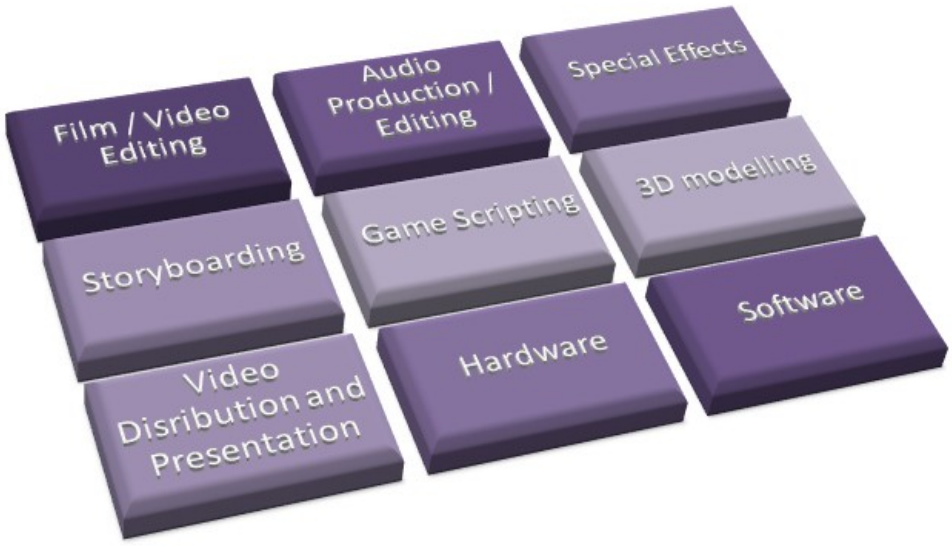
Machinima in Virtual Worlds

Machinima is the blend of machine and cinema. This elective is designed for students who want to learn more about Machinima production in virtual worlds and video games.

Machinima is the use of real-time 3D computer graphics rendering engines to create a cinematic production. Most often, video games are used to generate the computer animation. Using "The Sims 2" or similar as the base, students will create their own animation. Basic skills in script writing, setting the scene within a game, capturing the action via an in-game camera and importing sound are explored using practical activities. Acquired skills are then applied to a group project. Students will go through the complete process from generation of ideas, storyboarding and scripting.

Subject Cost: NIL

Skills grid



Science Student Led Electives

Wheels and Wings

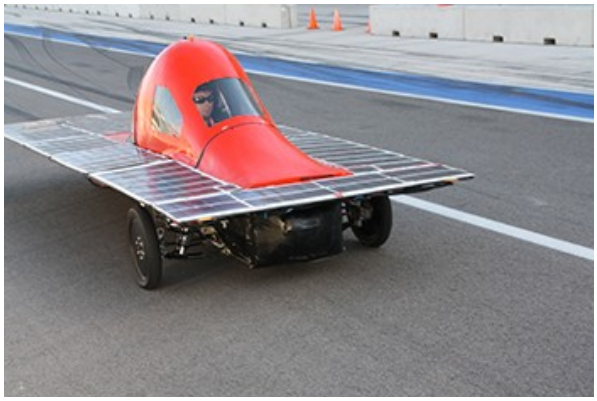
This Science elective will allow students to explain some important phenomena in the science of motion, mechanics and energy. Students will design and construct model electric cars and solar cars. Students will also investigate properties of flight and aircrafts.

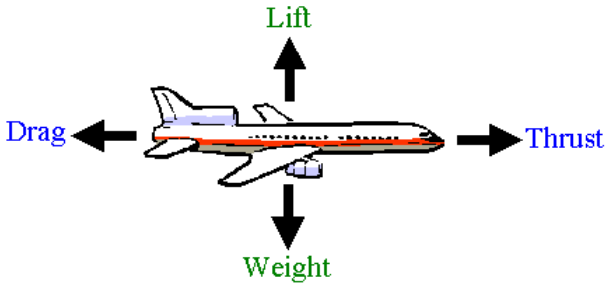
During this elective, students will be able to explore concepts/phenomena through experimentation and research.

Student achievement in this elective will be measured through the completion of a range of tasks centred around the following topics:

- free wheeling and gearing
- an appropriate chassis
- a switch mechanism
- fitting an engine
- adaptations of batteries for solar cells
- mechanics of flight
- history and advances in aircraft and engine design
- an extended practical project involving flight

Cost: $100





Skills Grid

LEARNING SKILLS	ENGINEERING DESIGN PROCESS	SUBJECT SKILLS	SUBJECT CONTENT	THE BIG QUESTIONS
Goal Setting	Define the problem	Creative problem solving	Energy appears in different forms including movement (kinetic), heat and potential energy, and causes change within systems	What are the true costs (social, environmental, and economical) of using gasoline cars?
Seeking feedback	Research the problem	Evaluating products, systems and ideas	Energy conservation in a system can be explained by describing energy transfers and transformations	Are electric cars truly a viable option for an entire society?
Cooperative learning	Brainstorm solutions	Represent ideas using 2D and 3D modelling	Investigating the difference between series and parallel circuits	How can the harnessing of solar energy be made more efficient?
Advance organisers	Create a plan	Science knowledge developing through collaboration across disciplines of science	Constructing and operating electronic devices	
Cues & Questions	Build a prototype	Advances in science and technology can affect people's lives	Evaluating the use of vehicle airbags and restraints in controlling motion	
Non-linguistic representation	Test the prototype	Assessing risk and working safely		
Identifying similarities and differences	Redesign as needed			
Generating and testing hypotheses.	Communicate your solution			

Brain works

A subject for students that would like to learn about the nervous system and brain, and why we behave as we do. What is the function of the different areas of the brain? How does this relate to language, personality, memory and learning? What is some of the major research and case studies that influenced what we know about the brain today?

Skills

- Develop aims and questions, formulate hypotheses and make predictions
- Plan and undertake investigations
- Conduct investigations to collect and record data (Comply with safety and ethical guidelines)
- Analyse and evaluate data, methods and scientific models
- Draw evidence-based conclusions
- Communicate and explain scientific ideas

Cost: There may be expenses incurred through excursions/incursions

Medicine and Disease

The medical sciences covers a wide range of different fields including anatomy, physiology, general practice, surgery, anaesthetics, medical imaging, pharmaceuticals and rehabilitation. This subject is not for the faint hearted students will be investigating grisly deaths. Students are required to conduct dissections and scientific investigations.

Students will explore:

- Human anatomy
- Human physiology
- Death/dying
- Heart disease
- Diabetes
- Cancer
- Genetic and inherited conditions
- Over-prescription and the misuse of antibiotics
- Plagues of mankind
- Eradication of diseases
- Biomedical advances

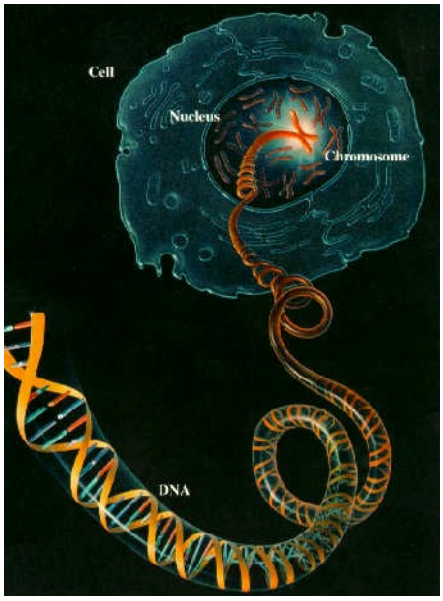
The course will consist of a number of practical components, research assignments, case studies and student presentations. Assessment will be based on these tasks.

LEARNING SKILLS	PROCESSES	SUBJECT SKILLS	SUBJECT CONTENT	THE BIG QUESTIONS
Goal Setting	Define the problem	Questioning	The growth and survival of living things are affected by the physical conditions of their environment	Why do you get sick?
Seeking feedback	Background research	Predicting	There are differences within and between groups of organisms; classification helps organise this diversity	Why do you feel well in the morning, but feel unwell by the evening?
Cooperative learning	Construct Hypothesis	Planning and Conducting	Cells are the basic units of living things and have specialised structures and functions	Are all bacteria bad?

Advance organisers	Test through experimentation	Processing and analysing data and information	Multi-cellular organisms contain systems of organs that carry out specialised functions that enable them to survive and reproduce	How do vaccines and prevent us from getting sick?
Cues & Questions	Redesign as needed	Evaluating	The growth and survival of living things are affected by the physical conditions of their environment	Why do we need to be immunised more than once for certain dieases?
Non-linguistic representation	Interpret and explain data	Communicating	The transmission of heritable characteristics from one generation to the next involves DNA and genes	Are hand sanitisers effective of controlling disease?
Identifying similarities and differences	Draw conclusions	Nature and development of science	Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems	Why do you need to wash your hands after going to the toilet?

Cost: Nil

Biochemistry



Biology is the study of life and chemistry is the study of matter. The combination, biochemistry covers matter in living things (such as molecules like DNA in cells)

Using knowledge of chemistry, the molecular building blocks of life are discussed. This information is essential for the understanding of any living things at the cellular level and on a whole body scale. Students will learn to appreciate the structure of biological building blocks (amino acids, DNA, carbohydrates, lipids).

During this elective, students will be able to explore concepts through experimentation and research. Student achievement in this elective will be measured through the completion of a range of tasks including:

- Individual assignments on a negotiated topic
- Peer- peer learning and teaching
- Topic tests and written assignments

Cost - $30 for experiments, there may be additional costs during the term for excursions

LEARNING SKILLS	ENGINEERING DESIGN PROCESS	SUBJECT CONTENT	MY BIG QUESTIONS (student devised)
Goal Setting	Define the problem	Cells have specialised structures and functions	
Seeking feedback	Background research	Elements, compounds and mixtures at the particle level	
Cooperative learning	Questioning and predicting	Reactions which form new substances without losing any mass.	
Advance organisers (planning and conducting)	Test through experimentation	Proteins are made of either essential or non-essential amino acids.	

Cues & Questions	Interpret and explain data	Heritable characteristics are passed on through DNA and genes.	
Non-linguistic representation	Draw conclusions (evaluate)	Carbohydrates, both simple and complex form a large part of our diet and provide energy.	
Identifying similarities and differences	Communicate solutions	Fats and oils are essential to living organisms and many forms exist	
Generating and testing hypotheses.	Redesign if needed	The food we eat contain macromolecules in different proportions	

Beyond the Terminator

From automatic doors to Siri, artificial intelligence and robotics is changing our lives. In Beyond the Terminator, students will investigate robots in our modern world, design and build their own robots using Lego EV3 kits and software, and use the engineering design process to come up with creative solutions to modern day challenges.

Students who have previously studied robotics are able to undertake Advanced Robotics – using Arduino boards, LEDs, motors and professional robotic coding software to create their robots.

Students will gain the following skills:

- computer programming with Lego EV3 or Arduino software
- building robots
- working with sensors
- engaging with the engineering design process

Potential projects include:

- Exploring robots in popular fiction
- Investigating the use of artificial intelligence in modern medicine and warfare
- Debating ethical issues in robotics
- Entering into the First Lego League competition
- Creating robot prototypes that address a community problem

Proposed subject cost: $50

Skills grid

LEARNING SKILLS	ENGINEERING DESIGN PROCESS	SUBJECT SKILLS	SUBJECT CONTENT	THE BIG QUESTIONS
Goal Setting	Define the problem	Creative problem solving	How sensors work	Is robots in the workforce a good idea or bad one?
Seeking feedback	Research the problem	Evaluating products, systems and ideas	Series & parallel circuits	Should robots have rights?

Cooperative learning	Brainstorm solutions	Represent ideas using 2D and 3D modelling	Energy sources	Will robots be the end of mankind?
Advance organisers	Create a plan	Building basic lego robots	Definitions and examples of robots	Can a robot break the law?
Cues & Questions	Build a prototype	Building with gears and levers	The social, cultural, economic and environmental impact of robots.	What is the role of robots in warfare>
Non-linguistic representation	Test the prototype	Programming an Arduino board	Isaac Asimov & the 3 Laws of Robotics	Can robots have feelings?
Identifying similarities and differences	Redesign as needed	Programming with EV3 software		What is the role of robots in popular fiction?
Generating and testing hypotheses.	Communicate your solution	Assessing risk and working safely		

Greening the apocalypse

The following image is of a puddle sculpture by Spanish street artist Isaac Cordal in Berlin, Germany.

This image is an attempt to portray politicians discussing climate change and global warming. With the increase carbon dioxide in the atmosphere and rising temperatures, this topic can often seem contentious and somewhat like a looming apocalypse. In this subject, we will determine how to be the agents of change in a challenging new environment. This approach will begin with day by day impacts and build up to larger scale global efforts.

The aim of this subject is to take a practical approach to current environmental issues we face. Students will:

- Research the natural cycling of atoms, temperature and living things in our world
- Investigate nutrition
- Determine the impact of food we eat on the environment
- Argue issues related to climate change
- Determine the impact of a damaging environmental issue and investigate solutions

Student achievement will be measures by a range of tasks and assessments as well as a negotiated project in the later parts of the subject.

Cost: Nil

LEARNING SKILLS	ENGINEERING DESIGN PROCESS	SUBJECT CONTENT	MY BIG QUESTIONS (student devised)
Goal Setting	Define the problem	Atoms cycle through nature and are reused	

Seeking feedback	Background research	Temperature fluctuate naturally, but this is also controlled by global conditions	
Cooperative learning	Questioning and predicting	The impact of the food we eat and what it is made of/ where it comes from	
Advance organisers (planning and conducting)	Test through experimentation	Ecosystems rely on a balance and living things are within an ecosystem	
Cues & Questions	Interpret and explain data	Climate change and the increased carbon dioxide in the atmosphere	
Non-linguistic representation	Draw conclusions (evaluate)	Environmental impact measurement techniques	
Identifying similarities and differences	Communicate solutions	How you can have a positive impact on the environment	
Generating and testing hypotheses.	Redesign if needed		

Forensic Science

Forensic Science is the application of scientific knowledge and methodology to criminal investigations. The evidence collected and analysed can be used in a court of law and could potentially lead to a person being found guilty of a crime. Students completing this course will explore and use forensic science techniques and psychological analysis to understand how to catch culprits of criminal activities. This course is not for the faint hearted; students will be required to conduct blood splatter analysis, virtual dissections, blood and DNA typing activities and many other forensic and psychological investigations. Students will learn and practice the skills to find out if they have what it takes to be a great forensic scientist.

The course will consist of a number of practical components, research assignments, case studies and student presentations. Assessment will be based on these tasks.

Cost - $15 for experiments and resources

Skills Grid

How Stuff Works

Scientists need to be critical thinkers who see everything an opportunity for an experiment. This science elective will allow students to explain and demystify the world around them by experimenting, constructing, designing and gathering and analysing data. Students will investigate the scientific basis for a variety of 'how stuff works'. Questions to be explored in depth could include:

- What determines the speed of a chemical reaction?
- How factors affect photosynthesis?
- What is the strongest design for a brigde?
- How do hot balloons work?

During this elective, students will undertake largely self-directed learning where they will be able to explore concepts through experimentation and research. Student achievement in this elective will be measured through the completion of a range of tasks including:

- A whole class assignment on a negotiated topic
- Projects and presentation based on research into 'stuff' of personal interest
- Participation in class

LEARNING SKILLS	SCIENTIFIC METHOD	SUBJECT SKILLS	SUBJECT CONTENT	THE BIG QUESTIONS
Goal Setting	Define the problem	Creative problem solving	How sensors work	How are the factories that build things made?
Seeking feedback	Research the problem	Evaluating products, systems and ideas	Series & parallel circuits	What determines the speed of a chemical reaction?
Cooperative learning	Brainstorm solutions	Represent ideas using 2D and 3D modelling	Energy sources	How do factors affect photosynthesis?
Advance organisers	Create a plan	Assessing risk and working safely	How energy is transferred from one form to another	How do our eyes see colour?
Cues & Questions	Build a prototype			How do computers work?

Non-linguistic representation	Test the prototype			How do trams work?
Identifying similarities and differences	Redesign as needed			**students will also come up with their own big questions
Generating and testing hypotheses.	Communicate your solution			

Proposed Cost: $20

Marine Biology

Did you know that about 71 percent of the Earth is covered by salt water? In this subject students will dive into the scientific study of oceanic zoology. This science elective will introduce students to the tremendously varied range of organisms that are found in marine environments. Students will investigate how the features common to aquatic organisms are the result of living in a watery world. The course will allow students to investigate the importance of the world's oceans as sources of food, reservoirs of minerals, a major supplier of oxygen, and as a regulator of climate.

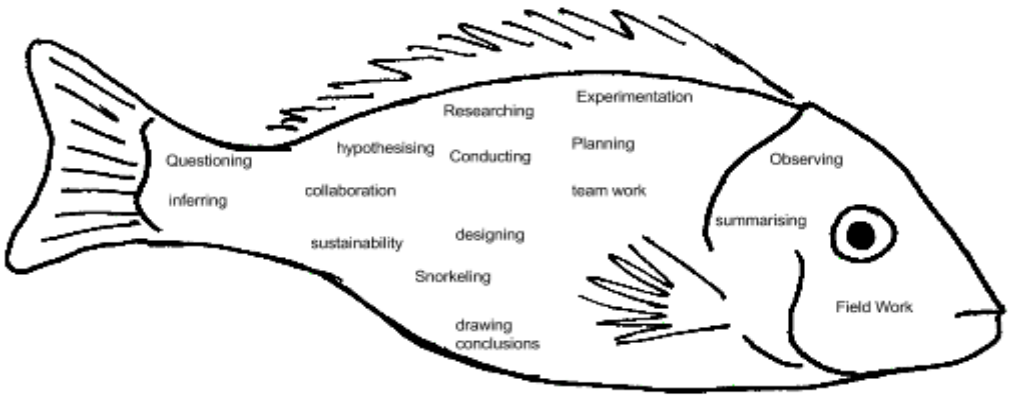
Marine biology will consist of a combination of directed learning and student lead activities, which are designed to introduce students to the concepts of:

- Properties of water
- Basic oceanography
- The diversity of marine life
- Deep sea biology
- Climate change
- Human impacts

Student achievement in Marine Biology will be measured through the completion of a range of tasks including:

- Excursion and fieldwork activities
- Dissections and written reports
- Projects and presentation based on individual interests
- Participation in class

Cost - $20 - there will be additional costs associated with fieldwork and excursions



Space Invaders

Space Invaders examines our past, explains our present, and imagines our future. It's a story about us - from the origins of the universe to our future colonisation of Mars.

In this subject, students will become 'big historians' – taking a multi-disciplinary approach to learning. They will develop their science skills and science understandings in physics, chemistry and biology as well as integrating literacy through exploring science fiction.

Students will choose their own projects to explore. These may include (but are not limited to):

- How to build a telescope
- Research into the special theory of relativity
- Creating models of the solar system
- The doppler effect and red shift
- Modelling Newtonian forces that govern the universe
- Building a working model of a rocket
- Exploring evolution and the history of the Earth
- Developing investigations that explore how light travels

LEARNING SKILLS (GANAG)	PROCESSES (SCIENTIFIC METHOD)	SUBJECT SKILLS (INQUIRY SKILLS & HUMAN ENDEAVOUR – AUSVELS)	SUBJECT CONTENT (AUSVELS)	THE BIG QUESTIONS (STUDENT DEVISED)
Goal Setting	Define the problem	Questioning	Understanding the universe allows us to make sense of the world we live in, however, the attempt to understand it and the underlying nature of all things is not an easy task.	
Seeking feedback	Background research	Predicting	Einstein's special and general theories of relativity explains related terms like 'space-time' and 'gravity and gravitation". Newton's and Einstein's theories of gravitation also need to be compared.	

Cooperative learning	Construct Hypothesis	Planning and Conducting	The Doppler effect, or shift and the expanding universe resulting from changes in frequencies and wavelengths of light needs to be explored	
Advance organisers	Test through experimentation	Processing and analysing data and information	One of the most important inventions of modern astronomy- the Hubble Space Telescope	
Cues & Questions	Redesign as needed	Evaluating	An overview of black holes and quasars and their connection to Einstein's theory of relativity.	
Non-linguistic representation	Interpret and explain data	Communicating	There are various types of stars and nebulae. The formation of stars and their life-span can be predicted.	
Identifying similarities and differences	Draw conclusions	Nature and development of science	Many planets in our Solar System have man made and natural satellites revolving around them.	
Generating and testing hypotheses.	Communicate solutions	Use and influence of Science	The Big Bang theory and the origin of the universe is really only a theory. There have been other theories about the creation of the universe too.	

Proposed subject cost: Nil

Students who choose projects that involve creating models will need to provide their own materials.

Health And Pe Student Led Elective

Team Sports

This sport elective is intended to provide students with more authentic sports experiences.

Students participate as members of teams and take an active role in their own sport experience by serving in varied roles that we see in sport settings such as

- captains
- coaches
- officials.

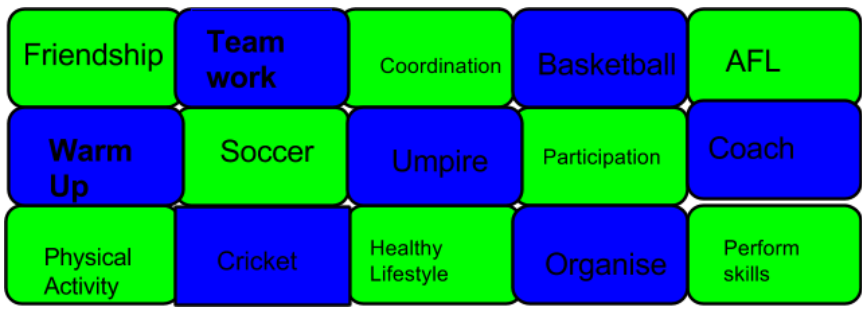
They work together to learn and develop skill and tactical play in various sports, such as:

- Basketball
- soccer
- AFL
- Hockey
- Cricket
- Netball

The major goals that guide this Sport Elective revolve around the concept that students become competent and enthusiastic players. This elective will give students the opportunity to organise lunch-time activities for various sports.

Proposed Cost: Nil

Skills Grid



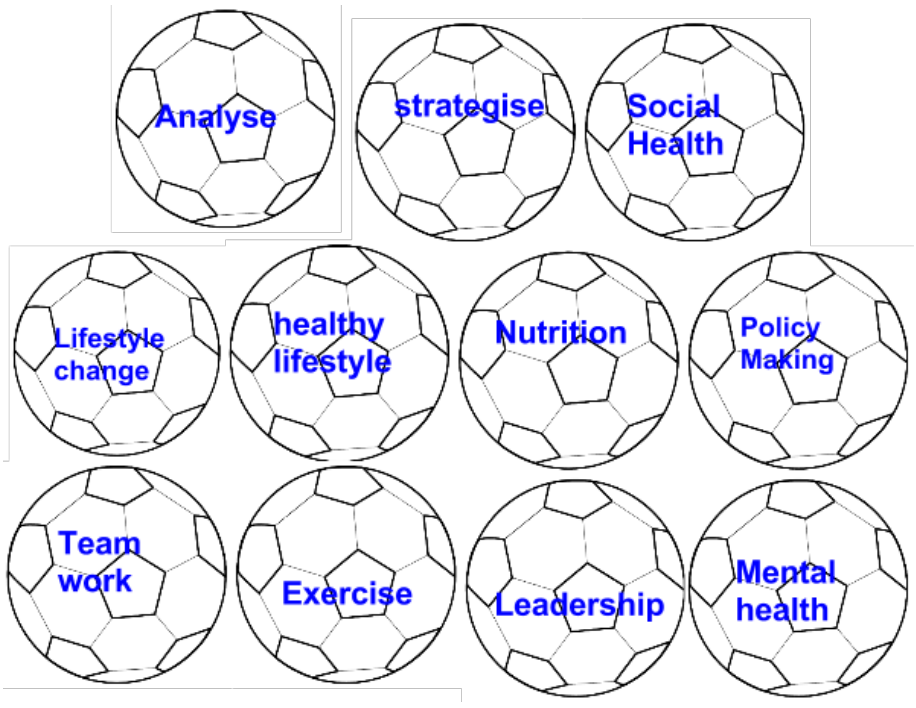
Walk Your Way to Good Health & Nutrition

Students will discover ways to become healthier in their life by learning about nutrition, exercise routines and lifestyle changes that can be easily implemented into daily routines and the routines of others, without the large cost of Gyms and Sporting clubs.

Students choosing this elective will also assume a health ambassadorial role. This role will help form the school's policies surrounding UV protection, uniform, nutrition and the canteen. The class will also take an active role in health initiatives such as Jump Rope for Heart and Relay for Life.

Proposed Cost: Nil

Skills Grid



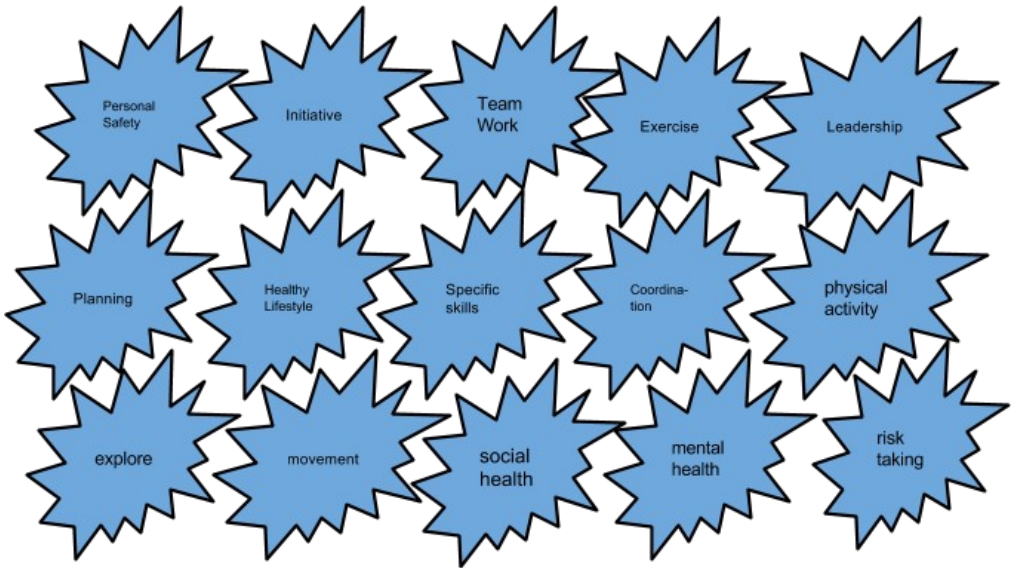
Community and Leisure Activities

This subject will provide students the opportunity to engage and participate in individual and team activities in the community setting. The activities chosen will be built on student input for the semester and could include some of the following;

- Golf
- Fishing
- Lawn Bowls
- Bike riding
- sailing
- rock climbing
- ten pin bowling
- canoeing
- tennis

Planning, safety, skills and other elements will be investigated in a school setting prior to undertaking activities in the community setting.

Proposed Cost: $120



Women in Sport

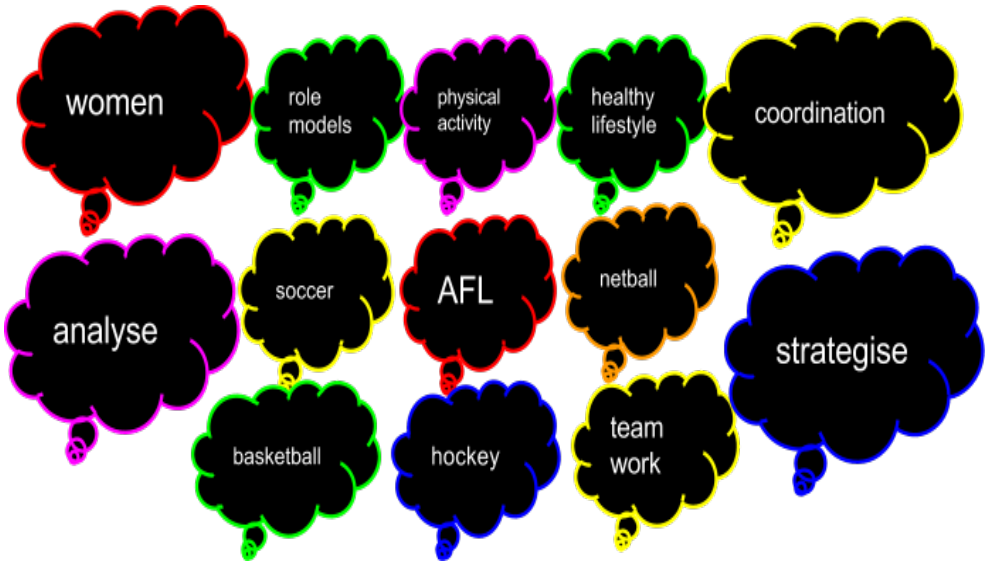
Students will be given the opportunity to participate in different sports whilst being in an inclusive environment.

Particular focus on the following sports

- Netball
- Basketball
- Soccer
- AFL
- Hockey
- Badminton
- Volleyball

Students will be able to identify what it takes to be a good role model. They will also develop further strategies to make women feel more included within sport and make them feel safe to participate in physical activity.

Proposed Cost: Nil



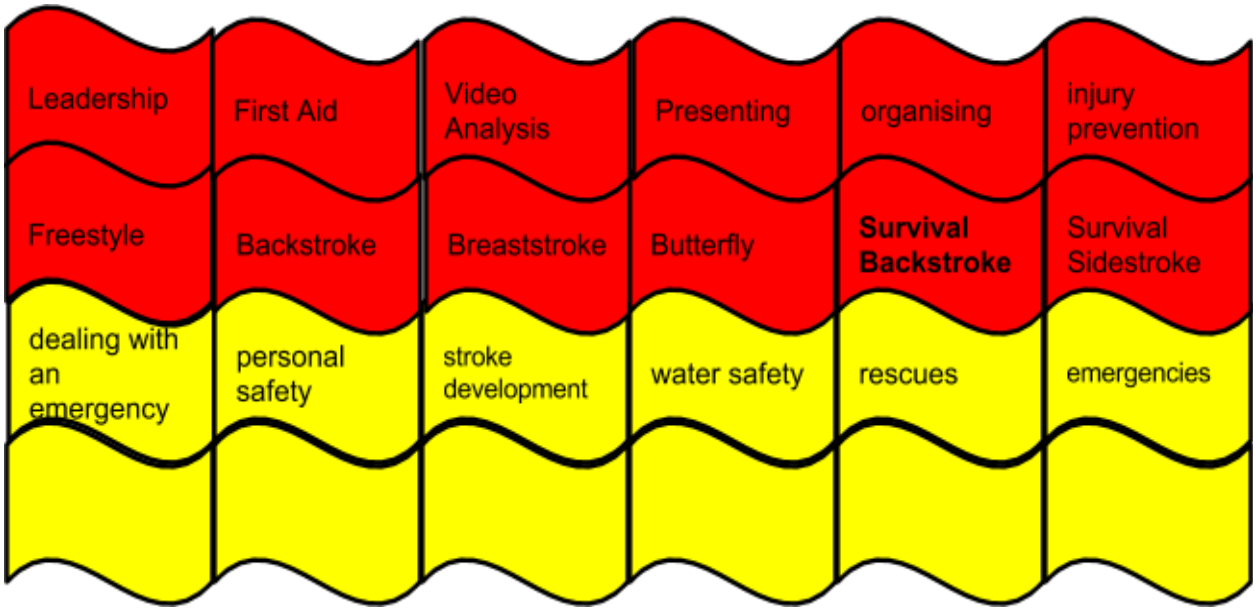
Swimming & Water Safety

Love the water, but don't know how to swim? Do you want to have an awesome job over summer, teaching kids to swim or life guarding? Or perhaps you are looking to do your first aid certification as part of another part time job you are interested in? Well, this might be the elective for you.

Students will engage in the following activities:

- Swimming stroke development
- Freestyle
- Backstroke
- Breaststroke
- Butterfly
- Survival techniques
- Survival backstroke
- Survival sidestroke
- water rescues
- Teaching others how to swim

Proposed Cost: $100 based on hiring of facilities and payment of obtaining first aid certificate



Dance/ Gymnastics

The dance elective is a performance-based subject. The focus of this course will be on students expanding their skills in relation to a variety of dance styles.

The techniques and styles of dance investigated through this course include:

- Ballet
- Tap
- Jazz
- Precision
- Cheerleading
- Aerobics
- Ballroom
- Hip hop

Other genres of dance may also be explored throughout the duration of the course.

Students will be expected to take part in all dance styles at the introductory level.

Once various styles have been explored, students will choreograph performance pieces and explore the interpretation or lyrics through movement both individually and in groups.

Proposed Subject Cost: $30 per semester (covers dance specialists and instructors)

As part of the elective, students may be required to pay additional fees based on need for costumes, props, and individual projects.

Major Ball Sports

The sport elective is intended to provide students with more authentic sport experiences.

Students participate as members of teams and take an active role in their own sport experience by serving in varied roles that we see in sport settings such as captains, coaches and officials .They work together to learn and develop skill and tactical play.

Goals

- The major goals that guide the Sport Elective revolve around the concept that students become competent and enthusiastic players.
- A competent player has sufficient skills to participate satisfactorily, can execute strategies that are appropriate for the complexity of the game being played, and is a knowledgeable player.
- A knowledgeable player understands the rules and safety aspects of the sport, and is able to distinguish between good and bad sport practices in a variety of sport settings.

Cost: NIL per Semester

There may be additional costs for excursions

An enthusiastic player is one who enjoys and enhances the sport through participation, involvement, and appropriate behaviour.

Objectives:

- Develop skills and fitness specific to particular sports
- Appreciate and be able to execute some strategic play in sports.
- Participate at a level appropriate to their stage of develops
- Share in the planning and teaching of sport experiences.
- Provide responsible leadership.

Personal Training and Fitness

Personal training and fitness is for

- Students interested in health, fitness and skill development in a sport.
- Students who don't like to work out, alone
- Students with a strong passion for being active and working out with others.
- Students looking to fill their program with a course that will help them achieve to a higher potential in other classes.

As part of this subject students will learn how to properly plan a training program to progress their cardiovascular fitness while looking to better their general health and wellbeing. They may also include skills, drills and activities to enhance their skill level and fitness for any sport of their choice.

By taking interest in consistent exercise students will have the opportunity to:

- Increase endurance
- Build and maintain healthy bones, joints and muscles
- Improve metabolic rate
- Boost energy
- Reduce levels of stress
- Improve sleep patterns
- Experience an overall sense of wellbeing and self-fulfillment

Fitness provides a gateway for students to adopt an active and healthy lifestyle that comes with consistency in exercise and fitness.

Knowledge from this course can help students to succeed in VCE Physical Education

Proposed Subject Cost: $20 per semester

Year Long Elective HPE

Go for Gold (Advance)

The goal of advance is to enable young people to build on their strengths through participation and volunteering in community life. At Mount Alexander College we offer Advance students the chance to complete 'The Duke of Edinburgh Award', which is an internationally recognised 'leadership in action' program. The award is non-competitive, challenging and most enjoyable. It provides an opportunity for students to achieve personal excellence and build self-esteem, confidence, self-reliance, motivation and respect for others through involvement in a service, skill, physical recreation outdoor expedition activities.

Students participating in the program can expect to be involved in opportunities that will:

- Develop leadership and team building skills
- Improve self-confidence and social connectedness
- Improve initiative skills
- Develop an understanding of volunteerism and community service through active participation in community service activities
- Acknowledge and accept different views and different ways of doing things.

Students who complete the course will have:

- A graduation certificate
- A first aid certificate
- The Duke of Edinburgh bronze medallion

Activities include:

- Camps/expeditions
- Community service (voluntary work)
- Discussions/role play/forums/workshops
- Community project
- Leadership modules
- The Duke of Edinburgh's Award program

Cost: Nil

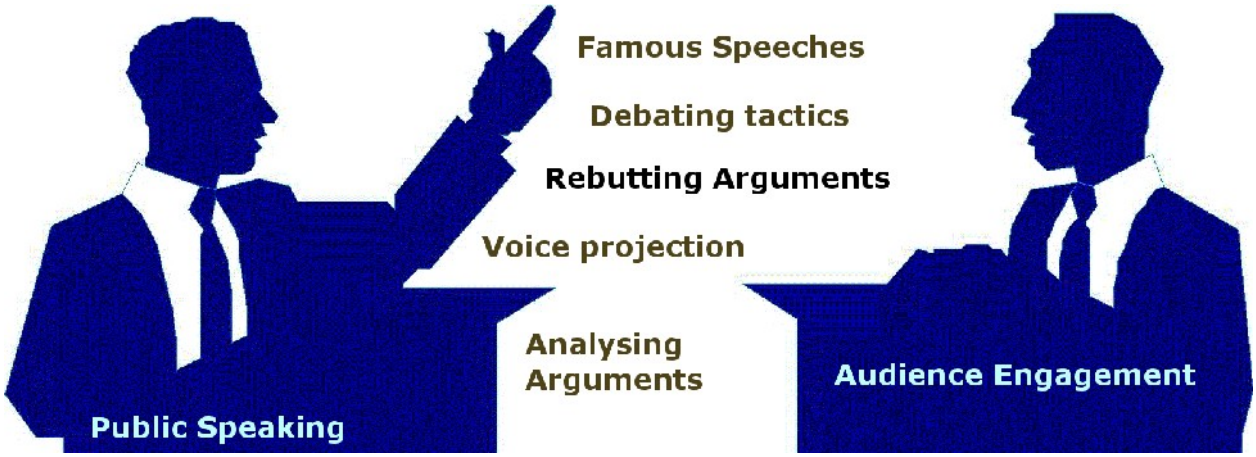
English Student Led Electives

You're the Voice:

Public Speaking and Debating

Love a good argument? How do you like the feeling of that 'score' when you make a good point? If the answer is 'yes' to one of these questions, you'll love You're The Voice.

Students will be learning public speaking and debating skills. The subject will work in with a formal debating team and individual public speaking presentations at assemblies. Students will analyse good examples of public speaking and in participating in debating will develop skills in spotting fallacies in arguments and responding.



Cost: Nil

Writers' Hub

Drawing upon the community knowledge in Flemington, Kensington and in other nearby suburbs too, there are people who know how to write well and who do it professionally.

There are authors of books (fiction and non-fiction) and people who write for a living in other professions: law, radio and print journalism, publishing, history, theatre, business, public policy and health, to name a few. Melbourne is a UNESCO City of Literature. We have organisations like the Wheeler Centre, Writers Victoria, the 100 Story Building, the Stella Prize education unit.

Writing workshops with expert writers will help students work on specific projects and bolster their ability to communicate clearly and effectively.

The Young Writers Hub will support student learning to communicate their understanding and their views clearly in any field, whether it be Science, Legal Studies, Philosophy, Media, History or Maths. It will support the whole school's efforts to teach strong literacy skills across the curriculum.

Cost: Nil

Language Conventions	Using Plain English	Knowing your audience
Using your medium	Formal and Informal writing	Writing styles
Structure	Avoiding common mistakes	Avoiding cliches
Note taking for reading	Note taking from listening	Inclusive language

Lnguages Student Led Electives

The Power of Zen

Like Jackie Chan movies? Want to get to know the real China - a civilisation thousands of years old, with rich cultural traditions?

This subject provides an introduction to Asian cultural activities such as meditation, calligraphy, and tea ceremonies among others.

Students will also be introduced to culture and customs as they relate to everyday life.

Students will demonstrate their knowledge through conducting tea ceremonies, creating beautiful calligraphy and other Chinese cultural activities.

Cost: $20.00

Meditation	Calligraphy	Tea ceremonies
Asian culture and history	Significant stories	Religion

Italian culture

This student-led elective is designed to foster students' love of Italian Culture. It takes a more practical approach, and by immersing students in authentic Italian cultural activities, they will gain an insight into the role of culture, be able to move between different cultural perspectives, and reflect upon the values of Australia's multicultural society.

Students will be introduced to key cultural aspects of Italian life, including:

- Traditional food preparation, such as passata (tomato day), pasta making, etc.
- Famous Italian products
- Italian fashion and design
- Venetian mask making
- An introduction to regional Italian cuisine
- Traditional artefacts of Italian migrants, such as la caffettiera (coffee percolator), etc.
- Traditional games, such as bocce (bowls), tombola (a form of bingo), etc.
- Traditional Italian card games, such as briscola, scopa, etc.
- Regional Italian dance
- Involvement with the local community: Aged care facilities, Italian Social Clubs, etc.

Student will then conduct an inquiry into whichever field they are most interested in. They could focus on Italian chocolates, car designs, Venetian Carnevale or the role of Italian immigrants in Australia – it's their choice!

While language acquisition is not a focus of this elective, this elective would complement a range of Italian and Humanities pathways.

Proposed subject cost: $40

Challenging assumptions	Reflection	Questioning	Analysing perspectives
Investigation	Moving between cultures	Classifying	Interpreting
Significance	Food preparation	Role of culture	Game strategy
Food preparation	Community engagement	Movement	Identifying values

Languages Curriculum Specified Electives

Chinese Beginners

This unit provides an introduction to Mandarin Chinese to students with no prior knowledge. An overview of the important sentence structures of modern standard Chinese is begun with equal emphasis on the four skills of reading, writing, listening and speaking.

Students will also be introduced to culture and customs as they relate to everyday life.

Assessment

- Oral Presentation: Self-introduction
- Written: Daily routine
- Unit Tests

Pathways Plan:

There are no prerequisites. This subject can lead to Intermediate/Advanced Chinese.

Chinese Intermediate

Intermediate Chinese continues the overview of the important sentence structures of Mandarin Chinese. Equal emphasis is placed on the four skills of reading, writing, listening and speaking. Speaking classes cover practical, everyday situations, to develop interactive competence at a basic level in a range of situations likely to be encountered in daily life. In addition to regular classroom activities, listening and reading skills will be further developed through the use of audio/visual, Web-based and computer-assisted language learning materials.

Assessment:

- Filmmaking: "Birthday Invitation"
- Written "My Two Weeks in China"
- Unit Tests and End of Year Exam

Pathways Plan:

Students must complete Beginners Chinese or show equivalent learning in Chinese as a prerequisite for Intermediate Chinese. This subject can lead to Advanced Chinese.

Chinese Advanced

Advanced Chinese continues the overview of the important sentence structures of Mandarin Chinese, in different writing formats. Equal emphasis is placed on the four skills of reading, writing, listening and speaking to prepare students for Pre-VCE Chinese.

Assessment

- Role-play: Doctor Appointment
- Filmmaking: "Directions in a Maze"
- Written: "Diary of a Week" and Weather Report in Chinese
- Unit Tests, Mid and End of Year Exam

Pathways Plan:

Students must complete Intermediate Chinese or show equivalent learning in Chinese as a prerequisite for Advanced Chinese. This subject can lead to Pre-VCE Chinese.

Pre-VCE Chinese (First/Second Language)

Chinese Pre-VCE continues the overview of the important sentence structures of Mandarin Chinese, in different writing formats. Equal emphasis is placed on the four skills of reading, writing, listening and speaking to prepare students for VCE Chinese Unit 1&2.

Assessment

- Writing: Journal Article Task, Invitation Letter, Persuasive Writing and Creative Writing
- Listening: Weekly Listening Practice
- Reading: Weekly Newspaper Activity for VCE Detailed Study Preparation
- Unit Tests, Mid and End of Year Exam

Pathways Plan:

Students must complete Chinese Advance or show equivalent learning in Chinese as a prerequisite for Pre-VCE Chinese. This subject can lead to VCE Unit 1&2 Chinese.

Beginners Italian

Gladiators, Pizza and Fashion: what's not to love about Italy?

This engaging unit provides an introduction to Italian language and culture to students with no or little prior knowledge, while extending the abilities of those who have studied it at primary school.

While focussing on the development of all four macro skills (reading, writing, listening and speaking) by using a range of ICT applications, this course focusses on the concepts of identity and family.

Students will be able to introduce themselves, initiate and sustain basic conversations, provide basic descriptions of themselves, their interests and their world. Students will focus on pronunciation, the use of cognates, basic sentence structures and explore the use of formal and informal registers.

Students will then explore the role their family life in shaping their identity. They will be able to describe their family tree, explore similarities amongst family members, and explore the role of migration in shaping their family identity. Students will explore the cultural significance of the family unit in Italy, will become familiar with the basic geography of Italy and will gain an insight into the migrant experience of Italians here in Australia.

From here, students can continue on to Intermediate Italian.

Italian - Intermediate

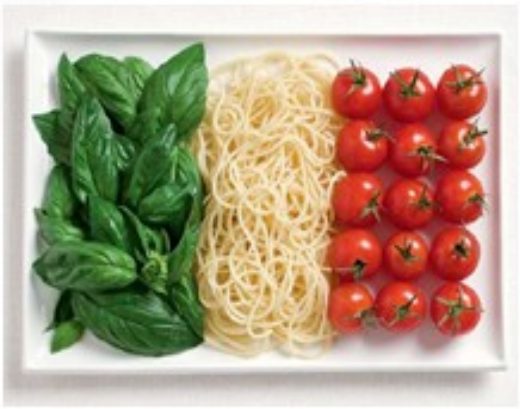
This course builds on all four macro skills (reading, writing, listening and speaking) by taking a practical approach to language learning, immersing students in three key aspects of Italian culture: music, food, and of course soccer!

Through an investigation of la musica italiana (Italian music), students experiment with different listening strategies, extend their understanding of essential language structures, and become familiar with some of the most influential contemporary Italian musicians.

Students will then explore la cucina italiana (Italian cuisine), and will be able to interpret and follow recipes, and even develop their own! Students will learn about typical Regional Italian cuisine and the Mediterranean diet, and will be able to compare and express their opinions on diverse food products.

Finally, students will explore the world of il calcio (soccer), developing the language to play games of soccer exclusively in Italian, be able to critique matches, and begin to express opinions.

This course is aimed at students who have already completed Beginner's Italian (Year 7 or 8). Students will then be able to progress to Advanced Italian, and eventually VCE Units 1-4 Italian.



Italian Advanced

Who could say no to a trip to Italy?

This course aims to equip students with the language skills to be able to undertake a student exchange or to travel around Italy. Students will build on all four macro skills (reading, writing, listening and speaking), and will be able to participate in transactions, group decision making, negotiations and exchanging opinions.

First, students will examine youth issues in Italy. They will be immersed in classroom language, use ICT to make contact with students in Italy to discuss issues such as leisure time, weekend activities, hobbies, schooling and everyday life. Students will focus on being able to socialise with their peers, exchanging past experiences, current issues and future aspirations. They will learn practical skills about the cultural aspects of life in Italy, such as texting etiquette, gesture and the Italian art of fare bella figura (making a good impression).

Students will then undertake a rich task in which they will plan a trip around Italy. Students will be able to plan an itinerary, give detailed directions, budget, evaluate accommodation and transport options, and justify their decisions. Through an investigation of Italian tourism, students will learn about Italian history, modern Italian design and the tourism industry.

This course is designed for students who have completed Intermediate Italian (Year 8 or 9). Upon completion of this course, students will be prepared to undertake VCE Italian units 1 & 2.

Japanese Beginners

This unit provides an introduction to Japanese to students with no prior knowledge. An overview of the important sentence structures of Japanese is begun with equal emphasis on the four skills of reading, writing, listening and speaking.

Students will also be introduced to culture and customs as they relate to everyday life.

Assessment

- Oral Presentation: Self-introduction
- Written: Daily routine, Hiragana and Katakana mnemonics

Pathways Plan:

There are no prerequisites. This subject can lead to Intermediate Japanese.

Humanities Student Led Electives

Video Games and Society

Isn't it all just a bit of harmless fun?

By exploring the dynamic nature of the video gaming industry, students will develop critical-thinking skills by demonstrating how video games both reflect and influence contemporary issues in society.

In unit 1, students will explore the sheer power of the gaming industry. They will examine gaming addiction, the psychological techniques used to keep you hooked, the role of age-compression marketing and the growing industries of competitive gaming and game design.

In unit 2, students will then explore how the gaming industry as a whole reflects contemporary social issues, including violence, racism, body image and gender roles. Students will conduct an inquiry to analyse how political, economic, social and technological developments both influence and are influenced by gaming.

Thinking skills	Process	Subject skills	Subject content	Big questions
Comparison	Questioning	Deconstructing generalisations	Addiction	When does entertainment become addiction?
Using analogies	Locating and interpreting sources	Persuasive writing	Psychological programming	Are humans programmable?
Systems analysis	Analysis and evaluation	Analysing perspectives	Marketing techniques	Can gaming be considered a form of gambling?
Cooperative learning	Communication	Using evidence	Societal values	Does entertainment guide or follow society's values?
Generating and testing hypotheses	Reflection	Social experiments	Industry environments	Can games teach us about society?

Proposed subject cost: Nil.

Mind Your Own Business! (MYOB)

Have you ever wanted to be your own boss? Have you got a million-dollar idea you can't wait to cash-in?

This course aims to equip students with the skills to design and run their own business, and with some hard work, maybe even generate a profit! As a result, students will be prepared to manage their business affairs more effectively in their roles as citizens, consumers and workers.

Students will work individually or in teams to develop and implement the business or social enterprise of their dreams. Students may choose to develop and market digital Apps, fashion labels, gardening services, or instead create a social enterprise to address issues such as homelessness. The choice is theirs!

Students will develop their own product concepts, business proposals and marketing plans. They will explore aspects of the business world such as competitiveness, market research, advertising and the use of e-commerce and ICT, and will develop financial literacy skills such as budgeting, forecasting, cash-handling and break-even analysis. After carefully developing their businesses, students will implement their business plans, and experience first hand the value of skills such as organisation, risk-taking, customer service and setting objectives.

The skills in this course apply to a broad range of pathways, and students will be directly prepared for VCE Business Management 1 & 2 and VCE Accounting 1 & 2.

Proposed subject cost: Nil.

LEARNING SKILLS	PLANNING PROCESS	SUBJECT SKILLS	SUBJECT CONTENT	BIG QUESTIONS
Cooperative learning	Concept development	Entrepre-neurship	Competitive advantage	Does risk always result in reward?
Goal setting	Business environment analysis	Market research	Marketing principles	What are the characteristics of a successful entrepreneur?
Generating and testing hypotheses	Business planning	Cost-benefit analysis	Operations	How is a competitive advantage maintained?
Identifying similarities and differences	Simulation	Economic reasoning	Investment options	How are our purchasing decisions influenced?
Seeking feedback	Evaluation	Budgeting and forecasting	Work futures	What will the future world of work look like?

History of Soccer

"Soccer is a matter of life and death - except it's more important!".
- Bill Shankly, legendary Liverpool manager.

This course will focus on the origins of the game of soccer, and its cultural and social importance across the world and throughout the ages. Students will study some suggested core topics, such as the development of soccer around the world, the business of soccer and the spiteful war between Honduras and El Salvador-the immediate cause: a world cup soccer match between them, and will design the rest of the course according to their particular team and country interests. Students will conduct an inquiry into their preferred team, their home country and the future of soccer. Students will be able to develop and hone their soccer skills as well.

The course will focus on refining students historical skills such as empathy, communication, analysis, interpretation and questioning. They will be able to determine cause and effect, chronology, continuity and change and analyse perspectives. They will be able to use a broad range of primary and secondary sources as evidence, and communicate their findings using a range of ICT technologies.

This course leads onto a lifelong interest in finding out more about the 'beautiful game' and the skills gained will prove useful for VCE History subjects and sports marketing degrees at tertiary level and perhaps playing for an EPL Soccer team.

Proposed subject cost: Nil.

LEARNING SKILLS	PLANNING PROCESS	SUBJECT SKILLS	SUBJECT CONTENT	BIG QUESTIONS
Comparison	Developing inquiry questions	Empathy	Origins of the game	Why aren't all countries mad for soccer?
Analyse perspectives	Locating and interpreting sources	Inference	Political and legal implications	Why are certain players paid so much?
Summarising	Analysis and evaluation of sources	Continuity and change	Economic influences	What makes a great club?
Cooperative learning	Explanation and communication	Cause and effect	Social impact	Which countries have the greatest influence?
Generating and testing hypotheses	Reflecting	Chronology	Effects of technology	Will soccer just continue to grow?

Philosophy

Why are we here? Is there more than one reality? Can we trust our senses? What does it mean to live a good life? How do we know anything? Are we the same person as we were last year, last week, last night?

Philosophy uses reason and logic to think through these big questions. Stimulated by what famous philosophers have said, students will create presentations, exhibit philosophical debates and write philosophical essays.

Unlike formal debating, philosophical argument aims at arriving at uncovering truth rather than 'winning'. Thus, philosophy classes involve building important listening and social skills.

This elective will prepare students for VCE Philosophy.

Analysing philosophical argument	Debating points of view	Reading philosophers
Creating presentations	Presenting dialogues	Reasoning
Formal Logic	Recognising Fallacies	Expanding your vocabulary

Looney Toons

What do politicians and Bugs Bunny have in common? Students will learn to interpret, analyse and even create satirical cartoons to explore political issues and perspectives from today and yesteryear - from Walt Disney's anti-Nazi propaganda to the rise of Donald Trump and Hillary Clinton.

In unit 1, students will select an issue of their choice and collect samples of satirical cartoons from around the world and Australia. They may wish to explore the refugee crisis, global warming, marriage equality or austerity measures, to name a few. Students will learn about the persuasive techniques used by cartoonists, and their role on shaping political opinions. Students will analyse the different perspectives in these cartoons, and undertake an inquiry into the different policies developed around the world to manage these issues. Students may also choose to develop their own folio of satirical cartoons, expressing their own political opinions on the issues discussed in class.

In unit 2, students will apply the skills they have developed to analysing historical cartoons. Again, students will choose an issue or time period, and examine the perspectives of people at the time. Students will then frame in inquiry around the issue or time period, using a range of primary and secondary sources. They may wish to investigate attitudes to Chinese migrants on Australia's gold fields, European imperialism or anti-Japanese US propaganda from WWII - the sky's the limit!

This subject could lead to a range of VCE Humanities subjects, specifically Global Politics and History, but will also greatly prepare students for the demand of VCE English.

Thinking skills	Process	Subject skills	Subject content	Big questions
Comparison	Questioning	Using primary sources	Persuasive techniques	When does entertainment become addiction?
Using analogies	Locating and interpreting sources	Creating an historical argument	Globalisation	Are humans programmable?
Non-verbal representations	Analysis and evaluation	Deconstructing generalisations	Imperialism	Can gaming be considered a form of gambling?
Cooperative learning	Communication	Caricature	Political ideology	Does entertainment guide or follow society's values?
Generating and testing hypotheses	Reflection	Identifying perspectives	Influence of the media	Can games teach us about society?

English Curriculum Specified Subjects

All English core subjects are taught using the Victorian Curriculum Learning Standards as set out in this table.

Subject Name	Curriculum	Pre-requisites	Success can lead to …	Further description
Entry English	English Level 7	None	Intermediate English, EAL or Communications	Equivalent to Year 7 to 10 English in most schools.
Intermediate English	English Level 8	Entry English	Advanced English	
Advanced English	English Level 9	Intermediate English	Pre-VCE English	
Pre-VCE English	English Level 10	Advanced English	VCE English Units 1 & 2	
Intermediate EAL	English Level 8 and DET EAL Continuum – SL to S2	Entry English	Advanced EAL	English Years 8 to 10 with EAL pedagogy for early English Language Learners.
Advanced EAL	English Level 9 and DET EAL Continuum – S2 to S3	Intermediate EAL	Pre-VCE EAL	
Pre-VCE EAL	English Level 10 and DET EAL Continuum S3 to S4	Advanced EAL	VCE EAL Units 1 & 2	

Intermediate Communications	English Level 7	Entry English	Advanced Communications or Intermediate English	English Levels 7 through 9 for those who need additional time and support before moving on or who have chosen the VCAL pathway.
Advanced Communications	English Level 8	Intermediate Communications or Intermediate English teacher recommendation	Pre-VCAL Communications or Advanced English / EAL	
Pre-VCAL Communications	English Level 9	Advanced Communications or Advanced English teacher recommendation	VCAL Communications or Pre-VCE English / EAL	

Mathematics Curriculum Specified Electives

1 year Long

Mathematics at Entry Level

Students' mathematical ability will be assessed at the beginning of the year via various testing procedures. Students will be enrolled in one of the three entry maths classes outlined below based on their mathematical learning needs.

Essential Maths

The aim of this subject is to equip students with essential mathematical understanding and skills needed in everyday life.

The key concepts that this subject will focus on are:

- Operations (addition, subtraction, multiplication and division)
- Time
- Length, perimeter and area
- Lines and angles
- Position and space
- Fractions
- Graphs and collecting data
- Place value and money

After completing essential maths students are encouraged to continue their mathematical education by enrolling in the yearlong practical math subject as a pathway to VCAL numeracy and VCE foundation math.

Core Maths

The aim of this subject is to develop students' understanding and fluency in relation to mathematical concepts. This subject will provide the foundation for students to move through the pathway leading to VCE maths.

They key concepts that this subject will focus on are:

- Positive and negative integers
- Fractions, decimals and percentages
- Algebra
- Measurement
- Angles
- Co-ordinates and Cartesian plane
- Data for statistics

Problem Solving Maths

The aim of this subject is to develop students' mathematical reasoning ability. It can be undertaken by entry level students or by students not yet ready to move to academic maths as a progression of core maths. The subject will cover new content, but its focus is on deepening and enhancing students' core mathematical concepts and applying these to problem solving.

The key concepts that this subject will focus on are:

- Angles
- Algebra
- Shape
- Spatial
- Sets
- Pattern
- Number sense
- Measurement
- Data
- Function
- Algorithm
- Transformation
- Logic
- Symbolism/Language

Examples contexts and topics may include:

- Expressing worded problems in mathematical language
- Plotting relations on Cartesian plane
- Investigating
- Justifying a result using Pythagoras and Trigonometry
- Derivation and formulation of formulae involving areas, ratios, probabilities
- Finding patterns for expanding and factorising algebraic expressions
- Finding and applying relationships such as linear and non-linear to relevant problems.

Students who complete this subject are encouraged to complete academic maths the following year as a pathway to VCE mathematics.

Academic Maths

The aim of this subject is to further build upon concepts covered in Problem Solving Maths as well as introduce more Mathematical content and language required for further progression towards Pre VCE Maths subjects.

The key concepts that this subject will focus on are:

- Algebra
- Linear and Non-linear equations
- Pythagoras and Trigonometry
- Proportion and rates
- Index laws
- Linear and Non-linear graphs
- Measurement
- Probability and Statistics

Students who complete this subject are encouraged to choose either Pre-VCE General Maths or Pre-VCE Maths Methods to prepare for VCE mathematics subjects.

Pre-VCE General Maths

This subject is aimed at students preparing to undertake the VCE sequence containing Units 1/2 General Mathematics (both Further Maths and Specialist Math foci) and Units 3/4 Further Mathematics or Units 3/4 Specialist Mathematics.

Students completing this subject must purchase and use a CASIO CAS calculator to attain familiarity and thus prepare for its compulsory use in VCE.

The appropriate use of technology to support and develop the teaching and learning of mathematics is incorporated throughout the course. This may include the use of some of the following technologies for various areas of study or topics;

- Graphic calculators;
- Graphical software;
- Geogebra;
- Dynamic geometry systems;
- Statistical analysis systems; and
- Computer algebra systems

Students undertaking this course should be confident with their core algebraic skills and with their ability to read and create graphs.

The following topics would be undertaken over the two semesters for which this course is run:

- Arithmetic
- Matrices
- Univariate data
- Bivariate data
- Simulation
- Linear relations and equations
- Non-linear relations and equations
- Linear Graphs and modelling
- Sketching and interpreting linear and non-linear graphs
- Networks
- Financial mathematics

Pre- VCE Math Methods

This course is aimed at students preparing to undertake the VCE sequence containing Units 1-4 of Mathematical Methods.

This course will be suitable for those students wishing to also undertake the VCE sequence containing Units 1/2 Maths Methods and 3/4 Maths Methods. Students may also undertake Units 3/4 Specialist Mathematics alongside Units 3/4 Maths Methods.

For this course students are strongly encouraged to purchase and use the CASIO CAS calculator in order to prepare for required calculator use in VCE.

Students are expected to apply techniques, routines and processes involving rational and real arithmetic, algebraic manipulation, equation solving and graph sketching.

Knowledge of the following skills is assumed:

- Determining the equation of straight lines from combinations of sufficient data regarding points on the line

- Determining the gradient of a line; and Pythagoras' Theorem and its application to finding the distance between two points.

Familiarity with the following is preferred:

- Quadratic and exponential functions;
- Algebra
- Graphs
- Probability

The following topics will be undertaken across two semesters;

- Linear function
- Linear graphs
- Quadratics function
- Algebraic expansion and factorisation
- Quadratic graphs
- Conditional probability
- Independent probability
- Set notation and Venn diagrams
- Logarithmic graphs
- ·Indices and exponentials
- Polynomial functions
- Polynomial graphs
- Relations, functions and transformation

Practical Maths

The aim of this course is to give students the skills to have a better appreciation and understanding of practical mathematics. The content is designed to give students the confidence to calculate important day-to-day matters that affect almost every aspect of life – including money and finance, purchasing, investing, work-based costing and budgets, and many practical matters such as speed, volume, weights, mechanics and electrics.

Topics may include::

- The importance of numeracy
  Numeracy is as critical as reading and writing. It impacts everyday life from finance to food, fuel in a car and even betting on a horse.

- Foundation mental arithmetic and calculations are examined in this subject. Those who understand numbers will always win and those who don't will always lose – on anything from pay packets to tax, from buying and selling cars and houses to getting loans.

- An appreciation for numeracy
  You will learn practical, fun ways to understand numbers and easy ways to develop mental maths. This includes games, tricks and shortcuts to multiplication, division, addition and subtraction. This part of the course uses physical and visual examples.

- How numeracy applies to money
  You will learn how to quickly and easily calculate pay rates, tax, interest rates, inflation, investment returns and how compound interest works with the comparison of small changes.

- This section includes practical examples regarding accounting and budgeting – both business and person of hire-purchases, rentals and payments plans and how they compare with a base or up-front cost. How maths works in relation to loans and credit cards will also be investigated.

- How numeracy applies to measurement
  This topic focuses on fundamentals. It includes such concepts as linear measurement, area, volumes, weight, speed, energy, heat, time and techniques showing how to mentally estimate or calculate which things are useful in day to day life.

From here students may then focus on topics such as:

- How numeracy applies to mechanics?

- How numeracy applies to sports?

- How numeracy applies to electrics, liquids and air?

- How numeracy applies to building and construction?

Science Curriculum Specified Electives

1 year Long

Science at Entry Level

This science subject aims to produce scientifically literate citizens that investigate and question the world around them. Students completing this subject will equip themselves with foundational science skills and scientific understanding.

The key concepts that this subject will focus on are:

- Scientific method
- Matter
- Cells
- Physical forces
- Energy
- Earth Science

Students are encouraged to continue their scientific education after entry level by selecting student-led and curriculum specified science electives as a pathway to VCE Science.

Cost - Nil

Pre- VCE Psychology

Psychology is the study of mental processes and behaviour.

In this course, students will be given the opportunity to explore the main concepts covered in VCE Psychology Units 1 to 4 in a fun and engaging way.

The topics to be covered may include

- The nature of psychology.
- Types of psychology.
- Mental Health/ Illness.
- Mental Disorders.
- Visual Perception.
- Visual Illusions.
- Interpersonal and group behaviour.
- Intelligence and Personality.
- Memory.
- Consciousness.

Students will drive their own learning within Pre-Psychology through individual and group research tasks, coursework, investigations, psychological experiments, surveys, films and interactive classes.

Skills

- Develop aims and questions, formulate hypotheses and make predictions
- Plan and undertake investigations
- Conduct investigations to collect and record data (Comply with safety and ethical guidelines)
- Analyse and evaluate data, methods and scientific models
- Draw evidence-based conclusions
- Communicate and explain scientific ideas

Pre-VCE Biology

This one year course is designed to give students a taste of the topic covered in VCE Biology Units 1-4. It will provide students with the flexibility to specialise in individual areas of interest.

The skills taught will be based around those prescribed by the current Biology Study Design. These include:

- Develop aims and questions, formulate hypotheses and make predictions;
- Plan and undertake investigations;
- Use appropriate scientific equipment;
- Collect, analyse, record and evaluating data;
- Analyse and evaluate data, methods and scientific models
- Draw evidence-based conclusions
- Communicate and explain scientific ideas

The topics to be covered will be taken from the Biology Study Design, they may include:

- Cells;
- Requirements of living things;
- Coordination at the organism and cellular level;
- Organisms and their environment;
- Bio-macromolecules of the cell;
- Immunity and disease;
- DNA/ Genetics and
- Evolution

Students will lead their discovery of these topics through the experimentation, course work and extended individual and group investigations including dissections, practical experiments, research assignments and planning of a biological excursion for the class.

Pre-VCE Chemistry

This one year course is designed to give students a taste of the topic covered in VCE Chemistry Units 1-4. It will provide students with the flexibility to specialise in individual areas of interest.

The skills taught will be based around those prescribed by the current Chemistry Study Design. These include:

- Develop aims and questions, formulate hypotheses and make predictions;
- Plan and undertake investigations;
- Use appropriate scientific equipment;
- Collect, analyse, record and evaluating data;
- Analyse and evaluate data, methods and scientific models
- Draw evidence-based conclusions
- Communicate and explain scientific ideas

The topics to be covered will be taken from the Chemistry Study Design and may include:

- The Periodic Table
- Bonding
- Reactions and balancing equations
- Thermodynamics
- Acid base titrations
- biochemistry

Students will lead their discovery of these topics through the experimentation, coursework,extended individual, group investigations and topic tests.

Pre-VCE Physics

This one year course is designed to give students a taste of the topic covered in VCE Physics Units 1-4. It will provide students with the flexibility to specialise in individual areas of interest.

The skills taught will be based around those prescribed by the current Physics Study Design. These include:

- Develop aims and questions, formulate hypotheses and make predictions
- Plan and undertake investigations
- Use appropriate scientific equipment
- Collect, analyse, record and evaluating data
- Analyse and evaluate data, methods and scientific models
- Draw evidence-based conclusions
- Communicate and explain scientific ideas

The topics to be covered will be taken from the VCE Physics Study Design, they may include:

- Motion
- Forces
- Energy transfer and transformations
- Light
- Heat
- Electricity
- Sound

Students will lead their discovery of these topics through the experimentation, course work, extended individual and group investigations and topic tests.

HPE Curriculum Specified Electives

Year Long

Entry Health and Physical Education

At foundation level of Physical Education students proficiently perform complex movement and manipulative skills. Students measure their own fitness and physical activity levels and identify factors that influence motivation to be physically active. They maintain regular participation in moderate to vigorous physical activity and analyse and evaluate their level of involvement in physical activity. They combine motor skills, strategic thinking and tactical knowledge to improve individual and team performance.

Students will be given the opportunity to participate in many team and individual sports.

Students describe the physical, emotional and social changes that occur as a result of the adolescent stage of the lifespan and the factors that influence their own development. They describe the effect of family and community expectations on the development of personal identity and values. They identify outcomes of risk-taking behaviours and evaluate harm-minimisation strategies. They identify the health concerns of young people and the strategies that are designed to improve their health.

Cost: Nil

Semester long

Exercise Science

Students are provided with the opportunity to develop a basic understanding and appreciation of the importance of physical fitness and nutrition for optimum sporting performance. Students will increase their knowledge of the theory and practice of performance in sport.

Students will be given the opportunity to

- Study the treatment of sports injuries
- Learn about body systems and how they are interrelated
- Study the benefits of fitness
- Look at the role and function of nutrients in improving diet and athletic performance
- Study the use of energy systems in sport
- Study psychological factors which affect sporting performance
- Study biomechanics in sport
- Analyse games
- Exercise Physiology

A visit to a University forms part of the unit, where students complete Laboratory tests, to see how their bodies react under exercise conditions

Students completing this subject will obtain enough knowledge for success in various subjects, but in particular VCE Physical Education, pre Biology, and pre Psychology.

Cost: $15 for experiments

Pre-VCE Health and Human Development

The Health Elective would be an excellent subject choice as a lead in to VCE Health and Human development, although it is not a prerequisite.

This subject aims to build student awareness of healthy living practices. Students will be encouraged to work collaboratively with others, as well as improve their individual research skills. There will be the opportunity for practical work as well as the in depth investigation of health issues relevant to adolescents.

Topics covered include

1. Nutrition and Healthy Eating
2. Global Health.
3. Alcohol.
4. Sun Protection.
5. Substance Use and/or Abuse.
6. Smoking.
7. Body Image.
8. Bullying.
9. Cyber Bullying.
10. Mental Health.
11. Relationships.
12. Gender Roles.
13. Health Services.
14. Excursion – Mercy / Austin Hospital
15. Real Care Baby Doll program.
16. Sex Education.

Cost: Nil

Humanities Curriculum Specified Electives

Semester Long

Engaging with Asia

We are living in what has been called "The Asian Century", and the future of Australia depends on us being able to live and work with our closest neighbours.

Students will select an Asian country of interests, and will analyse their relationship with Australia. Students will develop the skills to conduct business in their chosen Asian nation, both in terms of their financial literacy and cross-cultural capabilities.

There are 6 topics students will investigate:

1. Globalisation, and the business and personal opportunities it presents
2. A comparison of Asian cultures, including language, food and customs
3. The skills needed to conduct business in Asia
4. The benefit of 'in-country' experiences
5. The relationship between Australia and Asia, in terms of trade and politics
6. The future of Asia

Students will develop a range of essential business skills, such as communication, negotiation, problem-solving and leadership, and will also develop the ability to empathise, communicate across cultures and to develop their sense of global citizenship. Students will learn about current issues such as Free Trade Agreements, contemporary migration, foreign investment, economic indicators.

This elective could lead into a range of VCE Humanities subjects, including Business Management and Economics, and would also complement students studies in Chinese.

Cost: Nil.

Crime and Punishment

Want to learn about how to get into government and take over the world? Maybe you just want to hear about all the messed up crimes people have committed over time? Then you should definitely think about taking 'Crime and Punishment' next year!

This unit involves the study of the nature and operation of the Criminal Justice system exploring key features of the Australian legal and government system.

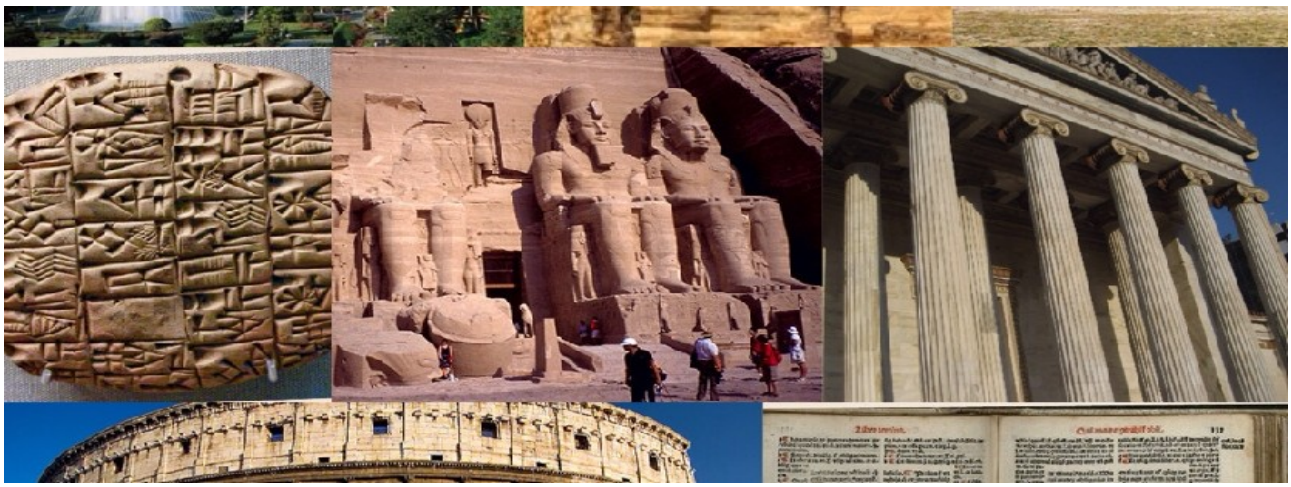
The principles and values of equality before the law, rights and freedoms and social justice issues are explored in the analysis of the causes of criminal behaviour, types of crime and associated trends, enforcement procedures and criminal sanctions incorporating a comparative analysis with an international legal and court system

Students will use their knowledge to think critically about their own values, rights and responsibilities and those of organisations and groups including courts and legal institutions. They will explore different perspectives, articulate and justify their opinions on local, national and global criminal matters.

Participation in events during Law Week and a visit to the Magistrates Court of Victoria form part of the unit allowing for the examination of the legal processes and procedures pertaining to criminal matters.

Students who undertake this subject will be prepared for success in a range of VCE studies as well as being directly prepared for VCE Legal Studies Units 1 & 2.

Proposed cost: Nil.



Ancient Civilisations

Mulan? Gladiator? The Mummy? Hercules? If you enjoy any of these films, this course is for you. Students will learn more about those who have come before us and how their religion, culture, language, technology and politics still influence us today, focussing on the rise and fall of ancient civilisations from Rome, Greece, Egypt, China and India.

This course seeks to answer the question, "Where did we come from?" and will provide students with a general introduction to some of the most prominent and fascinating ancient civilisations from across the globe. Students will learn more about those who have come before us and how their religion, culture, language, technology and politics still influence us today. Students will gain an insight into the rise and fall of ancient civilisations from Rome, Greece, Egypt, China and India and learn about some of the greatest and famous leaders who ruled the ancient world.

As part of this course, students will develop a range of historical skills that will help them to understand and explain events and people that have shaped our modern world. They will develop research and questioning skills to frame a historical inquiry including the ability to identify and select a range of sources and locate, compare and use information to answer inquiry questions.

This course can lead on to many other Humanities curriculum-specified electives, including the World Wars, The Cold War, Loony Tunes, and eventually on to a range of VCE subjects including 20th Century History and Revolutions.

Proposed cost: Nil.

The Cold War

The course is independent of but can follow on from the World Wars course and will investigate the Korean War,the Vietnam War, the Cuban missile crisis, tension in the middle east and the collapse of the Soviet Union.

Students will engage with and use their historical inquiry and research skills, and complete document and source analysis (from political cartoons to physical objects, such as Vietnam War veterans paraphernalia). They will be able to look at concepts of continuity and change, cause and effect, contestability and the importance of perspectives and significance while examining a range of historical events and contexts.

This unit provides knowledge and skills that Lead onto VCE Units 1 and 2 Twentieth Century History and would provide background information that would be useful for VCE Politics units.

Proposed cost: Nil.

The World Wars

Depending their prior learning, students may choose to study either World War One or World War 2, or even both in this semester unit. Students will conduct an historical inquiry into their chosen field of study, and will engage with the local community in researching the legacy of local residents and their involvement throughout the wars.

This course aims to equip students with the historic skills required to continue on to VCE History units 1 & 2. Students will develop critical skills such as empathy, communication, analysis, interpretation and questioning. They will be able to determine cause and effect, chronology, continuity and change and analyse perspectives. They will be able to use a broad range of primary and secondary sources as evidence, and communicate their findings using a range of ICT technologies.

Students may wish to investigate:

World War One:

- The causes of WW1
- Australia's role in World War One
- The nature of warfare
- The Western front
- Life in the trenches
- War at sea & in the air
- The Impact of the war on Australia
- Remembrance of the War

World War Two:

- The causes of WW2
- The rise of Hitler and Nazism
- The Holocaust
- Major battlefronts -Europe, Asia-Pacific, (inc.Kokoda), Africa
- The atomic bombing of
- Hiroshima and Nagasaki
- Significant individuals

This unit provides knowledge and skills that Lead onto VCE Units 1 and 2 Twentieth Century History and Units 3 and 4 History and would provide background information that would be useful for VCE Politics units.

Proposed cost: Nil.

Who Wants To Be A Millionaire?

If money can't buy you happiness, then why is it all anyone ever seems to talk about?

Learn how to get the most out of your money and develop the skills to manage your own personal finances.

The first half of the course looks at making informed purchasing decisions, and how to finance those purchases. Students will learn about a variety of finance tools, such as credit cards, mortgages and personal loans, the implications of each method, and will learn how to create a budget forecast and variance report.

Students will then analyse different investment options, and be able to make recommendations based on an individual's financial position. They will examine different investments, including the property market, the share market, bonds and term deposits, will be able to calculate appreciation and depreciation, and learn about some of the ways to minimise your tax!

Classroom activities will involve individual research projects, interactive Internet tasks, group work, an oral presentation to the class and various hands on tasks.

Students who undertake this subject will be prepared for success in a range of VCE and VCAL studies, in particular VCE Accounting Units 1 & 2.

How To Get Away With Murder

Can you talk your way out of washing the dishes? How would you go defending an alleged criminal?

"How to get away with murder" looks specifically at the area of criminal law, including murder and manslaughter. A range of other criminal offences will also be studied, using some of the most engaging (and sometimes terrifying!) case studies.

Students will first explore the field of criminology – examining the elements of a crime, forensics and criminal investigation, and the use of evidence in criminal trials. Students will investigate various defences to murder, and will work towards developing a criminal mock trial.

To complement their studies, students will also focus on a number of areas pertaining to the Australian Legal System. Students will be informed of the operations of our legal system and be able to evaluate its effectiveness and their rights in dealing with the law.

- The topics that will be studied include the following:
- The nature and function of laws;
- The law-making process –parliament and the courts;
- The Victorian court hierarchy;
- The jury system;
- Young people and the law;
- Police powers v. citizens' rights;
- Sentencing

Students will work collaboratively to develop a criminal mock trial, but will undertake a variety of other assessment tasks including research assignments, oral presentations, tests, etc.

This subject will directly prepare students for success in VCE Legal Studies.

MOOCs
Massive Open Online Courses

Want to study at Harvard University? Feel like exploring what Stanford University has to offer? MOOCs was first created by Massachusetts Institute of Technology (MIT) in 2001. If you are a self directed learner who wants to learn and engage with the world beyond school, someone who wants to be part of a global community of online learners. Then MOOCs free online courses offered by the world's leading universities is for you. You could explore The Einstein Revolution at Harvard University, marvel at Thermodynamics at The University of Michigan amongst thousands of other courses. Go on!

Cost: Nil

VCAL Units

Intermediate VCAL

Literacy (Communications)

These units cover two areas of study are Reading and Writing. Summary of learning outcomes:

- literacy for self expression
- literacy for practical purposes
- literacy for knowledge
- literacy for public debate

Both areas are designed to develop knowledge, skills and understanding relevant to reading, writing and oral communication in the contexts of family, employment, further learning and the community.

Proposed cost - nil

Numeracy (STEM - Science, Technology, Engineering and Maths)

These units cover the development of skills, knowledge and attitudes to numeracy within relevant and meaningful contexts. Students will use mathematical skills in order to carry out purposes and functions within the society related to designing, measuring, constructing, using graphical information, money and time and travel. Summary of learning outcomes:

- numeracy for practical purposes - design and measuring
- numeracy for personal organisation - money and time
- numeracy for interpreting society - data and numerical information

Proposed cost - $25 per year

Work Related Skills (Work Ready)

Students develop employability skills and key competencies applicable to employment in any industry sector. The unit includes:

- Investigation into industry and the nature of work
- Occupational health and safety
- Structured workplace learning (Work Placement every Friday)

Proposed cost - nil

Personal Development Skills (Learning for Life)

Students focus on the development of organisational and planning skills, knowledge, practical skills, problem solving skills and interpersonal skills. The aim is to develop self-confidence and increase self-esteem skills. Examples of learning activities include:

- Community Projects
- Organization of camps and excursions
- Personal health and fitness programs
- Financing and budgeting

Proposed cost - $25 per year

Industry Specific Skills

Theses are developed through VET units (Vocational Education and Training). This will be completed one day each week (every Wednesday) by an external provider - TAFE Institute.

- The aim is to develop key knowledge and competencies in a vocational context that assist students in making informed choices regarding further learning/or employment
- Provide vocational experiences relevant to their students' interests and abilities
- Provide pathways to further study through credit gained

Student should note that there is a fee to complete a VET course.

Proposed cost - varies according to course

VCE Subjects

Accounting

Accounting is the process of recording, reporting, analysing and interpreting financial data and accounting information which is then communicated to internal and external users of this information.

It plays an integral role in the successful operation and management of businesses. VCE Accounting focuses on small business. Unit 1 begins with a small service business, allowing students to develop knowledge and skills in accounting without the complexities of accounting for trading businesses or large organisations. Units 2, 3 and 4 then focus on a single activity trading business where students build on and extend their accounting skills.

Many students who study VCE Accounting will go on to further studies and careers in business and finance. The study is made up of four units:

Unit 1: 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.

Unit 2: 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: 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: 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.

Biology

Biology is the study of living organisms, of life processes, and of the different levels of organisation from the cell to the biosphere. It includes the study of interactions between organisms and between organisms and their environments. It considers the unity and continuity of life as well as diversity and change.

Unit 1: How do living things stay alive?

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.

Unit 2: How is continuity of life maintained?

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.

Unit 3: Signatures of life

In this unit students consider the molecules and biochemical processes that are indicators of life. They investigate the synthesis of biomacromolecules and biochemical processes that are common to autotrophic and heterotrophic life forms. Students consider the universality of DNA and investigate its structure; the genes of an organism, as functional units of DNA and code for the production of a diverse range of proteins in an organism. Students investigate the significant role of proteins in cell functioning; how technological advances have enabled scientists to determine differences in the molecular structure of proteins, how the structure of a protein relates to its function in an organism's tissues, and how technological advances have given rise to applications such as the design of proteins for specific purposes. Students consider advances in proteomics applied, for example, to medical diagnosis. Students investigate how cells communicate with each other at molecular level in regulating cellular activities; how they recognise 'self' and 'non-self' in detecting possible agents of attack; and how physical barriers and immune responses can protect the organism against pathogens. Students consider the technological advances that have contributed to our knowledge and understanding of molecular biology and thereby appreciate the dynamic nature of science. Students apply concepts related to the structure, function, activities, needs and regulated death of cells.

Unit 4: Biological continuity and change

In this unit students examine evidence for evolution of life forms over time. Students explore hypotheses that explain how changes to species have come about. In addition to observable similarities and differences between organisms, students explore the universality of DNA and conservation of genes as evidence for ancestral lines of life that have given rise to the present biodiversity of our planet. Students investigate how the study of molecular genetics has expanded into genomics – the study of whole sets of genes possessed by an organism. Information obtained by studying genomes and functional genomics has provided insight into gene expression and regulation, and relationships between species. Students study how genes are transmitted from generation to generation by examining meiosis and patterns of inheritance including pedigree analysis. Students consider the relationship between heritable variations and the environment in accounting for changes to species over time, and for speciation and extinction. Students examine the interrelationships between biological, cultural and technological evolution. As they consider the historical development of ideas and technological advances that have contributed to our knowledge and understanding of inheritance and evolutionary biology, students come to understand the dynamic nature of science, the human factors that influence developments in science and its increasing reliance on evidence. Students investigate emerging technological applications and the implications of advances in molecular genetics. The ability to apply technologies that can change the genetic composition of individual organisms and species, including humans, raises controversial issues for individuals and society. Students examine these issues and consider their implications from a variety of perspectives.

Business Management

VCE Business Management examines the ways in which people at various levels within a business organisation manage resources to achieve the objectives of the organisation. Students develop an understanding of the complexity, challenges and rewards that come from business management and gain an insight into the various ways resources can be managed in small, medium and large-scale organisations.

Unit 1: Planning a business

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

Unit 2: Establishing a business

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

Unit 3: Managing a business

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

Unit 4: Transforming a business

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

Chemistry

Chemistry is a key science explaining the workings of our universe through the properties and interactions of substances that make up matter. Most processes, from the formation of molecules in outer space to the complex biological interactions occurring in cells, can be described by chemical theories.

Unit 1: How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms. Students examine the modification of metals, assess the factors that affect the formation of ionic crystals and investigate a range of non-metallic substances from molecules to polymers and giant lattices and relate their structures to specific applications. Students are introduced to quantitative concepts in chemistry including the mole concept. They apply their knowledge to determine the relative masses of elements and the composition of substances. Throughout the unit students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena.

Unit 2: What makes water such a unique chemical?

Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. Students examine the 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. In this context students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. 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

Unit 3: Chemical Pathways

This unit investigates the scope of techniques available to the analytical chemist. Chemical analysis is vital in the work of the forensic scientist, the quality control chemist at a food manufacturing plant, the geologist in the field, and the environmental chemist monitoring the health of a waterway.

Unit 4: Chemistry at work

This unit examines the industrial production of chemicals, the reaction pathways of organic compounds, the structure biochemical molecules such as DNA, proteins and lipids chemistry and the energy changes associated with chemical reactions.

Computing

Sound skills in Information Technology are essential for all tertiary study as well as for employment. These skills frequently go well beyond being using a word processor to complete a university assignment or create a resumé. Furthermore, so much of our personal and professional communication relies on information communication technologies. In particular we rely heavily on Web2 tools such as blogs, wikis and social media. A study of Computing will provide students with essential life skills enabling them to control the technology of the 21st Century rather than be controlled by it.

Unit 1 - Computing

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

When creating solutions, students need an understanding of the problem-solving methodology, as detailed in the accredited Study Design. In this unit the emphasis is on the problem-solving stages of design and development.

Assessment

- Assignment work: 10%
- Outcome 1 (Visual representation of Issue): 15%
- Outcome 2 (network task): 10%
- Outcome 3 (web site planning and production): 25%
- Exam: 40%

Unit 2 - Computing

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

Assessment

- Assignment work: 10%
- Outcome 1 (computer programming task): 20%
- Outcome 2 (data analysis and visualisation task): 15%
- Outcome 3 (data management task): 15%
- Exam: 40%

Unit 3 - Informatics

The focus of Unit 3 is data, information and information systems.

Area of Study 1 focuses on the use of a relational database management system (RDBMS). Students examine techniques used by organisations to acquire data via websites and consider the relationship between how the data is acquired and the structure of an RDBMS. At the practical level, students acquire and apply knowledge and skills in the use of an RDBMS. In Unit 4 when solving information problems students can either use spreadsheet software or continue to use an RDBMS.

In Area of Study 2, students develop an hypothesis in a chosen field. They select, reference, manipulate and interpret data relevant to this hypothesis. They will use the results of this investigation in Unit 4 Outcome 1

Unit 4 - Informatics

In this unit students focus on how ICT is used by organisations to solve ongoing information problems and on the strategies used to protect the integrity and security of data and information.

In Area of Study 1 students use a multimodal online solution to present their findings from Unit 3 Outcome 2 and evaluate the effectiveness of this solution.

In Area of Study 2, students explore how organisations manage the storage, communication and disposal of data and information in order to minimise threats to the integrity and security of data and information, and to optimise efficient information handling.

Computing: Software development

Unit 3

This unit focuses on programming as a strategy for solving problems. Students develop knowledge and skills in the use of a programming language. The programming language selected will be studied for both Units 3 and 4. When programming in Unit 3, students are expected to have an overview of the problem-solving methodology and a detailed understanding of the stages of analysis, design and development.

Assessment Tasks

1. In response to teacher-provided designs, create working modules to meet specific need

Outcomes

1. Interpret design requirements and apply a range of functions and techniques using a programming language to develop working modules.

2. An analysis that defines the requirements, constraints and scope of a solution in the form of a software requirements specification AND A folio of two to three alternative design ideas and the detailed design specifications of the preferred design AND A project plan (Gantt chart) indicating times, resources and tasks.

Unit 4

This unit focuses on how the information needs of individuals, organisations and society are and can be met through the creation of purpose-designed solutions in a networked environment. Students continue to study the programming language selected in Unit 3. In this unit students are required to engage in the design, development and evaluation stages of problem-solving methodology.

Assessment Tasks

1. In response to a case study, one of the following: • a written report • an annotated visual report.

2. A software solution that meets the software requirements specification and the results of the usability test AND An assessment of the extent to which the project plan (Gantt chart) assisted in monitoring project progress in one of the following:

- a written report
- an annotated visual plan.

Outcomes

1. 1. Apply stages of the problem-solving methodology to create a solution using a programming language that fulfils identified requirements and assess the effectiveness of the project plan in monitoring progress.

2. Analyse and explain the dependencies between two information systems and evaluate the controls in place in one information system to protect the integrity of its source data.

VET Interactive Digital Media

Course Outline

The aim of the Certificate III in Media program is to provide students with the skills for creating interactive multimedia and artistic digital media products. This training will enable students to undertake a broad range of basic media related tasks and provide them with the foundation to enter the industry at entry level, and/or proceed to further study. The skills and knowledge attained in this program are highly transferable to other industries.

The VCE VET Interactive Digital Media Program aims to:

- Provide participants with the knowledge and skills to achieve competencies that will enhance their employment prospects in the media and media related industries
- Enable participants to gain a recognized credential and to make a more informed choice of location or career paths

Students who undertake the Certificate III in Media program will have access to industry standard multimedia facilities within the College, including the latest software programs, 3D Printers and drawing tablets. Through participation in this program students will develop skills in the use of a wide variety of multimedia applications including the ability to:

- Manipulate images in Adobe Photoshop
- Create an animated multimedia presentation in Adobe Flash, Adobe After Effects and author interactive sequences
- Create interactive websites using Adobe Dreamweaver and maintain Website contents
- Follow the Design process and create Visual Design components and 3D Design to be 3D printed

- Compile a video sequence in Adobe Premiere Pro or similar digital video editing software.

Special Features of the Course

Certificate III in Media can be included in the student's primary four for ATAR purposes.

Completion of this course provides students with additional pathways including university, diploma and creative courses. Both part time and full time employment opportunities are enhanced as students have demonstrated skills relevant to the industry. This is a nationally recognised qualification and such recognises other state's qualifications and other RTO's qualifications.

Modules covered

CUF30107 Certificate III in Media

VCE VET Interactive Digital Media Units 1 and 2

- Develop and Extend critical and creative thinking skills
- Work Effectively in the Screen and Media Industries
- Participate in OHS processes
- Produce and Prepare photo images
- Maintain Interactive Content
- Follow a Design Process
- Create 3-D Digital Models

VCE VET interactive digital media Unit 3 and Unit 4

- Create 2D Digital Animations
- Write Content for a range of media
- Explore and apply the creative process to 2D Forms
- Author Interactive Sequences
- Prepare Video Assets
- Create Visual Design Components

Internal assessment 66%

Exam 34%

National Recognition

A key principle of the Australian Quality Training Framework is national recognition (previously referred to as mutual recognition). This means that all States and Territories will recognise:

Australian Qualifications Framework qualifications and statements of attainment issued by other registered training organisations. This enables individuals to receive national recognition of their qualifications and statements of attainment.

Drama

VCE Drama connects students to the traditions of drama practice and, through the processes of devising and performing drama, allows them to explore, understand and respond to the narratives and stories that shape their worlds. The study requires students to be creative and critical thinkers. Through work as solo and ensemble performers and engagement with the work of professional drama practitioners, students develop an appreciation of drama as an art form and develop skills of criticism and aesthetic understanding.

Unit 1: Dramatic Storytelling

This unit focuses on creating, presenting and analysing a performance that reflects personal, cultural and/or community experiences and stories. Students examine storytelling through the creation of solo and/or ensemble devised performance/s. They manipulate expressive skills in the creation and presentation of characters, and develop awareness and understanding of how characters are portrayed in naturalistic and non-naturalistic performance styles. Students also gain an awareness of how performance is shaped and given meaning. They learn about stagecraft, conventions and performance styles from a range of contexts.

Unit 2: Non-naturalistic Australian Drama

This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance that uses non-naturalistic performance styles. Students create, present and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context. Students use a range of stimulus material in creating the performance and examine non-naturalistic performance styles from a range of contexts relevant to Australia and Australians.

English

Rationale

The English language is central to the way in which students understand, critique and appreciate their world and to the ways in which they participate socially, economically and culturally in Australian 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.

Unit 1

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

Unit 2

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

Unit 3

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

Unit 4

The focus on 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 text 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.

English as an Additional Language (EAL)

Unit 1

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

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.

Unit 3

The focus of this unit if 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 explore choices they have made as authors.

Unit 4

The focus on 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 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.

Bridging English as an Additional Language

Rationale

Bridging EAL is designed for a range of EAL students from diverse language and educational backgrounds and experiences. The study design draws on and strengthens the language skills and knowledge students have acquired, recognising their diverse educational backgrounds and English experiences. The nature and flexibility of this course provides teachers with the opportunity to focus on the needs and interests of their students. Oral and aural skills are emphasised, along with explicit, close study of linguistic features, structures and meaning in Standard Australian English, and in literary and non-literary texts. By engaging reflectively and critically with a range of increasingly complex spoken, written and multimodal texts, students work individually and collaboratively to create their own texts for different audiences, purposes and contexts. Through this process, students develop their confidence, fluency and ability to make accurate and appropriate choices in English language when engaging with a variety of issues and perspectives.

Unit 1

In this unit, students build their understanding of how spoken and written Standard Australian English (SAE) is used to communicate effectively in a variety of contexts and for a range of purposes. Students develop the ability to listen, speak, read and write for everyday and academic purposes. They explore how language features, structures and conventions can be used to express ideas and opinions, and to create their own spoken and written texts.

Unit 2

In this unit the elective areas of study enable students to extend their understanding of how English is constructed and used to communicate in a variety of contexts and for a range of purposes. Two of the following areas of study must be selected for study in Unit 2:

1. English for academic purposes
2. English literature
3. English in the media
4. English for the workplace

Please note: There is no presumption that students undertaking this study will be eligible for EAL at English Units 3 and 4. The eligibility criteria for EAL at Units 3 and 4 will apply, as detailed in the VCE and VCAL Administrative Handbook.

Food and Technology

Food and Technology is engaging and challenging. It enables students to develop a theoretical understanding and practical skills.

The food sector is dynamic, diverse and creative. Innovative food products are continually being introduced in response to changing social, economic and environmental needs of society. Technology plays an important role in food product development and the way food is produced, processed, packaged and marketed. An understanding of the links between food, food processing, nutrition, health and well-being is a high priority in contemporary society.

Through the study of Food and Technology, students will develop knowledge of the functional, sensory, physical and chemical properties of food and will be able to apply this knowledge when using food in a practical situation. They will develop and apply the knowledge and skills for safe and hygienic work practices and food preparation techniques. They will 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.

The study may also provide a foundation for exciting pathways to food science and technology, consumer science, home economics, education, the hospitality and food manufacturing industries, and nutrition and health studies.

Unit 1: Properties of food

In this unit students are introduced to the diverse nature of food, how to prepare it and how to store it for the best quality in terms of safety, health and aesthetics. Students study safe and hygienic food handling practices and apply these practices in the preparation of food.

Students discover the links between classification of foods and their properties and how their enjoyment of food is associated with different cooking methods and properties of foods. They examine changes in properties of food when different preparation and processing techniques are used. Students apply this knowledge when preparing food.

Unit 2: Planning and preparation of food

This unit provides students with the opportunity to investigate the best methods and tools and equipment to use for optimum results, and what to prepare for a range of situations. Students research, analyse and apply the most suitable food preparation and cooking methods to optimise the sensory, physical and chemical properties of food.

Students work both independently and as a member of a team to research and implement solutions to a design brief, and to respond to exciting challenges of preparing food for a range of circumstance including nutritional considerations, cultural beliefs, and resource access and availability.

Unit 3: Food preparation, processing and food controls

Students investigate cooking techniques and justify the use of the best techniques for key foods. They develop an understanding of food processing techniques to prevent spoilage in industrial and domestic settings, and will also preserve food using some of these techniques.

Students develop an understanding of food safety in Australia by investigating the causes of food poisoning and food spoilage, and the relevant regulations and apply safe work practices while preparing food.

Students write a design plan developed from a design brief that they create. The design plan, will apply their knowledge about key foods, properties of food, tools, equipment, cooking techniques and preservation techniques best suited to a particular situation. They make decisions and choices in developing this plan and establish a timeline to complete the selected food items to meet the requirements in Unit 4.

Unit 4: Food product development and emerging trends

In this unit students work independently to complete the challenge of producing the design plan they created in Unit 3. In completing this task, students apply food safety and hygiene guidelines and evaluate the product planning and processes.

Students examine food product development including investigating packaging, packaging systems, marketing, emerging trends, technological developments, and environmental considerations.

Foundation English

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 may also be suited to students who need additional time and assistance to strengthen and refine their literacy skills to support their study in VCE English/ESL, VCE Literature, or VCE English Language Units 1–4 and in other VCE studies.

The study design draws on and strengthens the skills gained and the knowledge students have acquired about texts and language in the English domain of AusVELS. 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.

Compulsory area of study in both Units 1 and 2:

Essentials of English - Unit 1 & 2

This area of study focuses on developing learning strategies and literacy skills. It describes the fundamental understandings and processes students need in order to read and write effectively and identifies learning strategies designed to enhance achievement in English.

Optional areas of study: Two of the following areas of study must be selected for study, one in each of Units 1 and 2.

Area of study 2: Communication and the workplace

This area of study focuses on developing the skills of effective workplace communication. It describes the ways in which students comprehend, compose and respond to oral and written texts in the context of the workplace. The area of study includes the examination of the structures, features and conventions of different oral and written work-related texts. Students focus on the process of planning, drafting, editing and proofreading, with particular emphasis on the conventions of spelling, punctuation and syntax. Emphasis is placed on the clarity, coherence, and appropriateness of work-related texts. Students learn techniques for active listening, note-taking and oral communication.

Area of study 3: Technology and communication

This area of study focuses on strategies for using information and communications technology to enhance and improve students' knowledge of the structures and features of various information technologies. It examines strategies for using the technologies to explore, record, process and present ideas and information. Students consider the importance of the four phases of the technology process: investigation, design, production and evaluation; with the emphasis on using technology for a range of purposes. Students use a selection of technologies to present and produce information, solve communication problems and communicate with others. Students also develop broader literacy skills in relation to the range of texts explored.

Area of study 4: The study of texts

This area of study focuses on developing the skills required to read a range of texts, including literary, factual, media, multimodal, visual and everyday texts, and develop oral and written responses. This area of study involves the reading and interpretation of a range of texts. Students explore strategies and techniques for reading and interpreting different texts. They examine the structures and features of a range of short texts such as poems, prose fiction, plays, films, newspaper articles, CD-ROMs, children's picture books, instructional texts and reference materials, and consider the ways readers respond to and make meaning from texts. This area of study includes strategies for making oral and written responses to texts with an emphasis on the language and techniques necessary for interpreting and comparing texts.

Area of study 5: The analysis and construction of argument

This area of study focuses on developing the ability to analyse the oral and written arguments of others, and the skills to structure a logical and supported argument of one's own, orally and in writing. The area of study includes an examination of the structures and features of a range of argumentative or persuasive texts, including non-print texts, constructed for different purposes and audiences. Students explore strategies for reading, viewing or listening to persuasive texts. They examine the persuasive techniques used by writers and speakers, and the language required to talk about and to analyse persuasive texts. Students compare and contrast different types of arguments to highlight the similarities and differences of texts constructed for particular purposes and audiences. They also explore techniques for constructing a written analysis of an argument and for presenting a reasoned point of view orally.

Area of study 6: Information literacy

This area of study focuses on developing in students the ability to recognise the need for credible information in an age when sources are becoming more varied, in some cases transient and increasingly multimodal. Students learn the strategies necessary to access that information, and to evaluate and synthesise to communicate for a given purpose and audience.

Students are encouraged to recognise that accurate and complete information is the basis for effective and informed decision making. Students develop skills in information literacy – the ability to understand and interpret information rather than merely reproduce it – as an essential aspect of effective communication.

Foundation Mathematics

Foundation Mathematics provides for the continuing mathematical development of students entering VCE and who do not necessarily intend to undertake Unit 3 and 4 studies in VCE Mathematics in the following year. This course is designed to complement General Mathematics and Mathematical Methods. Students completing this course would need to undertake additional targeted mathematical study in order to attempt Further Mathematics Units 3 and 4. In Foundation Mathematics there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study. The areas of study for Units 1 and 2 of Foundation Mathematics are 'Space, shape and design', 'Patterns and number', 'Data' and 'Measurement'.

Health and Human Development

VCE Health and Human Development provides students with the skills and knowledge to make informed decisions about their own health and to recognise the importance of health in society. In undertaking this study, they will be able to actively participate in making appropriate choices that allow for good health and be able to seek appropriate advice. It enables students to understand the current ideologies of health and human development in contemporary society. Students critically evaluate the health and development of the individual across the lifespan in the context of both Australia's and global health and human development.

VCE Health and Human Development offers students a range of pathways and caters to those who wish to pursue further formal study in areas such as health promotion, community health research and policy development, humanitarian aid work, allied health practices, education, and the health profession.

Unit 1

The transition from childhood to adulthood is a time that brings about enormous changes in physical, social, emotional and intellectual development. Optimal health and development for male and female youth sets the foundation for optimal health and development in adulthood. Students will explore the challenges to maintaining the physical, social, emotional and intellectual changes that occur and the inherited and environmental facts that influence health and development.

Unit 2

In Australia, families, communities and governments play a key role in optimising the health and development of individuals across the lifespan. Beyond the particular responsibilities of families, the community and governments have a responsibility to provide a range of series and programs that will help to optimise the health and development of all Australians. Students explore the requirements for optimal health and development throughout childhood and adulthood, and investigate inequitable health and developmental outcomes that can occur as a result of social and environmental factors.

Unit 3

Australians are amongst the healthiest people in the world. However a diversity of health outcomes are evident within a population as a results of a range of determinants that include factors such as biology, socio-economic, environment, inherited lifestyle, behaviour, knowledge, attitudes and beliefs. Students explore the health status of Australia's population and the promotion of health across the lifespan.

Unit 4

This unit enables students to examine the developmental changes that occur as individuals move through the lifespan and explore inherited factors that determine developmental potential. Students will also analyse the impact of a range of environmental factors that contribute to variations in health and developmental outcomes both between and within industrialized and developing countries. By comparing similarities

History

History is the practice of understanding and making meaning of the past. It is also the study of the problem of establishing and representing that meaning. It is a discipline which draws upon most elements of knowledge and human experience. Students learn about their historical past, their shared history and the people, ideas and events that have created present societies and cultures. The study of history draws links between contemporary society and its history, in terms of its social and political institutions, and language. An understanding of the link between accounts of the past, and the values and interests of the time in which the accounts were produced, is also a feature of the study of history.

Unit 1: Twentieth century history 1918-1939

In unit 1 students explore the nature of political,social and cultural changes in the period between the world wars. Such topics as the 'roaring twenties' and the Great Depression,the rise of fascism in Germany and Italy,the Russian revolution and the growth of Communism, and the isolation of the USA and the growth of militarism in Japan will be investigated.

Unit 2: Twentieth century history 1945–2000

In this unit students explore the nature and impact of the Cold War and challenges and changes to existing political,economic and social arrangements in the second half of the twentieth century.The Korean and Vietnam wars and the Cuban missile crisis will be investigated as will the rise of people's movements in Africa, Asia and the Americas.The space race and the reasons for the collapse of the Soviet Union will also be examined.

Unit 3 and Unit 4: Revolutions

Students investigate the significant historical causes and consequences of the American Revolution of 1776 and the Russian Revolution of October 1917.

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

Legal Studies

This study explores the way the legal system relates to and serves both individuals and the community. This knowledge is central to understanding the workings of contemporary Australian society. It focuses on how laws are made, an understanding of individual rights and responsibilities and how disputes are settled.

Unit 1: Criminal law in action

The focus is on the need for laws in our society. Students will investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts on society. Through contemporary cases and issues, students learn about different types of crime and explore rights and responsibilities under criminal law. Students will 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. An examination into the processes and procedures followed by the courts in hearing and resolving criminal cases is also undertaken. Students explore the main features and operations of criminal courts and consider the effectiveness of the criminal justice system in achieving justice.

Unit 2: Issues in civil law

This unit explores the rights that are protected by civil law as well as obligations that laws impose. Students will investigate types of civil law and related cases and issues and develop an appreciation of the role of civil law in society and how it affects them as individuals. The unit also focuses on the resolution of civil disputes through judicial interpretation and alternative methods in courts, tribunals and independent bodies. Students examine these methods of dispute resolution and evaluate their effectiveness .How individuals can influence change in the law by taking a case to court will also be examined Students focus on cases that have had a broader impact on the legal system and on their rights as individuals.

Unit 3: Law making

The focus of this unit is the law making bodies and their effectiveness within society. The unit also examines the notion of law as culture via the Australian Constitution. Students 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: Resolution and justice

This unit explores both criminal and civil procedures in the courts and alternative dispute resolution. The current operation of the jury and adversary systems is examined as well as an assessment of their strengths and weaknesses.

General Mathematics Units 1 and 2

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

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

- • for each unit, content covers four or more topics in their entirety, selected from at least three different areas of study
- • courses intended as preparation for study at the Units 3 and 4 level should include a selection of topics from areas of study that provide a suitable background for these studies
- • topics can also be selected from those available for Specialist Mathematics Units 1 and content covered from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2.
- In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic, financial and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

General Mathematics-Specialist Units 1 & 2

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

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

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

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

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

It is strongly recommended that students desiring to study Units 3-4 Mathematical Methods and/or Units 3-4 Specialist Mathematics undertake this course of study.

Note: a CAS graphics calculator is required (see booklist).

Mathematical Methods (CAS) Units 1 & 2

Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. They are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units.

Unit 1

The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra' which extends across Units 1 and 2. This content should be presented so that there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units 1 and 2. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs and differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

Unit 2

In Unit 2 students focus on the study of simple transcendental functions and the calculus of simple algebraic functions. The areas of study are 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics'. At the end of Unit 2, students are expected to have covered the material outlined in each area of study. Material from the 'Functions and graphs', 'Algebra', 'Calculus', and 'Probability and statistics' areas of study should be organised so that there is a clear progression of skills and knowledge from Unit 1 to Unit 2 in each area of study. In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations, graphs, differentiation and anti-differentiation with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

It is strongly recommended that students desiring to study Units 3-4 Mathematical Methods and/or Units 3-4 Specialist Mathematics undertake this course.

Note: a CAS graphics calculator is required (see booklist).

Further Mathematics Units 3 and 4

Further Mathematics consists of a compulsory core area of study "Data analysis" and a selection of three from six modules in the "Applications" area of study. Data analysis covers the presentation, summary, description and analysis of univariate and bivariate sample data.

The Applications modules are selected from:

- Module 1: Number patterns
- Module 2: Geometry and trigonometry
- Module 3: Graphs and relations
- Module 4: Business-related mathematics
- Module 5: Network and decision mathematics
- Module 6: Matrices

Note: a graphics calculator is required (see booklist).

Mathematical Methods (CAS) Units 3 and 4

Mathematical Methods is the study of function and pattern in number, logic, space and structure. It provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and precise. It also provides a means by which people can understand and manage their environment. Students will be expected to: apply knowledge and skills, model, investigate and solve problems and use technology.

The four areas of study include: functions and graphs, algebra, calculus and probability.

It is strongly recommended that students who wish to study Units 3-4 Mathematical Methods should first successfully complete Units 1-2 Mathematical Methods.

Note: a CAS graphics calculator is required (see booklist).

Specialist Mathematics Units 3 and 4

Specialist Mathematics covers the following areas of study: functions, relations and graphs, algebra, calculus, vectors and mechanics. The appropriate use of technology to support and develop learning is incorporated throughout each unit.

Students will apply knowledge and skills, model, investigate and solve problems. All material is covered in a progression from Unit 3 to Unit 4.

Specialist Mathematics can only be studied as part of a VCE program with or after Mathematical Methods 3 & 4.

It is strongly recommended that students who wish to study Units 3-4 Specialist Mathematics should first successfully complete Units 1-2 General Mathematics (Specialist) and Units 1-2 Mathematical Methods. Note: a CAS graphics calculator is required (see booklist).

Media

VCE Media provides students with the opportunity to analyse media products and concepts in an informed and critical way. Students consider media texts, technologies and processes from various perspectives, including an analysis of structure and features. They examine industry production and distribution context, audience reception and the media's contribution to and impact on society. This aspect of the study is integrated with the individual and collaborative design and production of media representations and products. VCE Media supports students to develop and refine their analytical, critical, creative thinking and expression. Students strengthen their communication skills and technical knowledge. This study is relevant for students who wish to pursue further formal study at tertiary level or in vocational education and training settings. The study provides knowledge and skills in creative thinking, planning, analysis, creative expression and communication valuable for participation in and contribution towards contemporary society.

Unit 1: Representation and technologies of representation

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

Unit 2: Media production and the media industry

In this unit students develop their understanding of the specialist production stages and roles within the collaborative organisation of media production. Students participate in specific stages of a media production, developing practical skills in their designated role. Students also develop an understanding of media industry issues and developments relating to production stages and roles and the broader framework within which Australian media organisations operate.

Music

Rationale

Music is an integral part of all cultures and societies, both contemporary and historical. The study of music develops students' understanding of artistic processes and contributes to the development of the aesthetic, cognitive, psychomotor and affective domains.

VCE Music offers students opportunities to engage in the practice of performing, creating and studying music that is representative of diverse genres, styles and cultures. Students can specialise in one or more approaches to the study of music, depending on their VCE program overall and the post-VCE pathways they may be interested in following.

Students develop knowledge of stylistic, aesthetic and expressive qualities and characteristics of music and develop their ability to communicate their understanding through music making: performing, composing, arranging and/or improvising; and musicianship: aural perception, analysis and music language.

VCE Music offers students opportunities for personal development and to make an ongoing contribution to the culture of their community through participation in life-long music making.

Structure

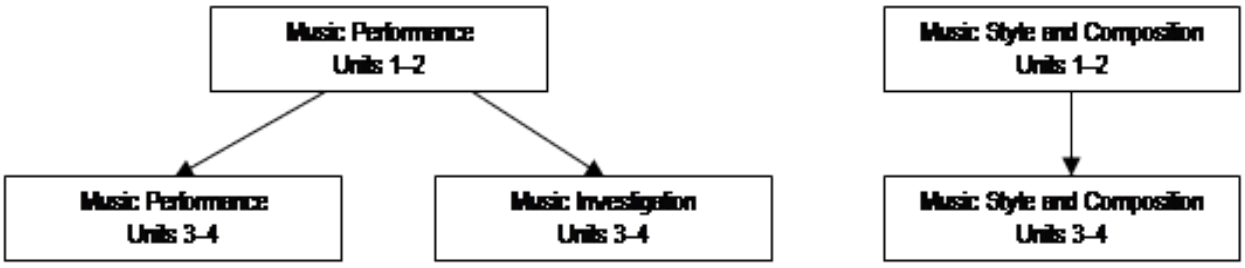
The study is made up of ten units:

- Music Performance Units 1, 2, 3 and 4
- Music Investigation Units 3 and 4
- Music Style and Composition Units 1, 2, 3 and 4

Students may enrol in all units or select specific combinations of units that cater for their interests and intended pathways.

Each unit contains between two and four areas of study.

The following diagram outlines the structure of VCE Music 2011–2015:



Entry

There are no prerequisites for entry to Units 1, 2 and 3 for Music Performance or Music Style and Composition, or for entry to Unit 3 of Music Investigation. Students must undertake Unit 3 prior to undertaking Unit 4 in these studies. Students are strongly recommended to undertake Units 3 and 4 Music Performance before or in the same year that they undertake Units 3 and 4 Music Investigation. Music Performance Units 1 to 4 and Music Style and Composition Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education. Music Investigation Units 3 and 4 are designed for students with considerable music experience.

Units 1–4: Music Performance

Unit 1

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

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

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

Unit 4

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.

Units 3 and 4: Music Investigation

Unit 3

In this unit students select a work from a prescribed list as the basis for an investigation of a Focus Area. They explore the Focus Area through three complementary areas of study: Investigation, Composition/arrangement/improvisation and Performance. Area of Study 1, Investigation involves research into background contextual issues relevant to performance practice, critical listening to recordings of performances and examination of texts including musical scores. Area of Study 2, Composition/arrangement/ improvisation involves applying these research findings to create a folio of exercises, sketches or recorded improvisations that demonstrate understanding of the characteristics of the Focus Area. Students plan, rehearse and perform a program of works that are representative of the Focus Area and in doing so develop relevant instrumental and performance techniques and apply performance practices. Together, these areas of study require students to apply extensive skills in performance, aural awareness, transcription, music theory and analysis.

Unit 4

In this unit students continue the exploration within the Focus Area they began in

Unit 3. In Unit 4 the Investigation involves the preparation of program notes to accompany their end-of-year performance program. In Area of Study 2, the Composition/improvisation/arrangement involves creating and performing a composition, improvisation or arrangement that draws on musical characteristics of the Focus Area. This composition, arrangement or improvisation builds on and extends exercises completed in Unit 3. Students rehearse and perform works for inclusion in a performance program of works that relates to the Focus Area. They develop mastery of relevant instrumental techniques and apply advanced performance conventions to realise their intended interpretations of each work. They continue to use skills in aural awareness, transcription, music theory and music analysis to support their work.

Units 1–4: Music Style and Composition

Unit 1

This unit involves an exploration of a wide range of music styles. Students listen to music excerpts from different styles, traditions, times and places. They analyse specific works from three distinct music styles including music from a non-western style or tradition. They become familiar with the elements of music and consider the various ways composers/music creators treat these elements and use compositional devices to create music works. Students compose and/or arrange brief creative exercises in response to the practices of other composers/creators.

Unit 2

This unit explores how composers and/or creators use music to create effects and elicit responses in multi-disciplinary forms.

Students listen to music excerpts from diverse styles and respond to the ways elements of music and compositional devices are used to create specific effects. Students study multi-disciplinary works that combine music and non-musical elements, and investigate how music is used in combination with these other elements. Students also consider the role and function of music in the complete work, for example ways it advances a narrative, provides commentary on a narrative or communicates a mood or feeling. Students create music for a multi-disciplinary work in a form of their choice.

Unit 3

In this unit students develop an understanding of the diverse practice of music creators working in different times, places and stylistic traditions.

Students develop skills in making critical responses to music excerpts. They analyse ways the compositional devices of contrast, repetition and variation are used in the excerpts.

Students develop knowledge about the music characteristics and style of two selected works or collections of minor works, one of which must be by an Australian composer/creator. They develop an understanding of the way contextual issues can influence works. Contextual issues may include cultural influences, social issues, practical issues, musical influences, commercial considerations and issues relating to the performer/s of the work. Students create music in response to the music characteristics and creative approaches evident in the music studied.

Unit 4

In this unit students create an original music work inspired by the study of music from different styles and traditions. They document their creative process/es from initial intention. Students develop skills in forming and presenting critical responses to music excerpts. They also analyse use of the compositional devices of contrast, repetition and variation.

Students investigate the music characteristics and style of two selected works or collections of minor works, one of which was created after 1910. They develop an understanding of the process/es used to create the works and how contextual issues may have influenced the creative process.

Philosophy

Philosophy provides students with the opportunity to read and understand some of the powerful ideas that have shaped our culture. This course introduces students to methods of philosophical argument and analysis, and their application to contemporary issues. The study also focuses on philosophers and philosophical ideas at different stages in history. Philosophy grapples with some of the most profound questions, such as: What is the nature of reality? Is it possible to attain absolute certainty about anything? Are right and wrong simply matters of culture? Is it rational to have religious beliefs?

Doing philosophy is about developing the ability to clarify concepts, analyse problems and construct reasonable, coherent arguments. Philosophy is intellectually challenging. Importantly, philosophy demands independent thinking, and develops independent reasoning skills which are highly transferable. Studies in philosophy complement courses across the VCE, interrogating underlying premises and connections between related fields. The key knowledge and skills fostered by philosophy also provide excellent preparation for any future career, whether in science or law, business or the arts. Experts in any field will inevitably confront philosophical questions.

Unit 1: Existence, knowledge and reasoning

What is the nature of reality? How can we achieve certain knowledge? These are some of the questions which have challenged humans for millennia and underpin ongoing endeavours in areas as diverse as science, justice and the arts. This unit engages students with fundamental philosophical problems through active, guided investigation, and critical discussion of two key areas of philosophy: epistemology and metaphysics. The emphasis is on philosophical inquiry – 'doing philosophy' – and hence the study and practice of the distinctive nature of philosophical thinking, including techniques of logic, are central to this unit. As students learn to think philosophically, appropriate examples of philosophical viewpoints and arguments, both contemporary and historical, should be used to support, stimulate and enhance their thinking about central concepts and problems. Students investigate relevant debates in applied epistemology and metaphysics, and consider whether the philosophical bases of these debates continue to have relevance in contemporary society and our everyday lives.

Unit 2: Ethics and philosophical investigation

This unit engages students in philosophical investigation and critical discussion of two key areas of philosophy, developing their abilities to analyse the reasoning of others and to formulate logical responses to philosophical questions. Students apply philosophical methods as they analyse problems, develop independent ideas, and explain and defend their views in philosophical exchanges with others, evaluating viewpoints and arguments. Students also apply their skills of reasoning to philosophical analysis of contemporary debates. Students explore basic principles of morality, assessing ethical arguments according to standards of logic and consistency, and uncovering the assumptions about values which underpin ethical viewpoints. There is broad scope to apply philosophical methods to everyday, personal ethical dilemmas as well as to issues debated in the media, including the most significant challenges faced by contemporary societies. The second area of study focuses on another significant topic in philosophy, to be chosen from Aesthetics, Philosophy of religion, Political philosophy or Other traditions of thought.

Unit 3: Minds, bodies and persons

This unit considers basic questions regarding the mind and the self through two key questions: Are human beings more than their bodies? Is there a basis for the belief that an individual remains the same person over time? Students critically compare the viewpoints and arguments put forward in set texts from the history of philosophy to their own views on these questions and to contemporary debates. It is important for students to understand that arguments make a claim supported by reasons and reasoning, whereas a viewpoint makes a claim without necessarily supporting it with reasons or reasoning. Philosophical debates encompass philosophical questions and associated viewpoints and arguments within other spheres of discourse such as religion, psychology, sociology and politics.

Unit 4: The good life

This unit considers the crucial question of what it is for a human to live well. What does an understanding of human nature tell us about what it is to live well? What is the role of happiness in a well lived life? Is morality central to a good life? How does our social context impact on our conception of a good life? In this unit, students explore texts by both ancient and modern philosophers that have had a significant impact on contemporary western ideas about the good life. Students critically compare the viewpoints and arguments in set texts from both ancient and modern periods to their own views on how we should live, and use their understandings to inform their analysis of contemporary debates. It is important for students to understand that arguments make a claim supported by reasons and reasoning, whereas a viewpoint makes a claim without necessarily supporting it with reasons or reasoning. Philosophical debates encompass philosophical questions and associated viewpoints and arguments within other spheres of discourse such as religion, psychology, sociology and politics.

Physical Education

Physical Education examines the biological, physiological, psychological, social and cultural influences on performance and participation in physical activity. Physical Education focuses on the interrelationship between motor learning and psychological, biomechanical, physiological and sociological factors that influence physical performances, together with the wider social attitudes to and understanding of physical activity.

A theoretical and practical approach towards physical activity is taken in this study. Please note that this subject is predominately theory based, where practical sessions are designed to explore the theory content through workshop activities.

This study design is relevant to students with a wide range of expectations, including those who wish to pursue further formal study at tertiary level or in vocational education and training settings. The study prepares students for such fields as human movement, nursing or physiotherapy, as well as providing valuable knowledge and skills for participating in their own sporting and physical activity pursuits.

Unit 1: Bodies in motion

In this unit students explore how the body systems work together to produce movement and analyse 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.

Unit 2: 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.

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.

Unit 3: 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: 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.

Physics

The study of Physics, by increasing understanding of the physical and social environment, has led to developments which have profoundly influenced the world. This study covers the areas that traditionally are the basis of courses at this level, with an emphasis on the foundation areas of mechanics and electricity. A contextual approach to the study has been adopted so that students appreciate the relevance of physics to the physical, technological and social worlds.

The development of practical skills in investigating physical phenomena is an essential part of all units.

Unit 1:

What ideas explain the physical world?

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

Students use thermodynamic principles to explain phenomena related to changes in thermal energy. They apply thermal laws when investigating energy transfers within and between systems, and assess the impact of human use of energy on the environment. Students examine the motion of electrons and explain how it can be manipulated and utilised. They explore current scientifically accepted theories that explain how matter and energy have changed since the origin of the Universe.

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

Unit 2:

What do experiments reveal about the physical world?

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

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

Unit 3

This unit consists of two prescribed areas of study: Motion in one and two dimensions; and Electronics and photonics. A detailed study is to be chosen in either Unit 3 or Unit 4 from one of six detailed studies: Einstein's special relativity, Materials and their use in structures, Further electronics, Synchrotron and its applications, Photonics, and Sound.

This unit focuses on the ideas that underpin much of the technology found in areas such as communications, engineering, commerce and industry. Motion in one and two dimensions is introduced and applied to moving objects on Earth and in space. Circuit models are applied to further aspects of electricity and electronics, and the operation and use of photonic devices are introduced.

Unit 4

This unit consists of two prescribed areas of study: Electric power and Interactions of light and matter. A detailed study is to be chosen in either Unit 3 or Unit 4 from one of six detailed studies: Einstein's special relativity, Materials and their use in structures, Further electronics, Synchrotron and its applications, Photonics, and Sound.

This unit focuses on the development and limitations of models in explaining physical phenomena. A field model of electromagnetism is applied to the generation of electricity, and the development of models that explain the complex interactions of light and matter are considered. The detailed studies provide examples of innovative technologies used for research and communication.

Psychology

The science of Psychology is the study of how people think and behave. The subject includes studying how our biology (genetic makeup), behaviour, thinking and upbringing (social and cultural) affect human beings. The study of these factors will assist students to gain an understanding of the complex interactions that influence human thought, emotions and behaviour.

The study assists students to further develop effective language skills for communication, and numeracy skills for research, data analysis and other applications. In addition, students develop a range of broader skills, including those of problem solving, critical evaluation and the application of processes of scientific inquiry.

Unit 1: How are behaviour and mental processes shaped?

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

Unit 2: How do external factors influence behaviour and mental processes?

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

Unit 3: The conscious self

This unit focuses on the study of the relationship between the brain and the mind through examining the basis of consciousness, behaviour, cognition and memory.

Advances in brain research methods have opened new ways to understanding the relationship between mind, brain and behaviour. Students study the structure and functioning of the human brain and nervous system, and explore the nature of consciousness and altered states of consciousness including sleep.

The brain continually receives and processes vast amounts of information from its internal and external environment. Memory involves the selective retention and retrieval of this information and it plays an important role in determining behaviour. Students consider the function of the

nervous system in memory and investigate the ways in which information is processed, stored and utilised. They apply different theories of memory and forgetting to their everyday learning experiences.

Students analyse research methodologies associated with classic and contemporary theories, studies and models, consider ethical issues associated with the conduct of research and the use of findings, and apply appropriate research methods when undertaking their own investigations.

Unit 4: Brain, behaviour and experience

This unit focuses on the interrelationship between learning, the brain and its response to experiences, and behaviour. The overall quality of functioning of the brain depends on experience, and its plasticity means that different kinds of experience change and configure the brain in different ways. Students investigate learning as a mental process that leads to the acquisition of knowledge, development of new capacities and changed behaviours. Understanding the mechanisms of learning, the cognitive processes that affect readiness for learning and how people learn informs both personal and social issues.

Students build on their conceptual understanding of learning to consider it as one of several important facets involved in a bio-psychosocial approach to the analysis of mental health and illness. They consider different concepts of normality, and learn to differentiate between normal responses such as stress to external stimuli, and mental disorders. Students use a bio-psychosocial framework – a conceptual model which includes psychological and social factors in addition to biological factors in understanding a person's mental state – to explore the nature of stress and a selected mental disorder.

The intent of the study is not that of diagnosis and treatment but to explore causes of mental illness, avenues of assistance and factors that promote mental wellbeing.

Students analyse research methodologies associated with classic and contemporary theories, studies and models, consider ethical issues associated with the conduct of research and the use of findings, and apply appropriate research methods when undertaking their own investigations.

Studio Arts

VCE Studio Arts encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. The study establishes effective art practices through the application of an individual design process to assist the student's production of a folio of artworks.

The theoretical component of the study informs students' practice through an investigation of selected artworks, an examination of artists' working methods and a study of professional practices and art industry issues.

Unit 1: Artistic inspiration and techniques

This unit focuses on using sources of inspiration and individual idea as the basis for developing artworks and exploring a wide range of materials and techniques as tools for communicating ideas, observations and experiences through art making. 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: Design exploration and concepts

This unit focuses on establishing and using a design process to produce artworks. The design process includes the use 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 artists' ideas and how they have created aesthetic qualities and identifiable styles.

Unit 3: 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.

For this study, the exploration proposal supports the students to identify a direction for their design process. The design process is individually determined by the student. The study of artists and their work practices and processes may provide inspiration for students own approaches to art making. Students investigate and analyse the response of artists to a wide range of 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. Students are expected to visit at least two different exhibition spaces in their current year of study.

Unit 4: 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 solutions generated in Unit 3 were used to produce a cohesive folio of finished artworks. These artworks should reflect the skilful application of materials and techniques, and the resolution of aims, ideas and aesthetic qualities.

This unit also explores 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 Design

Visual Communication Design can inform people's decisions about where and how they live and what they buy and consume. The visual presentation of information influences people's choices on what they think they need or want. The study provides students with the opportunity to develop an informed, a critical and a discriminating approach to understanding and using visual communications, and nurtures their ability to think creatively about design solutions. Design thinking, which involves the application of creative, critical and reflective techniques, processes and dispositions, supports skill development in areas beyond design, including science, business, marketing and management.

The rapid acceleration of the capabilities and accessibility of digital design technologies has brought new challenges to visual communication design practices. Through the consideration of ethical and environmental sustainability issues, students are able to make informed choices that affect current and future practices. The study of Visual Communication Design can provide pathways to training and tertiary study in design and design-related studies, including graphic design, industrial and architectural design and communication design.

Unit 1: Introduction to visual communication design

This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practice their ability to draw what they observe and they use visualization 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.

Unit 2: Applications of visual communication design

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

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 organizing 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.

Unit 3: Design thinking and practice

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

Students use their research and analysis of visual communication designers to support the development of their own work. They establish a brief and apply design thinking skills through the design process. They identify and describe a client, two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need.

Design from a variety of historical and contemporary design fields is considered by students to provide directions, themes or starting points for investigation and inspiration for their own work. Students use observational and visualization drawings to generate a wide range of design ideas and apply design thinking strategies to organize and evaluate their ideas. The brief and investigation work underpin the developmental and refinement work undertaken in Unit 4.

Unit 4: Design development and presentation

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

Having completed their brief and generated ideas in Unit 3, students continue the design process by developing and refining concepts for each need stated in the brief. They utilize a range of digital and manual two- and three-dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages with their target audience.

As students revisit stages to undertake further research or idea generation when developing and presenting their design solutions, they develop an understanding of the iterative nature of the design process. Ongoing reflection and evaluation of design solutions against the brief assists students with keeping their endeavors focused.

Students refine and present two visual communications within the parameters of the brief. They reflect on the design process and the design decisions they took in the realization of their ideas. They evaluate their visual communications and devise a pitch to communicate their design thinking and decision making to the client.

Italian

The study of Italian develops students' ability to understand and use a language which is one of the official languages of the European Union and the second most widely spoken language in Australia. It also provides students with a direct means of access to the rich and varied culture of the many communities around the world for whom Italian is a major means of communication.

Throughout VCE Italian, students develop all four macro skills (listening, speaking, reading and writing) through exploring topics related to:

- The individual - relationships, health, leisure, education and aspirations
- Italian-speaking communities - lifestyle, historical perspectives, arts, entertainment and contemporary social issues
- The changing world - work, technology, trade and tourism

The study of a language contributes to the overall education of students, most particularly in the area of communication, cross-cultural understanding, empathy, cognitive development, literacy and general knowledge. A knowledge of Italian in conjunction with other skills can provide employment opportunities in areas such as tourism, social services, banking, commerce, and translating and interpreting.

Unit 1:

Through an exploration of vocational pathways, the influence of Italian media, famous Italian musicians and Italy as an export-focussed economy, students will be able to:

- Establish and maintain a spoken or written exchange related to personal areas of experience.
- Listen to, read and obtain information from spoken and written texts.
- Produce a personal response to a text focusing on real or imaginary experience.

Unit 2:

Students will explore the current North-African refugee crisis, the Mediterranean diet, work-life balance in the 21st Century and the Italian literary Renaissance, and will 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 and written texts.
- Give expression to real or imaginary experience in spoken or written form

Unit 3:

Student will continue to refine and develop their skills through an exploration of the social effects of technology, the challenges of adolescence, and environmental sustainability. They will be able to:

- Express ideas through the production of original texts.
- Analyse and use information from spoken texts.
- Exchange information, opinions and experiences.

Unit 4:

Student will focus on the different historical perspectives of Post-War Italy as portrayed through film. Through a critical analysis, students will be able to:

- Analyse and use information from written texts.
- Respond critically to spoken and written texts which reflect aspects of the language and culture of Italian-speaking communities

Chinese First Language VCE Unit 1&2

The Language

The language to be studied and assessed is the modern standard/official version of Chinese. For the purpose of this study design, Modern Standard Chinese is taken to be putonghua in the spoken form and simplified character text in the written form. This does not, however, preclude the use of written texts in full-form or complex (traditional) characters. Students may choose to use either complex or simplified characters in their writing.

Rationale

The study of Chinese develops students' ability to understand and use a language which is spoken by about a quarter of the world's population. There are many spoken varieties of Chinese, and Modern Standard Chinese is pre-eminent among these. It is the major language of communication in China, Taiwan and Singapore, and is widely used by Chinese communities throughout the Asia-Pacific region, including Australia. Chinese is widely spoken in Australia, and the study of it by Australians will contribute to the positive features of a culturally diverse society. The study of Chinese provides access to an important cultural and linguistic heritage. In conjunction with other skills, the ability to communicate in Chinese may provide opportunities for employment in areas such as tourism, technology, finance, services and business.

Unit 1

- On completion of this unit the student should be able to establish and maintain a spoken or written exchange related to an issue of interest or concern.
- On completion of this unit the student should be able to listen to, read and reorganise information and ideas from spoken and written texts.
- On completion of this unit the student should be able to produce a personal response to a fictional text.

Assessment: Personal letter, listen to a spoken text (e.g. discussion, interview, broadcast) and extract and use information and ideas in a different text type, read a written text (e.g. article, report, letter) and extract and use information and ideas in a different text type and an oral presentation.

Unit 2

- On completion of this unit the student should be able to participate in a spoken or written exchange focusing on the resolution of an issue.
- On completion of this unit the student should be able to listen to, read, and extract and compare information and ideas from spoken and written texts.
- On completion of this unit the student should be able to produce an imaginative piece in spoken or written form.

Assessment: Role-paly, listen to two or more spoken texts (e.g. interview, discussion, debate) and compare information and ideas obtained in a given format in Chinese, read two or more written texts (e.g. letters, articles, reports) and compare information and ideas obtained in a given format in Chinese and journal entry.

Prescribed themes and topics, and suggested sub-topics

Self and others	Tradition and change in the Chinese-speaking communities	Global issues
Personal world For example, personal qualities, relationships with family and friends, aspirations and expectations, significant experiences.	Lifestyles For example, rural and urban life, leisure activities, changing lifestyles, education, housing, impact of travel, extended and single child families.	Peace For example, causes of conflict, impact of war, ways of attaining and maintaining peace, the role of the individual.

Personal beliefs and ideals For example, personal priorities, views of an ideal world and views on issues, personal beliefs/views on religion.	Arts and entertainment For example, modern and traditional Chinese art, music and dance, mass media, modern and classical literature.	Human rights in the world today For example, freedom and democracy, roles of government and the individual, equality of rights, racism, rights to life.
Contributing to the community For example, community and voluntary work, caring for the environment/wildlife, sport and social groups.	Stories from the past For example, legends and myths, inventions, proberbs and idioms, religions in China, a significant period, ancient philosophers.	The nature and future of work For example, the impact of modern technology, the nature and causes of unemployment, urbanisation, work ethics.

Text Types

The student should be familiar with a wide range of text types. The following list is not intended to be exhaustive. It focuses instead on text types that the student may not be familiar with, and which consequently may require a particular teaching and learning emphasis.

Advertisement	Documentary (film/television)	Report
Autobiography	Editorial	Résumé/curriculum vitae
Biography	Formal correspondence	Brochure
Interview	Script(radio/television/film)	Short story
Commentary	Newspaper/magazine article	Speech
Critique/review	Poem	Summary/precis
Debate		Questionnaire/survey

Kinds Of Writing

The student is expected to be familiar with, and be able to produce, the following five kinds of writing: personal, imaginative, persuasive, informative and evaluative.

Pathways Plan:

Students must complete Pre-VCE Chinese or show equivalent learning in Chinese as a prerequisite for Unit 1&2 Chinese First Language. This subject can lead to VCE Unit 3&4 Chinese First Language.

Chinese Second Language VCE Unit 1&2

The Language

The language to be studied and assessed is the modern standard/official version of Chinese. For the purpose of this syllabus, Modern Standard Chinese is taken to be putonghua in the spoken form, and simplified character text in the written form. Throughout the Chinese-speaking communities, Modern Standard Chinese may also be known as Mandarin, Guoyu, Huayu, Hanyu, Zhongwen and Zhongguohua. By the end of Unit 4, students will be expected to be familiar with, and be able to read and write 420 characters.

Rationale

The study of Chinese develops students' ability to understand and use a language which is spoken by about a quarter of the world's population. There are many spoken varieties of Chinese, and Modern Standard Chinese is pre-eminent among these. It is the major language of communication in China, Taiwan and Singapore, and is widely used by Chinese communities throughout the Asia-Pacific region, including Australia. Chinese is widely spoken in Australia, and the study of it by Australians will contribute to the positive features of a culturally diverse society. The study of Chinese provides access to an important cultural and linguistic heritage. In conjunction with other skills, the ability to communicate in Chinese may provide opportunities for employment in areas such as tourism, technology, finance, services and business.

Unit 1

- On completion of this unit the student should be able to establish and maintain a spoken or written exchange related to personal areas of experience.
- On completion of this unit the student should be able to listen to, read and obtain information from spoken and written texts.
- On completion of this unit the student should be able to produce a personal response to a text focusing on real or imaginary experience.

Assessment: Reply to personal letter/email, listen to spoken texts (e.g. conversations, interviews, broadcasts) to obtain information to complete notes, charts or tables in Chinese or English, read written texts (e.g. extracts, advertisements, letters) to obtain information to complete notes, charts or tables in Chinese or English and an oral presentation.

Unit 2

- On completion of this unit the student should be able to participate in a spoken or written exchange related to making arrangements and completing transactions.
- On completion of this unit the student should be able to listen to, read, and extract and use information and ideas from spoken and written texts, and translate from characters into English.
- On completion of this unit the student should be able to give expression to real or imaginary experience in spoken or written form.

Assessment: Formal letter, listen to spoken texts (e.g. conversations, interviews, broadcasts) and reorganise information and ideas in a different text type, read written texts (e.g. extracts, advertisements, letters) and reorganise information and ideas in a different text type, and translate the original text(s) from characters into English and a short story.

Prescribed Themes And Topics, And Suggested Sub-Topics

The individual	The Chinese-speaking communities	The changing world
• Personal identity For example, appearance and personality, family, friends, relationships, home and neighbourhood, daily routine. • Education and aspirations For example, school life, facilities, rules and routines, subjects and exams, further education, future plans. • Recreation and leisure For example, sport, interests, shopping, eating out, entertainment, parties. • Travel experiences For example, holidays and sightseeing, travel plans and requirements, transport and accommodation	• History and culture For example, festivals and customs, legends and fables, famous people. • Schooling For example, school life, subjects, study habits, routine. • Lifestyles For example, leisure, sports, food types and cuisine, media, film, TV • Geography For example, places of interest in China (and the Chinese-speaking world), urban and rural life.	• Youth issues For example, entertainment, technology in daily life. • The world of work For example, work skills and gaining employment, occupations of the future. • Tourism and hospitality For example, the growing importance of tourism, the impact of tourism on Chinese people.

Text Types

The student will be expected to be familiar with the following text types. Text types indicated with an asterisk (*) are those which the student may be expected to produce in the external examination.

Advertisement*	Invitation*	Poem, song lyrics	Application
Journal entry*	Postcard*	Article*	etter*
Posters	Biography	List (menu/shopping/price)	
Public announcement	Brochures	Map (geographic/street/map/ legend)	
Cartoon	Public notice	Questionnaire	Chart
News item	Report*	Conversation*	Note/message*
Script for a speech/dialogue*	Diagram	Notice*	
Speech*	Diary entry*	Personal profile*	Story*
Discussion*	Photograph	Survey form	Graph
Plan/itinerary*	Table	Guide	Play
Travel guide	Instructions		

Kinds Of Writing

The student is expected to be familiar with, and be able to produce, the following five kinds of writing: personal, imaginative, persuasive, informative and evaluative.

Pathways Plan:

Students must complete Pre-VCE Chinese or show equivalent learning in Chinese as a prerequisite for Unit 1&2 Chinese Second Language. This subject can lead to VCE Unit 3&4 Chinese Second Language.

Global Politics

Global Politics is the study of the political, social, cultural and economic forces that shape interactions between state and non-state actors in the twenty-first century. It examines the interconnectedness of twenty-first century global citizens and the impact of globalisation on culture, language, human rights and the environment. Students will also gain insights into current global challenges, including human rights, people movements, development issues, weapons proliferation, environmental degradation, war and terrorism. While the focus of this study is the twenty-first century and current events, historical events, examples and illustrations may provide students with contextual understanding and may provide unique examples of the workings of the Australian political system.

VCE GlobaL Politics can lead to opportunities in a range of careers, including academia, management, and government. Students may also pursue occupations in corporate and private enterprises in fields such as journalism, law, research and politics.

Unit 1: The national citizen

In this unit students are introduced to the study of politics as the exercise of power by individuals, groups and nation-states. Students consider key concepts related to power and influence, types of power, political ideology and values, political involvement and active citizenship. The nature of and philosophical ideas behind democracy are studied, as well as the operation and nature of contemporary Australian representative democracy. Students examine the reasons why people seek political power, the characteristics of successful political activists and leaders, and the political ideas that motivate them. The ways in which political power is exercised and how that power is challenged and resisted by others is explored. Students also examine the role and influence of social and political movements as methods of organising political ideas and action.

Unit 2: The global citizen

This unit focuses on the contemporary international community. Students examine their place within this community through considering the debate over the existence of the 'global citizen'. In Area of Study 1 they explore the myriad ways their lives have been affected by the increased interconnectedness – the global threads – of the world through the process of globalisation. In Area of Study 2, students consider the extent to which the notion of an international community exists, and investigate its ability to manage areas of global cooperation and respond to issues of global conflict and instability.

Unit 3: Global actors

In this unit students investigate the key global actors in twenty-first century global politics. They use contemporary evidence to analyse the key global actors and their aims, roles and power. They develop an understanding of the key actors through an in-depth examination of the concepts of national interests and power as they relate to the state, and the way in which one Asia-Pacific state uses power within the region to achieve its objectives.

Unit 4: Global actors

In this unit students investigate key global challenges facing the international community in the twenty-first century. They examine and analyse the debates surrounding two ethical issues which are underpinned by the contested notion of global citizenship. They then evaluate the effectiveness of responses to these issues. Students also explore the context and causes of global crises, and consider the varying effectiveness of responses and challenges to solving them.

VET Music

Certificate II in Music provides students with the knowledge and skills that will enhance their employment prospects in the music industry. With additional training and experience, future employment outcomes may include professional musician, sound or studio engineer, writer or arranger, sales and merchandising personnel.

On successful completion of this VCE VET program, students are eligible for the award of CUS20109 Certificate II in Music and recognition of up to four units at Units 1 and 2 level.

Pathways: Students may then move onto Certificate III Music Production, which is a scored VET and contributes to a student's ATAR.

Instrumental Music Program

Can be taken by any student from Entry to Graduate of 2017

Instrumental Music Options

- Brass
- Woodwind
- Drums/Percussion
- Guitar
- Bass
- Piano
- Vocals Digital (DJ, Looping)
- Song Writing (Composition – Digital/Acoustic)
- African Percussion

Ensembles

- MAC Jazz
- Electric MAC Orchestra (E.M.O)
- Choir