Preparing Today for Tomorrow

A GUIDE TO VCE and VCAL

2018 Handbook

CREATE YOUR OWN FUTURE

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Booklet Contents

Part One— VCE and VCAL requirements

Part Two—Subject outlines

Corryong College offers the following subjects. They cannot all run and will be determined by student choice, staff availability and the need to protect known pathways.

VCE COURSE SELECTION

Subject

English Units 1 to 4

Studio Art Units 1 to 4

Biology Units 1 to 4

Chemistry Units 1 to 4

Product Design and Technology Units 1 to 4 (Metal or Wood)

Health & Human Development Units 1 to 4

History Units 1 to 4

LOTE Indonesian Units 1 to 4

Maths General Units 1 & 2

Maths Methods Units 1 to 4

Further Maths Units 3 & 4

Physical Education Units 1 to 4

Physics Units 1 to 4

Psychology Units 1 to 4

Visual Communication Units 1 to 4

ADDITIONAL COURSES

These courses are offered in addition to the VCE units and the students are enrolled with a different Institution, generally Wodonga Institute of TAFE.

Certificate II, Engineering (Metal Fabrication & Welding)

Certificate II, Furniture Studies

Certificate II Catering Operations (Food and Beverage)

*** Please note that the subject fees for the VET Courses are expensive and the fee must be paid before they can be enrolled with the TAFE Provider.**

VCE and VCAL POLICY STATEMENT 2018

INTRODUCTION

This document summarises the requirements for VCE students at this College. It combines Victorian Curriculum and Assessment Authority (VCAA) rules and Corryong College internal policies.

VCE Students should study, in detail, the VCE Course Selection Booklet issued at the information evening. In selecting their VCE Course, students should bear in mind the following requirements:

GRADUATION REQUIREMENTS

FOR VCE

To gain your VCE you need to satisfactorily complete at least 16 units, three of which must be English and three other level 3 & 4 Units. To apply for tertiary studies through VTAC, Units 3&4 English must be satisfactorily completed.

FOR VCAL

To be eligible for the award of the VCAL Foundation, Intermediate or Senior Certificates the program must contain:

A minimum of 10 credits.

A minimum of 2 VCAL unit credits, drawn from Numeracy & Literacy, Personal Development and Work Related Strands.

A minimum of 6 credits at the award level of VCAL enrolment, of which one credit must be for literacy and one credit must be for a VCAL Personal Development Skills Unit.

In the Literacy & Numeracy strand, at least one credit for literacy and one credit for numeracy.

In each of the three remaining strands, at least one credit in each.

At the VCAL Intermediate and Senior levels a minimum of one credit of a VET program in the industry specific skill strand must be included.

NOTE: Credits awarded for VCAL Foundation units cannot contribute to the award of a Senior VCAL.

All studies are organised into Units 1,2,3,4. Students would normally take Units 1 & 2 in Year 11 and Units 3 & 4 in Year 12. The most usual variation from this may be that some Year 12 students might choose to do some Unit 1 & 2 studies, or that a Year 11 student may apply to do one Unit 3/4 study, (with the approval of the Co-ordinator and subject teacher).

UNIT REQUIREMENTS

Units 1 & 2 - These assessment tasks are graded H,M,L and are not included in the students' official VCE results. They are part of the College's internal assessment/reporting and should be seen as preparation for Unit 3 & 4 SACs. There will be mid and end of year exams in most Year 11 subjects.

Units 3 & 4 - For each unit, there will be a number of SCHOOL ASSESSED COURSEWORK (SACs) tasks which will be set and assessed in school. In addition, some practical subjects will have SCHOOL ASSESSED TASKS (SATs). Both SACs and SATs will be graded H, M, L. The marks obtained are then moderated against the GAT and the grades obtained at the end of year exam in that subject. These form part of official VCE results and are used for tertiary selection purposes.

Students who miss such assessment because of illness, personal hardship or similar must provide documented evidence (e.g. Medical Certificate), before the VCE Committee will authorize a supplementary task.

Studio Art Units 1&2 and 3&4

Unit 1: Artistic inspiration and techniques

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

Examples of Assessments;

- Selection of folio exploratory work.
- Written reports, oral responses and short and extended responses.

Unit 2: Design exploration and concepts

This unit focuses on students establishing and using a design process to produce artworks. Students also develop skills in the visual analysis of artworks.

Examples of Assessments;

- A folio demonstrating students can create a number of artworks.
- Written reports, oral responses and short and extended responses.

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 to support the making of finished artworks in Unit 4.

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 required to visit at least two different exhibition spaces in their current year of study.*

Examples of assessment;

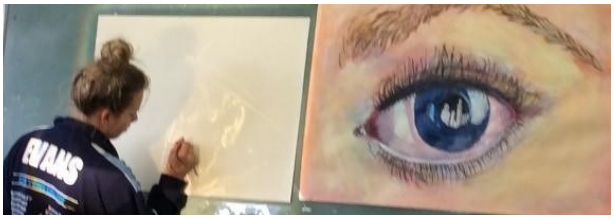
- A folio of visual responses.
- Written reports discussing art practice in relation to particular artworks of at least two artists and analysing ways in which artists develop their styles.

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. This unit also investigates aspects of artists' involvement in the art industry. *Students are required to visit at least two different exhibition spaces in their current year of study.*

Examples of assessment;

- Complete written tasks that examine the art industry and the exhibition of art works.
- At least two finished artworks with an evaluation of the studio processes through a cohesive folio.



Biology Units 1&2 and 3&4

Overview

Biology explores the dynamic relationships between organisms and their interactions with the non-living environment. It also explores the processes of life, from the molecular world of the cell to that of the whole organism, that maintain life and ensure its continuity. Students examine classical and contemporary research, models and theories to understand how knowledge in biology has evolved and continues to evolve in response to new evidence and discoveries.

Unit 1: How do Living Things Stay Alive?

Students examine the cell as the structural and functional unit of life, and the requirements for sustaining cellular processes. They analyse types of adaptations that enhance the organism's survival 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.

Unit 2: How is Continuity of Life Maintained?

Students focus on cell reproduction and the transmission of biological information from generation to generation. They examine the process of DNA replication and cell division. Students explore the mechanisms of asexual and sexual reproductive strategies. The role of stem cells in the differentiation, growth, repair and replacement of cells is examined. Students use chromosome theory and terminology from classical genetics to explain the inheritance of characteristics. They explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes.

Unit 3: How do Cells Maintain Life?

The two areas of study are:

How do cellular processes work*? Students* focus on the cell as a complex chemical system. They will learn about key cellular processes including protein synthesis, photosynthesis and cellular respiration, and analyse factors that affect the rate of biochemical reactions.

How do cells communicate? Includes the study of how cells receive specific signals that elicit a particular response. Students will apply the stimulus-response model to the cell in terms of the types of signals, receptors and the resultant response by an effector. This topic also looks at the molecular control by the immune system.

Unit 4: How Does Life Change and Respond to Challenges Over Time?

The three areas of study are:

How are species related? Students focus on changes to genetic material over time and the evidence for biological evolution.

How do humans impact biological processes? Students examine the impact of human culture and technological applications on biological processes.

Practical investigation; A student-designed or adapted investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4.

Units 1 – 4 Assessment

Assessment will include laboratory experimentation, microscopy, media reviews, tests and the end of year exams.

For Units 3 and 4 the percentage contributions to the study score are as follows:

Unit 3 School-assessed Coursework: 16 per cent. Unit 4 School-assessed Coursework: 24 per cent.

End-of-year examination: 60 per cent.

Chemistry Units 1&2 and 3&4

Overview; ***when studying Chemistry students will investigate how materials around us behave while developing an understanding of the atom, chemical bonding and reactions. These ideas can help a farmer understand how to mix chemicals safely, a nurse calculate the correct amount of medicine, a gardener understand plant growth or even a mechanic understand how to prevent rusting machinery. Completing experience will allow students to see the theory learnt in action.***

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. Students examine the modification of metals, assess the factors that affect the formation of crystals and investigate a range of non-metallic substances from molecules to polymers and giant lattice. They then relate their structure to specific application.

Unit 2: What makes water such a unique resource?

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 water molecules and the intermolecular forces between water molecules. Students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. Students are introduced to analytical techniques and instrumental procedures, and apply these to determine concentrations of different species in water samples, including chemical contaminants.

Units 1 and 2 Assessment; Satisfactory completion of a Unit will be based on whether a student has completed textbook questions, a range of experiments recorded in a logbook and chapter tests to understand the outcomes above. One assessment will be an extended investigation, where students will conduct their own experiment that further explores an area of interest from the topics covered in Unit 1 and 2.

Unit 3: Chemical Pathways

The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources, including fossil fuels, bio-fuels, galvanic cells and fuel cells. They investigate the combustion of fuels and calculate the amounts of energy released.

Examples of Assessment; 16% of study score.

There are two SACs that will be completed from either experiments, response to a media response, reflection of results from the student logbook or answering structural questions.

Unit 4: Chemistry at Work

The carbon atom has unique characteristics that explain the diversity and number of organic compounds that not only constitute living tissues but are also found in fuels, food, medicines and many more of the materials we use in everyday life. In this unit students investigate the structural features, bonding, typical reactions and uses of the major families of organic compounds including those found in food.

Examples of Assessment; 24% of study score.

There will be three SACs. Two are based on the textbook work and are similar to that described in Unit 3. the third is an extended investigation to explore one area of interest for Unit 3 or 4. this will be presented as a scientific poster.

Assessment for Units 3 & 4: Unit 3 SACs contribute 16%, Unit 4 SACs 24% and a single end of year exam worth 60% towards the student's study score.

English Units 1&2 and 3&4

Overview

The study of English contributes to the development of literate individuals capable of critical and creative thinking, aesthetic appreciation and creativity. This study also develops students' ability to create and analyse texts, moving from interpretation to reflection and critical analysis. Through engagement with texts from the contemporary world and from the past, and using texts from Australia and from other cultures, students studying English become confident, articulate and critically aware communicators and further develop a sense of themselves, their world and their place within it. English helps equip students for participation in a democratic society and the global community. This study will build on the learning established through AusVELS English in the key discipline concepts of language, literature and literacy, and the language modes of listening, speaking, reading, viewing and writing.

Unit 1

The focus of Outcome 1 is the production of analytical and creative responses to two texts. Outcome 2 focuses on analysing how argument and persuasive language can be used to position audiences, and to create an oral presentation intended to position audiences to a particular point of view.

- Completion of at least one analytical AND one creative response to the set text.
- An analysis of the use of argument and persuasive language in texts.
- An oral presentation intended to position an audience to the presenter's point of view

Unit 2

Outcome 1 for this unit focuses on comparing the presentation of ideas and issues and themes in two texts. Outcome 2 equips students to refine their skills in the identification and analysis of how argument and persuasive language are used in text/s that attempt to influence and audience, and the creation of a text which presents a point of view.

- Completion of a comparative analytical response to set texts.
- An analysis of the use of argument and persuasive language in texts.
- Construction of a persuasive text that presents an argument or viewpoint.

Unit 3

The focus of Unit 3 is the production of analytical and creative responses to two texts. Students also focus on analysing how argument and persuasive language can be used to position audiences.

- Completion of one analytical AND one creative response to two set texts.
- An written language analysis of an issue presented in the media from September 1 2017

Unit 4

In Unit 4, focuses on comparing the presentation of ideas and issues and themes in two texts. Students also refine their skills in the identification and analysis of how argument and persuasive language are used in text/s that attempt to influence and audience, and the creation of a text which presents a point of view.

- Completion of a comparative analytical response to two set texts.
- A persuasive speech that presents a point of view, accompanied by a written intention.

Health & Human Development Units 1&2 and 3&4

Unit 1: Understanding health and wellbeing.

In this unit students identify issues that impact on the health and wellbeing of Australia's youth as well Australia's Indigenous population. Data on health is analysed in order for students to enquire into reasons for variations in health status. Students investigate one health issue in detail and analyse personal, community and government strategies or programs that affect youth health and individual human development.

Examples of Assessment;

Assessment **choices** for Units 1 & 2 are from the following

- a data analysis
- a multimedia presentation
- a test

Unit 2: Managing health and development

In this unit the focus is on exploring transitions in health and well being from a lifespan perspective. Health literacy skills are promoted as well as investigating the Australian healthcare system and understanding health information.

Assessment is as above.

Unit 3: Australia's Health in a globalised world, with an emphasis on understanding health and well being as well as promoting.

Students will explore health and wellbeing in an Australian population as well as in a global context. The WHO prerequisites for health and wellbeing are analysed.

Examples of Assessment;

Assessment for the two outcomes is in the following form:

- Two tests which are known as SAC's

Unit 4: Health and human development in a global context.

Students will explore health and wellbeing, and human development in a global context. Health status data is used to investigate and analyse the burden of disease between and within countries. The health implications are considered with increased globalisation and trends relating to climate change, digital technologies as well as world trade and mass movement of people. A focus on the United Nations Sustainable Development Goals and the work of the World Health Organisation as well as Australia's overseas aid program are used to evaluate the effectiveness of health initiatives.

Examples of Assessment;

Assessment for the two outcomes is in the following form:

- Two tests which are known as SAC's

Please note: If Year 11 and 12 classes are run as a combined class, Year 11 students would complete a modified Year 12 course, covering topics in Units 3 and 4 with modified assessment tasks. They would then complete Units 3 and 4 in full in Year 12. If this occurs, Year 11 students would be required to purchase the Year 12 text.

History Units 1&2 and 3&4

Overview

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror. In these units students develop an understanding of the complexity and multiplicity of causes and consequences in the revolutionary narrative. They construct an argument about the past using primary sources as evidence and evaluate the extent to which the revolution brought change to the lives of people. They consider how perspectives of the revolution give an insight into the continuity and change experienced by those who lived through dramatic revolutionary moments. Students evaluate historical interpretations about the causes and consequences of revolution and the effects of change instigated by the new order.

Unit 3

In Unit 3 of History Revolutions, students study the French Revolution of 1789. Students analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements. They also investigate and analyse the consequences of revolution and evaluate the extent of change brought to society.

Unit 4

Unit 4 focuses on the study of the Russian Revolution of 1917. Once again, students learn about and analyse the causes of revolution, and evaluate the contribution of significant ideas, events, individuals and popular movements. Through research they analyse the consequences of revolution and evaluate the extent of change brought to society.

Please note: When Year 11 and 12 classes are run as a combined class, Year 11 students would complete a modified Year 12 course, covering topics in Units 3 and 4 with modified assessment tasks. They would then complete Units 3 and 4 in full in Year 12. If this occurs, Year 11 students are required to purchase the Year 12 text.

LOTE—Indonesia Units 1&2 and 3&4

Overview

The areas of study for Indonesian Second Language comprise themes and topics, grammar, text types, vocabulary and kinds of writing. They are common to all four units of the study, and they are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit. The themes and topics are the vehicle through which the student will demonstrate achievement of the outcomes, in the sense that they form the subject of the activities and tasks the student undertakes. In 2018, students of VCE Indonesian will be offered an opportunity to study the language in Indonesia.

Themes, topis and sub-topics; There are three prescribed themes: The individual, the Indonesian-speaking communities, and the changing world.

Unit 1:

In this Unit students learn to communicate in Indonesian about themselves; family, hobbies, travel and career.

Examples of Assessment

- Conversation
- Listening and reading tasks
- Written reviews, articles, short stories

Unit 2:

Students will choose and focus on an area of study which interests them; this is called the Detailed Study. Sub-topics which they could focus on include tourism, environment, youth or cultural traditions.

Examples of Assessment

- Interview
- Listening and reading tasks
- Written letter, editorials, reviews, reports.

Unit 3:

In this Unit students will learn about various topics related to Indonesian speaking communities and the changing dynamics in Indonesia, for example, women, health and social issues. They will learn how create short stories in Indonesian

Examples of Assessment

- Personal and imaginative written piece.
- Listening task
- Conversation

Unit 4:

Students will choose and focus on an area of study which interests them; this is called the Detailed Study. Sub-topics which they could focus on include tourism, environment, youth or cultural traditions.

Examples of Assessment

- Reading task
- Persuasive, informative , evaluative piece of writing
- Interview

MATHEMATICS Units 1&2 and 3&4

Note that students studying these units are required to purchase a TI-nspire CX CAS calculator and Math-o-mat = MHM*

General Maths Units 1&2

General Maths provides a general or business focus of Mathematics. The units involve the study of the following:

- Arithmetic
- Data analysis
- Algebra
- Graphs and Relations,
- Business related Mathematics,
- Geometry and Trigonometry

General Mathematics provides courses of study for a broad range of students and may be implemented in a number of ways. Some students will not study Mathematics beyond General Mathematics Units 1 and 2, while others will intend to study Further Mathematics Units 3 and 4.

Examples of Assessment;

- Tests
- Short written responses
- Problem-solving tasks
- Mathematical investigations

Further Maths Units 3&4

Overview;

Further Mathematics extends the work developed in Unit 1 & 2 General Maths and provides a general focus of Maths. It consists of two compulsory areas of study: Data Analysis and Financial maths and a selection of two from six modules in the applications area of study including Matrices, Networks and decision mathematics, Geometry & measurement, Graphs and relations.

The appropriate use of technology to support and develop the teaching and learning of mathematics is to be incorporated throughout the course. This will include the use of some of the following technologies for various areas of study or topics: graphics calculators, spreadsheets, graphing packages.

Assessment;

Application task: A data analysis application task with several components of increasing complexity. Teachers will choose appropriate contexts from within a specified data set. All outcomes will be covered by components of the task.

3 modelling or problem solving tasks one in unit 3 and 2 in unit 4

End of year exams (2): Each exam is worth 33%

Examination 1: 1½ hours multiple choice with calculator.

Examination 2: 1½ hours, short answer with calculator and bound book .

Mathematical Methods Units 1&2 and 3&4

Units 1 and 2;

Maths Methods Units 1 & 2 gives students a grounding to prepare them for Units 3 & 4 Maths Methods (CAS) and Specialist Maths. These units involve the study of

- Functions and graphs
- Algebra
- Probability

  Rates of change and calculus

In these units, the course uses computer algebra system (CAS) technology to support and develop the learning of mathematics.

Examples of Assessment;

- Tests
- Short written responses
- Problem-solving tasks
- Mathematical investigations

Units 3 and 4;

Mathematical Methods (CAS) Units 3 and 4 consists of the following areas of study: functions and graphs, calculus, algebra and probability. These areas must be covered in progression from Unit 3 to Unit 4.

Mathematical Methods (CAS) Units 1 & 2 are prerequisites, as an assumed knowledge and skills level are essential for the study of Mathematical Methods (CAS) Units 3 & 4

The appropriate use of CAS technology is to be incorporated throughout the course to support and develop the teaching and learning of mathematics. This will include the use of computer algebra technology to assist in the development of mathematical ideas and concepts, the application of specific techniques and processes to produce required results and its use as a tool for systematic analysis in investigative, problem-solving and modelling work. Other technologies such as spreadsheets, dynamic geometry systems or statistical analysis systems may also be used as appropriate for various topics from within the areas of study.

Students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, algebraic manipulation, equation solving, graph sketching, differentiation and integration with and without the use of technology, as applicable. Students should be familiar with relevant mental and by hand approaches in simple cases.

Unit 3 Assessment;

- A function and calculus application task with several components of increasing complexity over 1-2 weeks – 17%

Unit 4 Assessment;

- 2 modelling or problem solving tasks each 2-3 hours over 1week per task – 17%

End of Year exams

- Exam 1 – 1 hour, Technology free – 22%
- Exam 2 – 2 hours, - 44%

**** Please Note: It is essential that students studying these units purchase a TI-nspire CX CAS calculator and a Math-o-mat = MHM****

Physical Education Units 1&2 and 3&4

Overview;

VCE Physical Education examines the biological, physiological, psychological, social and cultural influences on performance and participation in physical activity. The study enables the integration of theoretical knowledge with practical application through participation in physical activities.

Unit 1: The human body in motion.

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

Unit 2: Physical activity, sport and society

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

Unit 3: Analysis of Movement and Energy Production

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport. Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the causes of fatigue and consider different strategies used to postpone fatigue and promote recovery.

Unit 4: Training to Improve Performance

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

Physics Units 1&2 and 3&4

Unit 1;

Area of Study 1: Investigate the thermodynamic principles related to heating processes, including concepts of temperature, energy and work. Examine the environmental impacts of Earth's thermal systems and human activities with reference to the effects on surface materials, the emission of greenhouse gases and the contribution to the enhanced greenhouse effect

Area of Study 2: Investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, and describe the safe and effective use of electricity by individuals and the community.

Area of Study 3: Explore the nature of matter, and consider the origins of atoms, time and space. Examine the currently accepted theory of what constitutes the nucleus, the forces within the nucleus and how energy is derived from the nucleus. Explain the origins of atoms, the nature of subatomic particles and how energy can be produced by atoms.

Unit 2;

Area of Study 1: Observe motion and explore the effects of balanced and unbalanced forces on motion. Analyse motion using concepts of energy, including energy transfers and transformations, and apply mathematical models during experimental investigations of motion. Model how the mass of finite objects can be considered to be at a point called the centre of mass.

Area of Study 2: Twelve options are available for selection in Area of Study 2

Area of Study 3; Practical investigation; designed and ran by students under guidance related to knowledge and skills developed in Area of Study 1 and/or Area of Study 2. A practical logbook must be maintained by the student for recording, authentication and assessment purposes.

Unit 3;

Area of Study 1; In this area of study students examine the similarities and differences between three fields: gravitational, electric and magnetic. Explore how positions in fields determine the potential energy of an object and the force on an object. Investigate how concepts related to field models can be applied to construct motors, maintain satellite orbits and to accelerate particles

Area of Study 2; Use empirical evidence and models of electric, magnetic and electromagnetic effects to explain how electricity is produced and delivered to homes. Explore magnetic fields and the transformer as critical to the performance of electrical distribution systems.

Area of Study 3; Use Newton's laws of motion to analyse relative motion, circular motion and projectile motion. At very high speeds, however, these laws are insufficient to model motion and Einstein's theory of special relativity provides a better model. Students compare Newton's and Einstein's explanations of motion and evaluate the circumstances in which they can be applied. They explore the relationships between force, energy and mass.

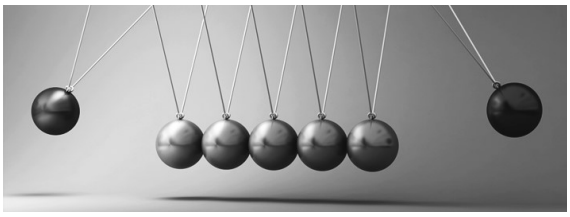
Physics Units 1&2 and 3&4 continued…

Unit 4;

Area of Study 1: Use evidence from experiments to explore wave concepts in a variety of applications. Wave theory has been used to describe transfers of energy, and is important in explaining phenomena including reflection, refraction, interference and polarisation.

Area of Study 2: Explore the design of major experiments that have led to the development of theories to describe the most fundamental aspects of the physical world – light and matter.

Area of Study 3: A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4.



Product Design and Technology Units 1&2 and 3&4

Aims;

This study enables students to:

- Understand design practice and product development
- Generate and communicate multiple creative ideas
- Explore and determine characteristics of materials
- Examine methods of processing and producing materials
- Examine the social, economic and environmental implications of materials
- Apply the appropriate safe methods of working with materials, tools and equipment to produce a model
- Apply project management techniques of time and sequence
- Analyse and evaluate production activities and product design
- Understand the requirement for ethical and environmental considerations involved in designing for the broader community

Structure;

This study is made up of four units:

Unit 1: Product re-design and sustainability

Unit 2: Collaborative design

Unit 3: Apply the product design process

Unit 4: Product development and evaluation

Work Requirements;

All Units will produce:

- A Design Folio
- A production item
- Theory requirements will vary depending on the Unit studied.

Psychology Units 1&2 and 3&4

Overview

VCE Psychology provides students with a framework for exploring the complex interactions between biological, psychological and social factors that influence human thought, emotions and behaviour. In undertaking this study, students apply their learning to everyday situations including workplace and social relations. They gain insights into a range of psychological health issues in society.

In VCE Psychology students develop a range of inquiry skills involving practical experimentation and research, analytical skills including critical and creative thinking, and communication skills. Students use scientific and cognitive skills and understanding to analyse contemporary psychology-related issues.

Unit 1: How are behaviour and mental processes shaped?

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 will understand research methods and the effect of damage to the brain, psychological development and the concept of normality. Students are also required to undertake a research investigation guided by the teacher.

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

Students will examine sensation and perception, social cognition and influences on behaviours. Students are required to complete a research investigation.

- Research Investigation
- Media Response
- Test
- Essay
- Debate/Socratic Seminar
- Scientific Poster

Unit 3: How does experience affect behaviour and mental processes?

This unit develops student understanding of the biological basis of behaviour. It explores the role of the nervous system in understanding human behaviour, stress as an example of the psychobiological process, neural basis of learning and memory and the process and reliability of memory.

Unit 4: How is wellbeing developed and maintained?

This unit includes the study of the nature of consciousness, the importance of sleep including the effects of sleep disturbances, mental health disorders, approaches to mental health that include biological, social and psychological factors. Students will be required to undertake a practical research investigation on any of the topics studied in Unit 3 & 4.

Students will complete Assessment tasks for Units 3 & 4

- Report on empirical research activity
- Media Response
- Response to a structured set of questions
- Annotations of practical activities from a practical logbook
- Comparison of different states of consciousness
- One *End of year* exam covering Units 3 & 4

Visual Communication Design
Units 1&2 and 3&4

***Overview:** Visual Communication Design examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. This includes developing a variety of drawing skills to visualise thinking and to present possible solutions. Manipulating design elements and principles and experimenting with various media, materials and methods of production.*

Unit 1: Introduction to visual communication design

A folio that demonstrates the ability to:

- Draw for different purposes using a range of drawing methods, media and materials.
- Select and apply the design elements and design principles to create visual communications that satisfy stated purposes.
- Investigate and describe how visual communications in a design field have been influenced by past and contemporary practices, and by social and cultural factors.

Unit 2: Applications of visual communication within design fields

A folio that demonstrates the ability to:

- Create presentation drawings that incorporate relevant technical drawing conventions, and effectively communicate information and ideas for a selected design field; including environmental and industrial design.
- Manipulating type and images to create visual communications suitable for print and screen-based presentations.
- Explore the stages of the design process to create a visual communication appropriate to a given brief.

Unit 3: Visual communication design practices

- A drawing folio that demonstrates the ability to create visual communications for specific contexts, purposes and audiences that are informed by their analysis of existing visual communications in the three design fields.
- A written or oral report discussing the practices of a contemporary designer from each of the design fields and explain factors that influence these practices.
- **Commencement of the SAT Folio:** preparing a brief with two communication needs for a client, undertaking research and generating a range of ideas relevant to the brief.

Unit 4: Visual Communication design development, evaluation and presentation

Completion of the design development process (SAT Folio) commenced in Unit 3:

- Development of distinctly different concepts for each communication need specified in design brief.
- Devise a pitch to present concepts to an audience, evaluating the extent to which these concepts meet the requirements of the brief.
- Produce a final visual communication presentation for each communication need that satisfies the requirements of the brief.

Certificate II in Engineering Studies

Overview

This two-year course aims to:

Provide the skills, knowledge and attitudes to perform entry-level roles across the four main areas of Engineering-fabrication, electrical/electronics, production and mechanical. This course prepares students for entry level training in the Engineering/Manufacturing Industries. Enhance prospects of employment and enable informed choices related to future careers.

Examples of some Modules in the Course

- Occupational health and safety
- Development of a career plan
- Basic machining operations
- Basic fabrication techniques
- Computers in engineering
- Hand and power tools
- Engineering sketches and drawings
- Basic computational principles

Workplace Learning

At least 12 days on the job training should be taken in this course, depending on the student's background.

Work placements are usually organized for the last week of each term.

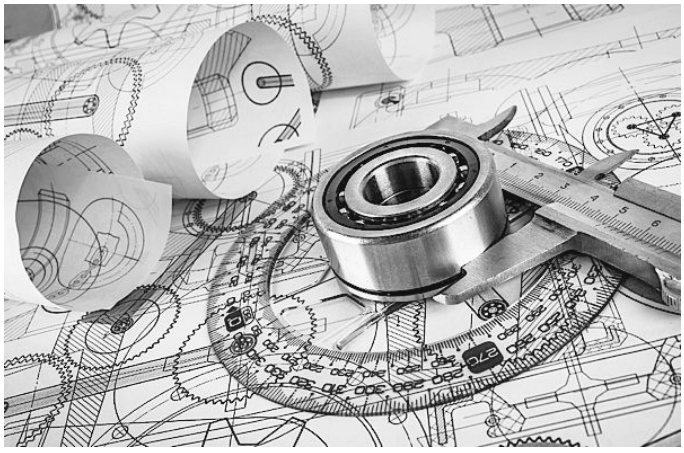
This course prepares students for entry level training in the Engineering/Manufacturing Industries.

CONTRIBUTION TO

VCAL: This program contributes to the Industry Specific Skills Strand and/or Work Related Skills Strand.

VCE: On completion, students will be eligible for four units of credit towards their VCE: Two units at Units 1 & 2 and two at Units 3 & 4.

ATAR: Scored assessment is available for this program.



VCE VET Furnishing

Overview;

The VCE VET furnishing program aims to;

Provide participants with the knowledge and skills that will enhance their employment prospects in the furniture and related industries. It also enable participants to gain a recognised credential and to make a more informed choice of vocation or career paths.

Units 1 & 2;

- Develop a career plan for furnishing industry
- Participate in environmentally sustainable work practices
- Demonstrate care and apply safe practices at work
- Organise and communicate information
- Select and apply hardware
- Prepare surfaces
- Join materials used in furnishing
- Make simple timber joints

Units 3 & 4;

- Use furniture making sector hand and power tools
- Assemble furnishing components
- Undertake a basic furniture making project
- Make measurements and calculations

Practical Projects

- Each student makes four items over the two year course.

Certificate II in Hospitality

Course Overview;

Students who successfully complete first year are awarded Certificate II in Hospitality. Students who successfully complete the second year are awarded credits toward Certificate IV in Hospitality. This two-year program aims to provide access to a range of potential career paths within the hospitality industry.

Examples of Some Units in the Course;

First Year – provides an overview of the hospitality industry: focusing on skills required to work in an industrial kitchen. There are 13 units to be studied and some of these are;

- Follow workplace hygiene procedures
- Interact with customers
- Clean and maintain premises
- Organize and prepare food

Second Year – the focus is on food and beverage service: for example...

- Prepare and serve non-alcoholic drinks
- Serve food and beverage to customers
- Responsible Service of Alcohol
- Prepare and Serve Espresso Coffee

Course Timing; Hospitality is offered to Years 10 & 11 students at the College. **It is delivered outside school hours, and costs $150 for the course.**

Workplace Learning; To complete the certificate the College operates a training restaurant which provides chefs and wait staff knowledge and skills in a range of dining experiences. Breakfast, High Tea, Degustation, Espresso Coffee. Students at Year 10 level run the kitchen while Year 11 students learn the skills and knowledge required to work "front of house". **This course is delivered out of school hours as well as on weekends and the April and September school holidays.** The busiest times of this program which impacts on weekends and holidays is also the busiest time in Corryong with tourists coming to the area. All money raised goes back into paying for training for students. Students do a Mocktail and Espresso course in Melbourne, Espresso training by Nikki McIntosh from Zoi Coffee in Albury through Wodonga TAFE and Responsible Service of Alcohol.

Hospitality and the VCE Program; This VET course is classified as a Group B VCE Study. Students who successfully complete both years of the course are eligible for:

- 4 VCE units – two at unit 1 & 2 level and two at unit 3 & 4 level.

  Students may elect to do the VET Hospitality exam and may use the study score to contribute to their ATAR score.

This Program May Lead To:

- Employment: This program provides background knowledge and skills associated with employment in the hospitality industry. For example, kitchen hand, waiting, bar work, apprentice chef, barrista.
- Tertiary Studies: It provides a foundation of theory and practice for further study at a diploma or degree level in the hospitality field.

School Based Apprenticeships (SBA)

If you want to complete your VCE or VCAL and also start a career, this is the ideal situation.

Part time apprenticeships mean flexible training, experience and a nationally recognised qualification and are available in the following fields.

- Arts and media
- Automotive trades
- Building and construction
- Education
- Engineering
- Financial services
- Health and community services
- Information technology and telecommunications
- Metals and engineering
- Multimedia
- Retail
- Rural and horticulture
- Sport and recreation
- Tourism and hospitality

Training can be on-the-job, off-the-job, or a combination of both. Off-the-job training is provided by TAFE colleges, business colleges or other approved training organisations.

Traditionally, apprenticeships took up to four years to complete and traineeships one and two years. SBAs are now 'competency based' which means you can complete your training faster if you reach the required skill level.

One of the many advantages of an SBA is that you earn a wage as you train. Your training wage will depend on the industry you are working in, the type of SBA and the level of schooling and training you have completed.

The best way to find an SBA is to search the advertised job vacancies and by contacting employers in industries where you would like to work. The key point is that you will need to find an employer who is willing to employ you on a part time basis that can be made fit in with your selected VCE/VCAL studies.

- ***The student must be prepared to catch up on any school work missed.***
- ***Corryong College prefers this day to be arranged for Wednesday.***