



Kyabram
P-12 COLLEGE

2023 Victorian Certificate of Education

Contents

Arts Discipline	4
Drama -Subject Code: DRA	5
Music Performance -Subject Code: MUS	7
Art Making and Exhibiting (Studio Arts) Subject Code: AME (Studio Arts)	9
Visual Communication and Design- Subject Code: VIS	11
English Discipline	13
English- Subject Code: ENG	14
English Language- Subject Code: ENL	15
Literature- Subject Code: LIT	16
Health and Physical Education Discipline	17
Health and Human Development- Subject Code: HHD	18
Outdoor and Environmental Studies – Subject Code: OES	20
Physical Education- Subject Code: PED	22
Humanities Discipline	24
Accounting- Subject Code: ACC	25
Business Management - Subject Code: BUS	26
Geography - Subject Code: GEO	28
History- Subject Code: HIS	29
Legal Studies- Subject Code: LEG	30
Mathematics Discipline	31
General Mathematics Units 1 & 2 (Year 11)	32
General Mathematics Units 3 & 4 (Year 12) Subject Codes: General Maths: MGE	32
Mathematical Methods CAS Units 1 & 2 (Year 11)	33
Mathematical Methods CAS Units 3 & 4 (Year 12) Subject Code : MME	33
Specialist Mathematics Units 1 & 2 (Year 11)	34
Specialist Mathematics Units 3 & 4 (Year 12) Subject Code: MSP	34
Science Discipline	35
Biology- Subject Code: BIO	36
Chemistry- Subject Code: CHE	38
Environmental Science - Subject Code: ENV	40
Physics- Subject Code: PHY	42
Psychology- Subject Code: PSY	44
Food Studies- Subject Code: FOO	47
Product Design and Technology- Subject Code: PDT	49
Systems Engineering- Subject Code: SYS	50

Victorian Certificate of Education – Vocational Major (VCE-VM)	51
Victorian Pathways Certificate (VPC) - Subject Code: VPC1 & VPC2	57
VET	62

Arts Discipline

For further information about subjects in the Arts Discipline, please contact the Collaborative Team Leaders:

Mr Kim Morrison: Kim.Morrison@education.vic.gov.au

Mrs Bridget Curling: Bridget.Curling@education.vic.gov.au

Mrs Lisa Stevens: Lisa.Stevens@education.vic.gov.au

Subjects Offered

- Drama Performance
- Music Performance
- Studio Arts
- Visual Communication and Design

Career Pathways

Art Styles

- Artistic Director
- Art Critic/ Writer
- Arts Administrator
- Arts and Cultural Planner
- Graphic Novel Author
- Fashion Consultant
- Art Historian/ Art Conservationist
- Courtroom Artist
- Website Writer
- Art Teacher

Drama Performance:

- Actor
- Announcer
- Artist Director
- Film Director
- Stage Designer/ Makeup Artist
- Lighting Technician/ Rigger
- Film Editor/ Camera Operator
- Performing Arts Teacher
- Dancer
- TV/ Radio Presenter/ Reporter
- Events Manager

Music Performance

- Performer/ Musician
- Music Arranger/ Composer
- Music Producer/ Publisher
- Music Teacher
- Promoter/ Band Manager
- Audio Engineer
- Songwriter
- Events Manager
- Music Programmer
- Record Producer
- Music Agent

Studio Arts

- Commercial Artist
- Architectural illustrator
- Fine Artist
- Photographer
- Photo Journalist
- Food Photographer
- Concept Artist
- Art Teacher
- Jeweller
- Urban Designer/ Town Planner
- Interior Designer
- Costume Designer
- Dress Maker

Visual Communication and Design

- Advertising Director
- Magazine Designer
- Landscape Architect
- Industrial Designer
- Packaging Designer
- Digital 3D Modeller
- Web Designer
- Video Game Designer
- Visual Arts Teacher

Drama -Subject Code: DRA

VCE Drama examines the art of performance and uses research to enhance the decision making process. Students work through a range of activities to explore stagecraft and research the use of stimulus material to inform practice in both group performance and solo performance. They investigate a range of stimulus material and learn about stagecraft, theatrical conventions and performance styles from a range of social and cultural contexts. This unit also involves analysis of a student's own performance work and analysis of a performance by professional practitioners.

Unit 1

Dramatic Storytelling

This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters, based on personal, cultural and/or community experiences and stories. Students examine storytelling through the creation of an ensemble performance/s and manipulate expressive skills in the creation and presentation of characters. They develop an awareness and understanding of how characters are portrayed in naturalistic and non-naturalistic performance style/s. Students also gain an awareness of how performance is shaped and given meaning.

Unit 2

Creating Australian Drama

This unit focuses on the use and documentation of the processes involved in constructing a devised solo performance. Students create, present and analyse a performance based on a person, an event, an issue, a place, an art work, a text and/or an icon from a contemporary or historical Australian context. Students use a range of stimulus material in creating performance and examine performance styles from a range of cultural and historical contexts. Theatrical conventions appropriate to the selected performance styles are also explored. Students knowledge of how dramatic elements are enhanced or manipulated through performance is further developed in this unit.

Unit 3

Ensemble Performance

The focus of this unit is on non-naturalistic drama. Students collaborate in the development of an ensemble performance, drawing on subject matter from a range of sources and using non-naturalistic styles from a range of traditions. Analysis and evaluation is focused on the development and realisation of the student's own character(s) in the ensemble, the development and presentation of the ensemble performance and also on a non-naturalistic performance from a prescribed play list.

Unit 4

Solo Performance

A solo performance based on a prescribed structure is developed, scripted and performed (external exam) by each student. They will also analyse and evaluate the processes involved in the preparation and realisation of their own solo work. There will be a written exam (external) at the end of the year, which includes aspects of both Units 3 and 4 work.

Outcomes and Assessment Tasks

- Performance Analysis tasks including watching a visiting performer
- Ensemble Performance in front of an audience
- Ensemble Analysis including workshop activities
- Rehearsal techniques for Group Ensemble
- Development of Solo Performance in front of an audience

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/drama/dramaindex.aspx>

Camps and Excursions:

Students attend an overnight camp in term 3 to refine their final solo performance and techniques.

Key Skills Developed

- To create, sustain and develop a role to communicate meaning.
- Explore performance styles from a range of historical, cultural and social contexts.
- Identify and effectively manipulate dramatic elements.
- Apply symbol and transformation of character, time and place.
- Identify and apply production areas appropriate to the selected performance styles.
- Document how a range of stimulus material can be researched and shaped into a performance.
- Document a devised performance.

Music Performance -Subject Code: MUS

VCE Music allows students to focus on the skills to become a performer and develop their skills in front of an audience. Students learn skills that enhance their performance ability and to make a connection with an audience. They study other musicians and work through a range of music styles that relate to their instrument in both solo and group ensembles. They learn to focus their craft and develop their understanding of musical language and elements of music during class activities.

Unit 1

Performance Skills

This unit focuses on building performance and musician skills. Students present performances of selected groups and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimize their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practice technical work to address these challenges. They also develop skills in performing previously unseen music.

Unit 2

Music Theory

Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances. 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

Instrumental Techniques

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.

Unit 4

Group/ Solo Performance

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.

Outcomes and Assessment Tasks

- Performance Practice including performance based activities
- Music Theory and understanding of musical language
- Group Ensemble Skills and working others to create a music performance
- Technical Assessments on your instrument
- Aural Listening tasks and assignments
- Development of a performance program
- Attend instrumental music lessons

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/music/musicindex.aspx>

Key Skills Developed

- To develop a performance program on an instrument or voice
- To use research to make decisions about how selected works can be interpreted, arranged and/or shaped in Performance
- To learn, practise, interpret and rehearse a program of group and solo works
- To perform a program of group and solo works
- To apply musicianship skills in performance to realise the structure and expressive qualities of the works

Art Making and Exhibiting (Studio Arts) Subject Code: AME (Studio Arts)

In VCE Art Making and Exhibiting, art making and the investigation of artworks is guided by inquiry learning. The first step is the engagement of students in the practices of art making, either through the exploration of ideas or through specific themes. Students investigate artworks by artists from different periods of time and cultures, and they explore how artists have used materials, techniques and processes, and how artists have represented ideas and communicated meaning in artworks. Students work with a range of materials to understand their characteristics and properties and how these have developed over time. Students also research specific art forms to develop their knowledge and skills in art making.

Unit 1

Explore, expand and investigate

In this unit students explore materials, techniques and processes in a range of art forms. They expand their knowledge and understanding of the characteristics, properties and application of materials used in art making. They explore selected materials to understand how they relate to specific art forms and how they can be used in the making of artworks. Students also explore the historical development of specific art forms and investigate how the characteristics, properties and use of materials and techniques have changed over time. Throughout their investigation students become aware of and understand the safe handling of materials they use.

Unit 2

Understand, develop and resolve

In Unit 2 students continue to research how artworks are made by investigating how artists use aesthetic qualities to represent ideas in artworks. They broaden their investigation to understand how artworks are displayed to audiences, and how ideas are represented to communicate meaning.

Students respond to a set theme and progressively develop their own ideas. Students learn how to develop their ideas using materials, techniques and processes, and art elements and art principles. They consolidate these ideas to plan and make finished artworks, reflecting on their knowledge and understanding of the aesthetic qualities of artworks. The planning and development of at least one finished artwork are documented in their Visual Arts journal.

Unit 3

Collect, extend and connect

In this unit students are actively engaged in art making using materials, techniques and processes. They explore contexts, subject matter and ideas to develop artworks in imaginative and creative ways. They also investigate how artists use visual language to represent ideas and meaning in artworks. The materials, techniques and processes of the art form the students work with are fundamental to the artworks they make.

Unit 4

Consolidate, present and conserve

In Unit 4 students make connections to the artworks they have made in Unit 3, consolidating and extending their ideas and art making to further refine and resolve artworks in -specific art forms. The progressive resolution of these artworks is documented in the student's Visual Arts journal, demonstrating their developing technical skills in a specific art form as well as their refinement and resolution of subject matter, ideas, visual language, aesthetic qualities and style. Students also reflect on their selected finished artworks and evaluate the materials, techniques and processes used to make them.

Outcomes and Assessment Tasks

- Exploration of studio processes and practice
- Researching design and artistic intent
- Preparing and presentation art proposals
- Understanding artistic ideas
- Understanding use of materials and techniques
- Development of a visual art folio

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/studioarts/studioindex.aspx>

Camps and Excursions

Students will attend excursions throughout the year at the SAM (Shepparton Art Museum) and Melbourne

Key Skills Developed

- To generate ideas and identify sources of inspiration and artistic influences.
- To progressively record the research and development of individual ideas in a visual diary.
- To use a variety of research methods to translate ideas, observations and experiences into a visual language.
- To select, create, organise and use visual reference material.
- To explore a range of art elements, art principles and aesthetic qualities in the studio process.
- To research subject matter appropriate to individual ideas in a visual diary.
- To discuss the characteristics of a range of art forms, including how materials, techniques and processes will be used in studio practice.

Visual Communication and Design- Subject Code: VIS

VCE Visual Communication Design allows students to develop technical understanding and skills in design elements and principals that relate to a context and purpose. Students build skills sets in technical drawing as well as computer assisted design to develop stronger understanding of design practice and product communication. Students undertake research into target audiences and purpose behind concept designs to promote the generation of ideas that then inform practice.

Unit 1

Introduction to visual communication design

This unit focuses on using visual language to communicate messages, ideas and concepts. Students will practise their ability to draw from observation and use visualisation drawing methods to explore their own ideas. Students will also develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications. Through both theoretical and practical exercises students will develop an understanding of how design elements and principles affect the visual message and the way information and ideas are read and perceived. Students will also research and review the contextual background of visual communication through an investigation of design styles.

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 will use presentation drawing methods that incorporate the use of technical drawing conventions to communicate ideas and information. They will also investigate how typography and imagery are used in visual communication design. Students will also develop an understanding of the design process, engaging in the stages of research, generation of ideas and development of concepts to create visual communications.

Unit 3

Design thinking and practice

The focus of this unit is for students to gain an understanding of the process that designers use to communicate ideas with clients, target audiences, other designers and specialists. Students will investigate and analyse existing visual communications, along with the investigation and experimentation of manual and digital methods, media and materials. Students will establish a design brief, identifying and describing one client, two distinctly different needs of that client, and the purpose, target audience, context and constraints relevant to each need. Students will then engage in the stages of research and generation of ideas. The brief and investigation work will underpin the developmental and refinement work to be completed in Unit 4.

Unit 4

Design development and presentation

The focus of this unit is the development of the design concepts and two final presentations of visual communications to meet the requirements of the brief established in Unit 3. This involves students applying the design process twice to meet each of the stated needs. Students will utilise a range of digital and manual methods, media and materials, considering how the application of design elements and principles created different communication messages to their target audience.

Outcomes and Assessment Tasks

- Research into audience profile
- Understanding concepts in design analysis
- Describing design elements and principles
- Drawing tasks designed to communicate ideas and concepts
- Development of visual communication in contexts
- Research into industry practices and processes
- Creation of a brief and formation of concepts to develop design ideas

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/visualcomm/vcommindex.aspx>

Camps and Excursions

Students will attend excursions throughout the year at the SAM (Shepparton Art Museum) and Melbourne.

Key Skills Developed

- To generate ideas and identify sources of inspiration and artistic influences.
- To progressively record the research and development of individual ideas in a visual diary.
- To use a variety of research methods to translate ideas, observations and experiences into a visual language.
- To select, create, organise and use visual reference material.
- To explore a range of art elements, art principles and aesthetic qualities in the studio process.
- To research subject matter appropriate to individual ideas in a visual diary.
- To discuss the characteristics of a range of art forms, including how materials, techniques and processes will be used in studio processes.

English Discipline

For further information about subjects in the English Discipline, please contact the Collaborative Team Leaders:
Mr Daniel Cloake: daniel.cloake@education.vic.gov.au

Subjects Offered

- English
- English Language
- English Literature

Career Pathways

- Publisher
- Writer
- Editor
- Publicist
- Journalist
- Teacher: Primary, Secondary, EAL, Early childhood
- Speech Pathologist

English- Subject Code: ENG

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.

Unit 1

In this Unit, students read and create texts. They explore how meaning is created in a text. Students analyse and present arguments. They focus on the analysis and construction of texts that attempt to influence an audience.

Unit 2

In this area of study, students develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing, to further open possible meanings in a text, and to extend their writing in response to text. Students will develop their skills from Unit 1 through an exploration of a different text type from that studied in Unit 1.

Unit 3

In this Unit, students identify, discuss and analyse how the features of selected texts create meaning and how they influence interpretation. Students analyse and compare the use of argument and language in texts that debate a topical issue.

Unit 4

In this Unit, students explore the meaningful connections between two texts. Students build their understanding of both the analysis and construction of texts that attempt to influence audiences.

Assessment Tasks

- an analytical response to a set text in written form
- a creative response to a set text such as a monologue, script, short story, illustrated narrative, short film or graphic text with a written explanation of decisions made in the writing process
- an analysis and comparison of the use of argument and persuasive language in texts
- a text intended to position an audience
- a comparative analytical response to set texts
- a persuasive text that presents an argument or viewpoint
- an analysis of the use of argument and persuasive language in text/s.

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/english/index.aspx>

Key Skills Developed

- | | |
|---------------------------|-----------------------------|
| • Communication | • Self-management |
| • Planning and organising | • Initiative and enterprise |
| • Teamwork | • Technology |
| • Problem-solving | • Learning |

English Language- Subject Code: ENL

VCE English Language explores the ways in which language is used by individuals and groups and reflects our thinking and values. Learning about language helps us to understand ourselves, the groups with which we identify and the society we inhabit.

Unit 1

Language and Communication

In this Unit, students explore the nature of language and the various functions language performs in a range of contexts. They focus on the developmental stages of child language acquisition.

Unit 2

Language Change

In this Unit, students examine the changes that have occurred in English over time. They consider the effects of the global spread of English by learning about both the development and decline of language as a result of English contact, the elevation of English as a global lingua franca and the cultural consequences of language contact.

Unit 3

Language Variation and Social Purpose

In this Unit, students consider the way speakers and writers choose from a repertoire of both formal and informal language to vary the style of their language to suit a particular social purpose.

Unit 4

Language Variation and Identity

In this Unit, students examine the range of language varieties that exist in contemporary Australian society and the contributions these varieties make to a construction of shared national identity. Students focus on the role of language in reflecting and constructing individual and group identities.

Assessment Tasks

- a folio of annotated texts
- an analytical commentary
- an essay
- a case study
- an investigative report
- short-answer questions
- an analysis of spoken and/or written text
- an analysis of data

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/englishlanguage/englangindex.aspx>

Key Skills Developed

- Communication
- Self-management
- Planning and organising
- Initiative and enterprise
- Teamwork
- Technology
- Problem-solving
- Learning

Literature- Subject Code: LIT

VCE Literature focuses on the meaning derived from texts, the relationship between texts, the contexts in which texts are produced and read, and the experiences the reader brings to the texts.

Unit 1

Approaches to Literature

In this Unit, students consider how language, structure and stylistic choices are used in different literary forms and types of text. Students investigate the ideas and concerns raised in texts and the ways social and cultural contexts are represented.

Unit 2

Context and Connections

In this Unit, students focus on the interrelationships between the text, readers and their social and cultural contexts. Students focus on the ways that texts relate to and influence each other.

Unit 3

Form and Transformation

In this Unit, students focus on how the form of a text contributes to the meaning of the text. Students focus on the imaginative techniques used for creating and recreating a literary work.

Unit 4

Interpreting Texts

In this Unit, students focus on how different readings of texts may reflect the views and values of both writer and reader. Students focus on detailed scrutiny of the language, style, concerns and construction of texts.

Assessment Tasks

- an essay (comparative, interpretive, analytical or discursive)
- a debate
- a reading journal
- a close analysis of selected passages
- an original piece of writing responding to a text/s studied
- an oral or a written review
- a multimedia presentation
- participation in an online discussion
- performance and commentary.
- An analysis of how the form of a text influences meaning
- A creative response to a text
- A reflective commentary establishing connections with the original text
- A written interpretation of a text using two different perspectives to inform their response
- A written interpretation of a text, supported by close textual analysis
- A written interpretation of a different text from Task 1, support by close textual analysis

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/literature/literatureindex.aspx>

Key Skills Developed

- | | |
|---------------------------|-----------------------------|
| • Communication | • Self-management |
| • Planning and organising | • Initiative and enterprise |
| • Teamwork | • Technology |
| • Problem-solving | • Learning |

Health and Physical Education Discipline

For further information about subjects in the Health and Physical Education Discipline, please contact the Collaborative Team Leaders:

Mr Daniel Cloake: daniel.cloake@education.vic.gov.au

Subjects Offered

- Health and Human Development
- Outdoor and Environmental Studies
- Physical Education

Career Pathways

Health and Human Development

- Health Promotion Officer
- Health Education
- Community Health Officer
- Family and Community Support
- Health Marketing
- Health and Sport Public Relations
- Health Policy Development
- Nutritionist
- Social Worker
- Nursing
- Teaching
- Health Psychologist
- Mental Health Nurse
- Health Surveyor
- Child care
- Welfare
- Drug and Alcohol Counsellor
- Youth Worker

Outdoor and Environmental Studies

- Environmental Management
- Coastal and Park Management
- National Parks and Wildlife Ranger
- Teaching
- Hospitality
- Eco Communications
- Ecotourism
- Environmental Science
- Outdoor Education and Camp Leader
- Outdoor Adventure Leader
- Conservation
- Environmental Policy and Sustainability
- Land Rehabilitation
- Pollution Control

Physical Education

- Sports Coaching
- Sport Psychology
- Sports Trainer
- Sports Massage
- Sports Management
- Exercise Science
- Bio mechanist
- Teaching
- Fitness Instructor
- Fitness Advisor
- Police Officer
- Armed Forces
- Physiotherapy
- Osteopathy
- Paramedic
- Nursing
- Health Promotion

Health and Human Development- Subject Code: HHD

The study of Health and Human Development is based on the premise that health is a dynamic condition that is influenced by complex interrelationships between individuals and biomedical and behavioural factors, as well as physical and social environments. Health and human development needs to be promoted at an individual level, and within group and community settings at national and international levels, to maximize global development potential.

The VCE Human Development study approaches the concept of ‘development’ as a continuum that begins with individual human development in Units 1 & 2, and progresses towards human development at a societal level in Unit 4. The study also promotes the understanding that nutrition plays a major role in influencing both health status and individual human development.

Unit 1

Understanding health and wellbeing

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization’s (WHO) definition and also explore other interpretations. Wellbeing is a complex combination of all dimensions of health, characterised by an equilibrium in which the individual feels happy, healthy, capable and engaged. For the purposes of this study, students should consider wellbeing to be an implicit element of health.

Unit 2

Managing health and development

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

Unit 3

Australia’s health in a globalised world

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right.

Unit 4

Health and human development in a global context

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

Outcomes and Assessment Tasks

Suitable tasks for assessment in this unit may be selected from the following:

- a short written report, such as a media analysis, a research inquiry, a blog or a case study analysis
- oral presentation, such as a debate or a podcast
- a visual presentation such as a graphic organiser, a concept/mind map, an annotated poster, a digital presentation
- structured questions, including data analysis.

Key Skills Developed

Written report – Planning and organising (collecting, analysing and organising information).

Oral presentation – Communicating (sharing information, speaking clearly and directly). Planning and organising (collecting, analysing and organising information).

Visual presentation - Planning and organising (collecting, analysing and organising information).

Technology (having a range of basic IT skills; using IT to organise data)

For more information on VCE HHD, please access the study design as

<http://www.vcaa.vic.edu.au/Documents/vce/hhd/HealthHumDevSD-2018.pdf>

Outdoor and Environmental Studies – Subject Code: OES

At Kyabram P – 12 College, Units 1 and 2 are offered at Year 10 and Year 11, and Units 3 and 4 are offered in Year 11 and Year 12. It is advised that you fast track this subject however it is only suggested. Each unit carries a levy. In addition to this, Outdoor and Environmental Studies students must meet the cost of practical activities and trips.

Outdoor and Environmental Studies is a study of the ways humans interact with and relate to natural environments. Natural environments are understood to include environments that have minimum influence from humans, but they may also include environments that have been subject to human intervention. Ultimately, the study is directed towards enabling students to make critically informed comment on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts.

Please note:

Practical Applications of Knowledge and Skills (PAKS) field trips are compulsory and may require students to be involved in some of the following activities: bush walking, rock climbing, canoeing, cross country skiing, orienteering, surfing, cycling and ecological and naturalistic pursuits. The activities offered each year vary according to staff expertise, availability and cost.

Unit 1

Exploring outdoor experiences

This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to, and experiences of, outdoor environments.

Unit 2

Discovering outdoor environments

This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the impact of humans on outdoor environments. In this unit students study the impact of nature on humans, and the ecological, social and economic implications of the impact of humans on outdoor environments. Students develop a clear understanding of the impact of technologies and changing human lifestyles on outdoor environments.

Unit 3

Relationships with outdoor environments

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of a range of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia.

Unit 4

Sustainable outdoor relationships

In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues relating to the capacity of outdoor environments to support the future needs of the Australian population.

Outcomes and Assessment Tasks

The major assessment task for this unit is a journal or report demonstrating links between theoretical content studied and practical experiences undertaken. Additionally, at least one task for assessment of each outcome is to be selected from the following:

- a case study
- an oral presentation including the use of multimedia and podcasts
- data analysis
- structured questions
- written responses, including essays and web discussion forums.

Camps and Excursions

Unit 1&2

Torquay Surf Camp - February

Canoe Trip – October

Units 3&4

Wilson's Prom – March

Bogong Snow Camp – August

The College can provide basic equipment such as coats, over pants, stoves, tents and sleeping mats. Students will be required to have access to appropriate lace up, leather walking boots, polypropylene thermal underwear and a 3-season sleeping bag. Equipment is discussed early in Unit 1 so students have the knowledge required to obtain the correct equipment. Parents are also provided with detailed information about equipment and clothing.

Key Skills Developed

Case study analysis - Communication (writing to the needs of the audience; reading independently), Planning and organising (collecting, analysing and organising information), Problem solving (applying a range of strategies)

Data analysis - Communication (writing to the needs of the audience; reading independently), Planning and organising (collecting, analysing and organising information), Problem solving (applying a range of strategies), Technology (using IT to organise data)

Journal or report of outdoor experiences - Communication (writing to the needs of the audience)
Problem solving (testing assumptions taking the context of data and circumstances into account; managing own learning), Planning and organising (collecting, analysing and organising information)
Technology (using IT to organise data)

Oral presentation - Communication (writing to the needs of the audience; sharing information; speaking clearly and directly), Planning and organising (collecting, analysing and organising information)

Written report - Communication (writing to the needs of the audience), Planning and organising (collecting, analysing and organising information), Problem solving (applying a range of strategies to problem solving)

Multimedia presentation - Communication (sharing information; speaking clearly and directly), Planning and organising (collecting, analysing and organising information), Technology (having a range of basic IT skills; using IT to organise data; being willing to learn new IT skills)

Physical Education- Subject Code: PED

VCE Physical Education explores the complex interrelationships between anatomical, biomechanical, physiological and skill acquisition principles to understand their role in producing and refining movement, and examines behavioural, psychological, environmental and sociocultural influences on performance and participation in physical activity. The assimilation of theoretical understanding and practice is central to the study of VCE Physical Education. Students participate in practical activities to examine the core concepts that underpin movement and that influence performance and participation in physical activity, sport and exercise. Through integrated physical, written, oral and digital learning experiences, students apply theoretical concepts and reflect critically on factors that affect all levels of performance and participation in sport, exercise and physical activity.

Unit 1

The human body in motion

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

Unit 2

Physical activity, sport and society

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

Unit 3

Movement skills and energy for physical activity

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

Unit 4

Training to improve performance

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

Outcomes and Assessment Tasks

For each unit, any of the following tasks can be used as assessment:

- a written report
- a practical laboratory report linking key knowledge and key skills to a practical activity or practical activities
- a case study analysis
- a data analysis
- a critically reflective folio/diary of participation in practical activities
- a visual presentation such as a graphic organiser, concept/mind map, annotated poster, presentation file
- a multimedia presentation, including two or more data types (for example, text, still and moving images, sound) and involving some form of interaction or simulation
- a physical simulation or model
- an oral presentation such as podcast, debate
- Structured questions.

Camps and Excursions

Local facilities will be accessed at times throughout the year.

Key Skills Developed

A folio of annotated texts - Communication (sharing information; writing to the needs of the audience), Self-management (evaluating and monitoring own performance), Learning (managing own learning; having enthusiasm for ongoing learning)

An essay - Communication (reading independently; writing to the needs of the audience), Planning and organising (collecting, analysing and organising information), Initiative and enterprise (generating a range of options; initiating innovative solutions; being creative), Learning (managing own learning; having enthusiasm for ongoing learning), Self-management (evaluating and monitoring own performance)

An investigative report - Communication (sharing information; writing to the needs of the audience; using numeracy), Planning and organising (collecting, analysing and organising information), Technology (using IT to organise data).

An analytical commentary - Communication (sharing information; writing to the needs of the audience; using numeracy), Planning and organising (collecting, analysing and organising information), Technology (using IT to organise data).

Short-answer questions - Communication (writing to the needs of the audience), Planning and organising (collecting, analysing and organising information), Learning (managing own learning).

Humanities Discipline

For further information about subjects in the Humanities Discipline, please contact the Collaborative Team Leaders:

Mr Daniel Cloake: daniel.cloake@education.vic.gov.au

Subjects Offered

- Accounting
- Business Management
- Geography
- History
- Legal Studies

Career Pathways

Business Studies

- | | |
|---|--|
| <ul style="list-style-type: none"> • Treasurer • Hotel manager • Economist • Copywriter | <ul style="list-style-type: none"> • Business Manager • Bank officer • Accountant |
|---|--|

Geography

- | | |
|--|---|
| <ul style="list-style-type: none"> • Cartographer • Civil engineer • Demographer • Ecologist • Farm manager | <ul style="list-style-type: none"> • Farmer • Geographer • Navy officer • Mine surveyor |
|--|---|

History

- | | |
|---|--|
| <ul style="list-style-type: none"> • Political scientist • Research officer • Writer • Lawyer • Journalist | <ul style="list-style-type: none"> • Historian • Editor • Librarian • Museum curator |
|---|--|

Accounting- Subject Code: ACC

VCE Accounting explores the financial recording, reporting, analysis and decision-making processes of a sole proprietor small business. Students study both theoretical and practical aspects of accounting. They collect, record, report and analyse financial data, and report, classify, verify and interpret accounting information, using both manual methods and information and communications technology (ICT).

Unit 1

Role of accounting in business

In this Unit, students investigate the reasons for establishing a business and possible alternatives to operating a business. Students investigate the role of accounting in generating financial data and accounting information.

Unit 2

Accounting and decision-making for a trading business

In this Unit, students investigate the use of both the First-In, First-Out and Identified Cost inventory cost assignment methods to record and report the movement of inventory through the business. Student's record and report transactions relating to accounts receivable and accounts payable. Students develop an understanding of the accounting process for non-current assets and the issues that can arise when determining a valuation for a non-current asset

Unit 3

Financial accounting for a trading business

In this Unit, students focus on identifying and recording financial data for a business. Students develop their understanding of the accounting processes and complete those processes that are applicable to the end of a reporting period for a trading business.

Unit 4

Recording, reporting, budgeting and decision-making

In this Unit, students further develop their understanding of the recording and reporting of financial data in the General Journal and General Ledger by focusing on balance day adjustments and the alternative methods of depreciating for non-current depreciable assets. Students prepare and analyse budgeted accounting reports, both manually and using ICT, and suggest strategies to improve the performance of the business.

Assessment Tasks

- a folio of exercises (manual methods and ICT)
- structured questions (manual methods and ICT)
- an assignment including use of ICT
- a case study including use of ICT
- a classroom presentation including use of ICT
- a feasibility investigation of a business venture including use of ICT.

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/account/accountindex.aspx>

Key Skills Developed

- the ability to gather, organise, analyse and synthesise information
- working collaboratively
- analyse and evaluate
- appreciate a range of diverse viewpoints

Business Management - Subject Code: *BUS*

VCE Business Management examines the ways businesses manage resources to achieve objectives. The VCE Business Management study design follows the process from the initial idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure continued success of a business. Students develop an understanding of the complexity of the challenges facing decision makers in managing businesses and their resources.

Unit 1

Planning a Business

In this Unit, students explore the factors affecting business ideas and the internal and external environments within which businesses operate, as well as the effect of these on planning a business. They also consider the importance of the business sector to the national economy and social wellbeing.

Unit 2

Establishing a business

In this Unit, students examine the legal requirements that must be met 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 management practices by applying key 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 considerations for managing a business efficiently and effectively to achieve business objectives. Students examine different types of businesses and their respective objectives and stakeholders. They investigate strategies to manage both staff and business operations to meet business objectives, and develop an understanding of the complexity and challenge of managing businesses. Students compare theoretical perspectives with current practice through the use of contemporary Australian and global business case studies from the past four years.

Unit 4

Transforming a business

In this Unit, 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 effective management and leadership in change management. Using one or more contemporary business case studies from the past four years, students evaluate business practice against theory.

Assessment Tasks

- a case study analysis
- a business research report
- development of a business plan and/or feasibility study
- an interview and a report on contact with business
- a school-based, short-term business activity
- a business simulation exercise
- an essay
- a business survey and analysis
- a media analysis.

For additional information, please visit the link below to access the Study Design

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

Key Skills Developed

- the ability to gather, organise, analyse and synthesise information
- working collaboratively
- interpret, discuss, compare and evaluate business information
- propose, justify and evaluate management strategies
- apply business management knowledge to a range of practical or simulated business situations
- analyse case studies and contemporary examples

Geography - Subject Code: GEO

Geography is the study of the world around us. Students of Geography develop an appreciation for natural and human environments and critique the ways in which they are managed on a local, regional, national and global scale.

Unit 1

Hazards and Disasters

In this Unit, students investigate a range of environmental hazards and disasters and their impact. Students explore the nature and effectiveness of specific responses to hazards and disasters.

Unit 2

Tourism

In this Unit, students examine the characteristics of tourism, the location and distribution of different types of tourism and tourist destinations and the factors affecting different types of tourism. Students explore the environmental, economic and socio-cultural impacts of different types of tourism.

Unit 3

Changing the Land

In this Unit, students explore the processes and impacts of land use change. Students undertake an overview of global land cover and changes that have occurred over time.

Unit 4

Human Population – Trends and Issues

In this Unit, students undertake an overview of world population distribution and growth before investigating the dynamics of population change over time and space. Students undertake investigations into two significant population trends that have developed in different parts of the world.

Assessment Tasks

- a fieldwork report of approximately 1500–2000 words
- structured questions
- a case study
- a report
- a multimedia presentation
- analysis of geographic data

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/geography/geogindex.aspx>

Camps and Excursions

Various camps and excursions for data collection

Key Skills Developed

- Problem-solving
- Planning and organization
- Communication (written and oral)
- Use of ICT
- Initiative and enterprise (including teamwork)
- Self-management

History- Subject Code: HIS

History is the study of the past. Students of History investigate crucial events in the history of the world and assess their impact on our own lives. History students also investigate the study of history itself – looking into the way in which historical texts are constructed and developing strategies for critically appraising source material.

Unit 1 and 2

Empires – The Russian Empire (1552 – 1894) and The Qing Dynasty (1644 – 1911)

In these Units, students explore the rise of the Empires, considering the significant features of its development and expansion. Students analyse the challenges and changes faced by the Empires and evaluate the consequences of its expansion and how they were able to maintain and consolidate power.

Units 3 and 4

Revolutions – Russia and China

In these Units, students analyse the long-term causes and short-term triggers of revolution. They evaluate how revolutionary outbreaks are caused by the interplay of significant events, ideas, individuals and popular movements and assess how these were directly or indirectly influenced by the social, political, economic and cultural conditions. Students analyse the consequences of the revolution and evaluate the extent to which it brought change to society.

Assessment Tasks

- a historical inquiry
- an analysis of primary sources
- an analysis of historical interpretations
- an essay.

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/history/revolutions/revolutionindex.aspx>

Key Skills Developed

- Problem-solving and self-discipline
- Planning and organisation
- Communication (written and oral) and teamwork
- Use of ICT

Legal Studies- Subject Code: LEG

VCE Legal Studies investigates the ways in which the law and the legal system relate to and serve individuals and the community. Students examine the processes of law-making, dispute resolution and administration of justice in Australia. Students develop an understanding of the impact of the legal system on the lives of citizens, and the implications of legal decisions and outcomes on Australian society.

Unit 1

Guilt and liability

In this Unit, students develop a foundational knowledge of laws and the Australian legal system. Students develop an understanding of key concepts in criminal law and types of crime, and investigate two criminal offences in detail. Students develop an understanding of key concepts in civil law and investigate two areas of civil law in detail.

Unit 2

Sanctions, remedies and rights

In this Unit, students investigate key concepts in the determination of a criminal case, including the institutions that enforce criminal law, and the purposes and types of sanctions and approaches to sentencing. Students develop an appreciation of key concepts in the resolution of a civil case, including the methods used and institutions available to resolve disputes and the purposes and types of remedies. Students examine the ways in which rights are protected in Australia and compare this approach with that of another country.

Unit 3

Rights and justice

In this Unit, students explore the criminal justice system, its range of personnel and institutions and the various means it uses to determine a criminal case. Students consider the factors relevant to commencing a civil claim, examine the institutions and methods used to resolve a civil dispute and explore the purposes and types of remedies.

Unit 4

The people and the law

In this Unit, students examine the relationship between the Australian people and the Australian Constitution and the ways in which the Australian Constitution acts as a check on parliament law-making. Students investigate factors that affect the ability of parliament and courts to make law.

Assessment Tasks

- a folio of exercises
- structured questions
- a classroom presentation
- a role-play
- a debate
- a report in written format
- a question-and-answer session
- an essay

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Pages/vce/studies/legalstudies/legalindex.aspx>

Camps and Excursions

- Loddon Prison, Castlemaine

Key Skills Developed

- Planning and organisation
- Teamwork and Communication
- Problem Solving
- Initiative
- ICT

Mathematics Discipline

For further information about subjects in the Mathematics Discipline, please contact the Collaborative Team Leaders:

Mr Kim Morrison: Kim.Morrison@education.vic.gov.au

Mrs Bridget Curling: Bridget.Curling@education.vic.gov.au

Mrs Lisa Stevens: Lisa.Stevens@education.vic.gov.au

Subjects Offered

Year 11

General Mathematics, Units 1 and 2

Mathematical Methods, Units 1 and 2

Specialist Mathematics, Units 1 and 2

Year 12

General Mathematics, Units 3 and 4

Mathematical Methods, Units 3 and 4

Specialist Mathematics, Units 3 and 4

Career Pathways

General Mathematics

- Trades and apprenticeships
- Teacher: Primary, Secondary, EAL, Early childhood
- Nursing
- Statistical Analysis
- Financial Services

Mathematical Methods

- Science careers
- Engineering
- Teaching: Mathematics
- Computer Sciences
- ICT careers
- Statistical analysis and modelling

Specialist Mathematics

- Science careers
- Engineering
- Teaching: Mathematics
- Computer Sciences
- ICT careers
- Statistical analysis and modelling

General Mathematics Units 1 & 2 (Year 11)

General Mathematics Units 3 & 4 (Year 12) Subject Codes: General Maths: MGE

It is recommended all students purchase (or have) an approved CAS calculator for General Mathematics. It should be retained for Units 3 and 4.

Unit 1

General Mathematics focuses on everyday maths applications. Students will use and apply number skills and technology. A significant statistical content will be studied, as well as applications to solve equations in practical applications, financial situations and recursion.

Unit 2

Students will build on skills obtained from Unit 1 and continue to acquire skills in statistics, geometry and trigonometry. Further material will be drawn from the study of networks and matrices, with a reliance on CAS technology.

Unit 3

General Mathematics is intended to provide a sound platform for life experiences involving financial and decision making maths. Unit 3 consists of core material of Data Analysis and Recursion and Financial Modelling,

Unit 4

General Mathematics is intended to provide a sound platform for life experiences involving financial and decision making maths. Unit 4 consists of study from the areas of Matrices and Networks.

Assessment Tasks

General Mathematics Unit 1 and 2

- Analysis tasks
- Mathematical investigation
- In class tests and assignments
- Exams

General Mathematics Unit 3 and 4

- Data analysis task
- Recursion and Financial Modelling task
- Problem solving tasks from Matrices and Networks.
- Exams

For additional information, please visit the link below to access the Study Design

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

Key Skills Developed

- Data analysis
- Financial mathematics skills
- Geometrical and spatial problem solving
- Algorithmic recursion and systematic analysis including matrices and networks

Mathematical Methods CAS Units 1 & 2 (Year 11)

Mathematical Methods CAS Units 3 & 4 (Year 12) Subject Code : MME

Mathematical Methods can be a complement intended studies in many fields, particularly Science, Engineering Mathematics, Astronomy.

Please note:

- Mathematical Methods Units 1 and 2 can be taken in combination with General Mathematics Units 1 and 2 in order to provide a sound mathematical platform for the study of General Mathematics Units 3 and 4.
- Students wishing to study Specialist Mathematics must study Mathematical Methods as a co-requisite, that as either prior or alongside Specialist Mathematics.

Prerequisite for Units 3 and 4: Mathematical Methods Units 1 and 2.

All students in Mathematical Methods CAS Units 1-4 are recommended to purchase (or have) an approved CAS calculator.

Unit 1 and 2

Students are expected to have a sound background in algebra and linear relations. Students will study topics from Functions and graphs, Algebra, Calculus and Probability, and will build on previously acquired skills and knowledge from Year 10.

Prerequisite for Units 3 and 4: Mathematical Methods Units 1 and 2. That is, any student completing Specialist Mathematics at either level must complete Mathematical Methods at the same level.

Unit 3 and 4

Students will undertake studies and analysis tasks in Coordinate Geometry, Circular (Trigonometric) Functions, Algebra, Calculus and Statistics and Probability, and will build on the skills and knowledge of Units 1 and 2.

Assessment Tasks

- Assignments
- Mathematical investigation
- Tests
- Modelling tasks
- Problem solving tasks
- Exams

For additional information, please visit the link below to access the Study Design

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

Key Skills Developed

- Functions and graphs
- Algebra
- Calculus
- Probability and statistics

Specialist Mathematics Units 1 & 2 (Year 11)

Specialist Mathematics Units 3 & 4 (Year 12) Subject Code: MSP

Specialist Mathematics is designed to complement intended studies in Science, Engineering, Mathematics, Astronomy and Computer Science.

Co-requisite: Mathematical Methods. That is, any student completing Specialist Mathematics at either level must complete Mathematical Methods at the same level.

Prerequisite for Units 3 and 4: Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2.

All students in Specialist Maths are recommended to purchase (or have) an approved CAS calculator.

Unit 1 and 2

This unit involves rigorous mathematical application and requires sound mathematical skills as well as the ability and willingness to acquire new algebraic and trigonometric skills to prepare for Specialist Maths Units 3 and 4. Material studied will be drawn from the following areas of study: Arithmetic and number, Geometry, measurement and trigonometry, Graphs of linear and non-linear relations, Algebra and structure, Transformations and matrices, discrete mathematics, Statistics. Students will continue to use and apply skills and knowledge from Year 10 as well as Mathematical Methods.

Unit 3 and 4

Students will undertake studies and analysis tasks from the following areas of study: Functions and graphs, Algebra, Calculus, Vectors, Mechanics and Statistics.

Assessment Tasks

- Assignments
- Mathematical investigation
- Tests
- Modelling tasks
- Problem solving tasks
- Mathematical investigations
- Exams

For additional information, please visit the link below to access the Study Design

<http://www.vcaa.vic.edu.au/Documents/vce/mathematics/MathematicsSD-2016.pdf>

Key Skills Developed

- Fractions and graphs
- Algebra
- Calculus
- Vectors
- Mechanics
- Probability and statistics

Science Discipline

For further information about subjects in the Science Discipline, please contact the Collaborative Team Leaders:

Mr Kim Morrison: Kim.Morrison@education.vic.gov.au

Mrs Lisa Stevens: Lisa.Stevens@education.vic.gov.au

Mrs Bridget Curling: Bridget.Curling@education.vic.gov.au

Subjects offered:

- Biology
- Chemistry
- Environmental Science
- Physics
- Psychology

Career Pathways

- Vet
- Zoologist
- Doctor
- Pharmacist
- Dentist
- Allied Health
- Nurse
- Laboratory Technician
- Education
- Psychologist
- Counsellor
- Astrophysicist
- Engineer
- Sports Scientist
- Environmental Scientist
- Forensics
- Aviation

Key Skills Developed

The following skills are a key focus of all of the Sciences:

Communication, Teamwork, Problem solving, Self-management, Planning and organising, Technology, Initiative and enterprise.

Students work scientifically to:

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

Biology- Subject Code: BIO

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. Despite the diversity of organisms and their many adaptations for survival in various environments, all life forms share a degree of relatedness and a common origin. The study 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.

Unit 1

How do organisms regulate their functions?

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

Unit 2

How does inheritance impact on diversity?

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

Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including the use of reproductive cloning technologies. They study structural, physiological and behavioural adaptations that enhance an organism's survival. Students explore interdependences between species, focusing on how keystone species and top predators structure and maintain the distribution, density and size of a population. They also consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding the survival of organisms in Australian ecosystems.

Unit 3

How do cells maintain life?

The cell is a dynamic system of interacting molecules that define life. An understanding of the workings of the cell enables an appreciation of both the capabilities and the limitations of living organisms whether animal, plant, fungus or microorganism. The convergence of cytology, genetics and biochemistry makes cell biology one of the most rapidly evolving disciplines in contemporary biology.

Unit 4

How does life change and respond to challenges?

In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool. The accumulation of changes over time is considered as a mechanism for biological evolution by natural selection that leads to the rise of new species.

Assessment Tasks

Assessment is undertaken in a range of ways, including:

Research Tasks, Oral Presentations, Field Work, Practical Reports, Annotated Models, and Tests.

Percentage contributions to the study score in VCE Biology are as follows:

- Unit 3 School-assessed Coursework: 20 per cent
- Unit 4 School-assessed Coursework: 30 per cent
- End-of-year examination: 50 per cent.

Further information regarding the VCE Biology study design can be found utilising the following link:

<http://www.vcaa.vic.edu.au/Pages/vce/studies/biology/biologyindex.aspx>

Camps and Excursions

Students undertake a number of local and state-wide excursions such as to the Kyabram Fauna Park and to GTAC.

Chemistry- Subject Code: CHE

Prerequisites

Students enrolling in Chemistry Units 3 and 4 MUST have satisfactorily completed Chemistry Unit 2.

Chemistry explores and explains the composition and behaviour of matter and the chemical processes that occur on Earth and beyond. Chemical models and theories are used to describe and explain known chemical reactions and processes. Chemistry underpins the production and development of energy, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes.

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 structures and properties of a range of materials, including covalent compounds, metals, ionic compounds and polymers. They are introduced to ways that chemical quantities are measured. They consider how manufacturing innovations lead to more sustainable products being produced for society through the use of renewable raw materials and a transition from a linear economy towards a circular economy. Students conduct practical investigations involving the reactivity series of metals, separation of mixtures by chromatography, use of precipitation reactions to identify ionic compounds, determination of empirical formulas, and synthesis of polymers.

Unit 2

How do chemical reactions shape the natural world?

Society is dependent on the work of chemists to analyse the materials and products in everyday use. In this unit students analyse and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid-base and redox reactions in society.

Students conduct practical investigations involving the specific heat capacity of water, acid-base and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve.

Unit 3

How can chemical processes be designed to optimise efficiency?

The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources, including fossil fuels, biofuels, galvanic cells and fuel cells. They investigate the combustion of fuels, including the energy transformations involved, the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions, and calculations of the amounts of energy released and their representations.

Unit 4

How are organic compounds categorised, analysed and used?

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 the fuels, foods, medicines and many 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.

Assessment Tasks

Assessment is undertaken in a range of ways, including:

Research Tasks, Oral Presentations, Field Work, Practical Reports, Annotated Models, and Tests.

Percentage contributions to the study score in VCE Physics 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.

Further information regarding the VCE Chemistry study design can be found utilising the following link:

<http://www.vcaa.vic.edu.au/Pages/vce/studies/chemistry/chemindex.aspx>

Camps and Excursions

Students undertake excursions to specialist science centres, such as VSSEC, each year to gain experience with analytical instruments.

Environmental Science - Subject Code: ENV

Environmental science explores the interactions and interconnectedness between humans and their environments and analyses the functions of both living and non-living elements that sustain Earth systems. Earth is understood as a set of four interdependent systems: the atmosphere, biosphere, hydrosphere and lithosphere. The study explores how the relationships between these systems produce environmental change over a variety of time scales. Students investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts with a focus on pollution, biodiversity, energy use and climate change.

Unit 1

How are Earth's dynamic systems interconnected to support life?

In this unit students examine the processes and interactions occurring within and between Earth's four interrelated systems – the atmosphere, biosphere, hydrosphere and lithosphere. They focus on how ecosystem functioning can influence many local, regional and global environmental conditions such as plant productivity, soil fertility, water quality and air quality. Students explore how changes that have taken place throughout geological and recent history are fundamental to predicting the likely impact of future changes. They consider a variety of influencing factors in achieving a solutions-focused approach to responsible management of challenges related to natural and human-induced environmental change.

Unit 2

What affects Earth's capacity to sustain life?

In this unit students consider pollution as well as food and water security as complex and systemic environmental challenges facing current and future generations. They examine the characteristics, impacts, assessment and management of a range of pollutants that are emitted or discharged into Earth's air, soil, water and biological systems, and explore factors that limit and enable the sustainable supply of adequate and affordable food and water.

Unit 3

How can biodiversity and development be sustained?

In this unit students focus on environmental management through the examination and application of sustainability principles. They explore the value and management of the biosphere by examining the concept of biodiversity and the services provided to all living things. They analyse the processes that threaten biodiversity and apply scientific principles in evaluating biodiversity management strategies for a selected threatened endemic species. Students use a selected environmental science case study with reference to the principles of sustainability and environmental management to explore management at an Earth systems scale, including impact on the atmosphere, biosphere, hydrosphere and lithosphere.

Unit 4

How can climate change and the impacts of human energy use be managed?

In this unit students explore different factors that contribute to the variability of Earth's climate and that can affect living things, human society and the environment at local, regional and global scales. Students compare sources, availability, reliability and efficiencies of renewable and non-renewable energy resources in order to evaluate the suitability and consequences of their use in terms of upholding sustainability principles. They analyse various factors that are involved in responsible environmental decision-making and consider how science can be used to inform the management of climate change and the impacts of energy production and use.

Measurement of environmental indicators often involves uncertainty. Students develop skills in data interpretation, extrapolation and interpolation and test predictions. They recognise the limitations of contradictory, provisional and incomplete data derived from observations and models. They explore relationships and patterns in data, and make judgments about accuracy and validity of evidence

Assessment Tasks

Assessment is undertaken in a range of ways, including:

Research tasks, Field work, Practical reports, Annotated models, Tests and student investigations.

Percentage contributions to the study score in VCE Environmental Science are as follows:

- Unit 3 School-assessed Coursework: 20 per cent
- Unit 4 School-assessed Coursework: 30 per cent
- End-of-year examination: 50 per cent

Further information regarding the VCE Environmental Science study design can be found utilising the following link:

<https://www.vcaa.vic.edu.au/Pages/vce/studies/envscience/envscindex.aspx>

Camps and Excursions

Students undertake a number of local and state-wide excursions such as to an off grid environmentally friendly designed house.

Physics- Subject Code: PHY

It is strongly recommended that:

- Students studying Physics should also study Maths Methods
- Students complete Units 1 and 2 before attempting Units 3 and 4

Physics seeks to understand and explain the physical world. It examines models and ideas used to make sense of the world and which are sometimes challenged as new knowledge develops. By looking at the way matter and energy interact through observations, measurements and experiments, physicists gain a better understanding of the underlying laws of nature.

Unit 1

How is energy useful to society?

In this unit students examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain energy. Models used to understand light, thermal energy, radioactivity, nuclear processes and electricity are explored. Students apply these physics ideas to contemporary societal issues: communication, climate change and global warming, medical treatment, electrical home safety and Australian energy needs.

Unit 2

How does physics help us to understand the 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. In Area of Study 1, students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary and apply these concepts to a chosen case study of motion. In Area of Study 2, students choose one of eighteen options related to climate science, nuclear energy, flight, structural engineering, biomechanics, medical physics, bioelectricity, optics, photography, music, sports science, electronics, astrophysics, astrobiology, Australian traditional artefacts and techniques, particle physics, cosmology and local physics research

Unit 3

How do fields explain motion and electricity?

In this unit students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators.

Unit 4

How can two contradictory models explain both light and matter?

In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter.

Assessment Tasks

Assessment is undertaken in a range of ways, including:

Research Tasks, Oral Presentations, Field Work, Practical Reports, Annotated Models, and Tests.

Percentage contributions to the study score in VCE Chemistry are as follows:

- Unit 3 School-assessed Coursework: 21 per cent
- Unit 4 School-assessed Coursework: 19 per cent
- End-of-year examination: 60 per cent.

Further information regarding the VCE Physics study design can be found utilising the following link:

<http://www.vcaa.vic.edu.au/Pages/vce/studies/physics/physicsindex.aspx>

Camps and Excursions

Students undertake an excursion to Luna Park to explore the laws of motion.

Psychology- Subject Code: PSY

Unit 1

How are behaviour and mental processes shaped?

In this unit students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples, has made to an understanding of psychological development and to the development of psychological models and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the structure and functioning of the human brain and the role it plays in mental processes and behaviour and explore brain plasticity and the influence that brain damage may have on a person's psychological functioning.

Unit 2

How do internal and external factors influence behaviour and mental processes?

In this unit students 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 individuals and groups, recognising that different cultural groups have different experiences and values. Students are encouraged to consider Aboriginal and Torres Strait Islander people's experiences within Australian society and how these experiences may affect psychological functioning.

Unit 3

How does experience affect behaviour and mental processes?

In this unit students investigate the contribution that classical and contemporary research has made to the understanding of the functioning of the nervous system and to the understanding of biological, psychological and social factors that influence learning and memory. Students investigate how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider stress as a psychobiological process, including emerging research into the relationship between the gut and the brain in psychological functioning. Students investigate how mechanisms of learning and memory lead to the acquisition of knowledge and the development of new and changed behaviours. They consider models to explain learning and memory as well as the interconnectedness of brain regions involved in memory. The use of mnemonics to improve memory is explored, including Aboriginal and Torres Strait Islander peoples' use of place as a repository of memory.

Unit 4

How is mental wellbeing supported and maintained?

In this unit students explore the demand for sleep and the influences of sleep on mental wellbeing. They consider the biological mechanisms that regulate sleep and the relationship between rapid eye movement (REM) and non-rapid eye movement (NREM) sleep across the life span. They also study the impact that changes to a person's sleep-wake cycle and sleep hygiene have on a person's psychological functioning and consider the contribution that classical and contemporary research has made to the understanding of sleep.

Students consider ways in which mental wellbeing may be defined and conceptualised, including social and emotional wellbeing (SEWB) as a multidimensional and holistic framework to wellbeing. They explore the concept of mental wellbeing as a continuum and apply a biopsychosocial approach, as a scientific model, to understand specific phobia. They explore how mental wellbeing can be supported by considering the importance of biopsychosocial protective factors and cultural determinants as integral to the wellbeing of Aboriginal and Torres Strait Islander peoples.

Assessment Tasks

Assessment is undertaken in a range of ways, including:

Research Tasks, Oral Presentations, Field Work, Practical Reports, Annotated Models, and Tests.

Percentage contributions to the study score in VCE Psychology are as follows:

- Unit 3 School-assessed Coursework: 20 per cent
- Unit 4 School-assessed Coursework: 30 per cent
- End-of-year examination: 50 per cent.

Further information regarding the VCE Psychology study design can be found utilising the following link:

<http://www.vcaa.vic.edu.au/Pages/vce/studies/psychology/psychoindex.aspx>

Camps and Excursions

Students undertake a number of local and state-wide excursions such as to the Melbourne Zoo.

Technologies

For further information about subjects in the Technologies Discipline, please contact the Collaborative Team Leader, Mr Mitchell Coombs: Mitchell.Coombs@education.vic.gov.au

Subjects Offered

- Food Studies – Units 1 to 4
- Product Design and Technology – Units 1 to 4
- Systems Engineering – Units 1 to 4
- VET Automotive - Units 1 to 4 This can be a scored VCE course(refer the VET part of the booklet for further information)
- VET Building and Construction - Units 1 to 4 This can be a scored VCE course(refer the VET part of the booklet for further information)
- VET Engineering – Units 1 to 4 This can be a scored VCE course(refer the VET part of the booklet for further information)

Career Pathways

- Employability skills which are developed include: Communication; Planning and organising; Teamwork; Problem solving; Self-management; Initiative and enterprise; Technology and Learning
- Food Studies: Food Technologist, Food Critic, Environmental Health Officer, Dietician, Consumer Scientist, Health Promotion Officer, Home Economist, Hospital Food Service Manager, Nutritionist, Winemaker, Caterer, Cook, Baker, Primary Products Inspector, Teacher, Food Processing technician, weight loss counsellor
- Product Design and Technology: Industrial designer, craftsperson, Industrial engineer, Jeweller, Set Designer, Prosthesis, Orthodontist, Mechanical engineer, model maker, Materials engineer, Marine Engineer, Architectural technician, Building contractor, Boilermaker, Engineering pattern maker, Metal fabricator, Fitter and turner, Handyperson, Leadlight worker, Product Assembler, Picture framer, Musical instrument maker and repairer, Cooper, Carpenter, Panel Beater, Plumber, Roofer, Saw doctor, shipwright, welder, Wood machinist.
- Systems Engineering: Industrial engineer, Electrical engineer, Mechanical engineer, Marine engineer, Electrician, Airforce technician, Electronics engineer, Automotive electrician, Electrical linesperson, Electrical motor winding, Cable joiner, Broadcasting technician, Instrument fitter, Lift electrician, Train and network controller, Security system technician, Telecommunications technician, Industrial designer, Material engineer

Food Studies- Subject Code: FOO

There are costs associated with the practical classes. Students will be advised of this weekly.

In VCE Food Studies students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems and the many physical and social functions and roles of food. They research economic, environmental and ethical dimensions of food and critically evaluate information, marketing messages and new trends. Practical work is integral to Food Studies and includes cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling and taste-testing, sensory analysis, product analysis and scientific experiments.

Unit 1

Food Origins

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world.

Unit 2

Food makers

In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in small-scale domestic settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

Unit 3

Food in Daily Life

This unit investigates the many roles and everyday influences of food. Area of Study 1 explores the science of food: our physical need for it and how it nourishes and sometimes harms our bodies.

Area of Study 2 focuses on influences on food choice: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments. The practical component of this unit enables students to understand food science terminology and to apply specific techniques to the production of everyday food that facilitates the establishment of nutritious and sustainable meal patterns.

Unit 4

Food issues, challenges and futures

In this unit students examine debates about global and Australian food systems. Area of Study 1 focuses on issues about the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage, and the use and management of water and land.

Area of Study 2 focuses on individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. The practical component of this unit provides students with opportunities to apply their responses to environmental and ethical food issues, and to extend their food production repertoire reflecting the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

Assessment

Assessment is conducted in a range of ways including:

Practical activities, short written report, oral presentation, practical demonstration, video or podcast, annotated visual report, media analysis, research inquiry.

Unit 3 and 4 Assessment Overview

- School assessed coursework for Unit 3 contributes 30 per cent to the study score.
- School assessed coursework for Unit 4 contributes 30 per cent to the study score.
- The end of year examination contributes 40 per cent to the study score.

Further information

Can be obtained by visiting the VCCA website:

<http://www.vcaa.vic.edu.au/Pages/vce/studies/foodstudies/foodstudiesindex.aspx>

Product Design and Technology- Subject Code: PDT

In VCE Product Design and Technology, students design and make three-dimensional products using a range of construction materials. The range of materials that may be used include wood, metal, plastics and textiles.

Unit 1

Sustainable product redevelopment

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability.

Unit 2

Collaborative Design

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

Unit 3

Applying the product design process

In this unit students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology.

Unit 4

Product development and evaluation

In this unit students engage with an end-user/s to gain feedback throughout the process of production. Students make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the product design factors.

Assessment

Assessment is conducted in a range of ways including:

Design Folio, finished product and records of production and modifications, short written report including materials testing or trialling activities, oral presentation, practical demonstration, video or podcast, case study analysis, Structure annotated design brief, structured questions, or annotated visual report.

Unit 3 and 4 Assessment Overview

- School-assessed Task, in Unit 3 and 4, contributes 50 per cent of the study score.
- School assessed coursework for Unit 3 contributes 12 per cent to the study score.
- School assessed coursework for Unit 4 contributes 8 per cent to the study score.
- The end of year examination contributes 30 per cent to the study score.

Further information

Can be obtained by visiting the VCCA website:

<http://www.vcaa.vic.edu.au/Pages/vce/studies/designtech/destechindex.aspx>

Systems Engineering- Subject Code: SYS

VCE Systems Engineering involves the design, creation, operation and evaluation of integrated systems, which mediate and control many aspects of human experience. Integral to Systems Engineering is the identification and quantification of systems goals, the development of alternative system designs concepts, trial and error, design trade-offs, selection and implementation of the best design, testing and verifying that the system is well built and integrated, and evaluating how well the completed system meets the intended goals and reflect on the systems engineering process to create a satisfactory design outcome.

Unit 1

Mechanical systems

This unit focuses on engineering fundamentals as the basis of understanding concepts, principles and components that operate in mechanical systems. The term ‘mechanical systems’ includes systems that utilise all forms of mechanical components and their linkages.

Students create an operational system using the systems engineering process. The focus is on a mechanical system; however, it may include some electrotechnological components.

Unit 2

Electrotechnology systems

In this unit students study fundamental electrotechnology engineering principles. The term ‘electrotechnological’ encompasses systems that include electrical/electronic circuitry including microelectronic circuitry.

While this unit contains fundamental physics and theoretical understanding of electrotechnological systems and how they work, the focus is on the creation of electrotechnological systems, drawing heavily upon design and innovation processes.

Unit 3

Integrated and controlled systems

In this unit students study engineering principles used to explain physical properties of integrated systems and how they work. Students design and plan an operational, mechanical and electrotechnological integrated and controlled system. They learn about the technologies used to harness energy sources to provide power for engineered systems

Unit 4

Systems control

In this unit students complete the creation of the mechanical and electrotechnological integrated and controlled system they researched, designed, planned and commenced production of in Unit 3. Students investigate new and emerging technologies, consider reasons for their development and analyse their impacts.

Assessment

Assessment is conducted in a range of ways including:

Documentation of the systems engineering process, multimedia or simulation presentation, electronic portfolio, a brochure, a poster, a written report, practical demonstration, production work, oral presentation.

Unit 3 and 4 Assessment Overview

- School-assessed Task, in Unit 3 and 4, contributes 50 per cent of the study score.
- School assessed coursework for Unit 3 contributes 10 per cent to the study score.
- School assessed coursework for Unit 4 contributes 10 per cent to the study score.
- The end of year examination contributes 30 per cent to the study score.

Further information

Can be obtained by visiting the VCCA

website:http://www.vcaa.vic.edu.au/Documents/vce/systemeng/SystemsEngineeringSD_2019.pdf

Victorian Certificate of Education – Vocational Major (VCE-VM)

For further information about individual subjects or the course as a whole, please contact the Applied Learning Teacher: Mr Mitchell Coombs – Mitchell.Coombs@education.vic.edu.au

Subject Code: VCE-VM1 & VCE-VM2

What is the VCE-VM?

The VCE Vocational Major (VM) is a vocational and applied learning program within the VCE designed to be completed over a minimum of two years. The VCE VM will give students greater choice and flexibility to pursue their strengths and interests and develop the skills and capabilities needed to succeed in further education, work and life.

It prepares students to move into apprenticeships, traineeships, further education and training, university (via non-ATAR pathways) or directly into the workforce.

The purpose of the VCE VM is to provide students with the best opportunity to achieve their personal goals and aspirations in a rapidly changing world by:

- equipping them with the skills, knowledge, values and capabilities to be active and informed citizens, lifelong learners and confident and creative individuals; and
- empowering them to make informed decisions about the next stages of their lives through real life workplace experiences.

Our College focus

The Applied Learning students have diverse pathways which lead them in many directions, including into apprenticeships, retail jobs and positions with local employers, all of which, largely, have them contributing to the community. It is within this certificate that it is our hope to get the students better prepared for the workforce by giving them practical experiences, but also improving their work-related skills such as communication, teamwork, problem solving, initiative and enterprise, planning and organising, learning, self-management, the use of technology, independence, responsibility, handling money and leadership. By developing these skills we also hope to strengthen transferable life-skills so they can be successful in whatever their future brings.

To support this, we deliver a VCE-VM program in an integrated format. This means that students are meeting the requirements for multiple subjects at any given time.

To enable success, students will be in 'VCE-VM' for every period of study, with the exception of any VCE or VET subjects they might undertake and their 'Amplify' class.

Structure

Within 'VCE-VM' time, students will be enrolled in the following subjects, with the option of work placement on one day.

Year 11	Year 12
Literacy – Unit 1	Literacy – Unit 3
Literacy – Unit 2	Literacy – Unit 4
VCE Foundation Maths – Unit 3	Personal Development Skills – Unit 3
VCE Foundation Maths – Unit 4	Personal Development Skills – Unit 4
Personal Development Skills – Unit 1	Work Related Skills – Unit 3
Personal Development Skills – Unit 2	Work Related Skills – Unit 4
Work Related Skills – Unit 1	VET choice 1
Work Related Skills – Unit 2	VET choice 2 (by consultation)
VET choice 1	VCE subject (by consultation)
VET choice 2 (by consultation)	
VCE subject (by consultation)	

There is the option to complete VCE subjects, by consultation.

An example timetable looks as follows;

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	VET Building Construction	VCE-VM	VCE-VM	Work Placement	VET Building Construction
2					VCE-VM
Recess					
3	VCE-VM	VCE-VM	VCE-VM		VCE-VM
4					
Lunch					
5	VCE-VM	VCE-VM	VET Building Construction	VCE-VM	

Literacy

Literacy empowers students to read, write, speak and listen in different contexts. Literacy enables students to understand the different ways in which knowledge and opinion are represented and developed in texts drawn from daily life. The development of literacy in this study design is based upon applied learning principles, making strong connections between students' lives and their learning. By engaging with a wide range of text types and content drawn from a range of local and global cultures, forms and genres, including First Nations peoples' knowledge and voices, students learn how information can be shown through print, visual, oral, digital and multimodal representations.

Along with the literacy practices necessary for reading and interpreting texts, it is important that students develop their capacity to respond to texts. Listening, viewing, reading, speaking and writing are developed systematically and concurrently, so that students' capacity to respond to different texts informs the creation of their own written and oral texts. A further key part of literacy in this study design is that students develop their understanding of how texts are designed to meet the demands of different audiences, purposes and contexts, including workplace, vocational and community contexts. This understanding helps students develop their own writing and oral communication, so that they become confident in their use of language and their ability to comprehend, respond to and create texts for a variety of settings.

Students' development of literate practices includes an emphasis on critical literacy so that they understand the social nature of language and how texts position readers in relation to particular ideologies.

An outline for each of the Literacy Units is outlined below;

Unit 1	Unit 2	Unit 3	Unit 4
Area of study 1; Literacy for Personal use	Area of study 1; Understanding issues and voices	Area of study 1; Accessing and understanding informational, organisational and procedural texts	Area of study 1; Understanding and engaging with Literacy for advocacy
Area of study 2; Understanding and creating digital texts	Area of study 2; Responding to opinions	Area of study 2; Creating and responding to organisational information or procedural texts	Area of study 2; Speaking to advise or advocate

VCE Foundation Maths – Unit 3 and Unit 4 (Year 11)

Foundation Mathematics Units 3 and 4 focus on providing students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning, community and global settings relevant to contemporary society. The areas of study for Units 3 and 4 are 'Algebra, number and structure', 'Data analysis, probability and statistics', 'Discrete mathematics' and 'Space and measurement'. All four areas of study are to be completed over the two units, and content equivalent to two areas of study covered in each unit. The selected content for each unit should be developed using contexts present in students' other studies, work and personal or other familiar situations, and in national and international contexts, events and developments.

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, contemporary data displays, diagrams, plans, geometric objects and constructions, algebra, algorithms, measures, 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.

Area of Study 1

Algebra, number and structure

In this area of study students cover estimation, the use and application of different forms of numbers and calculations, algorithmic and computational thinking, and the representation of formal mathematical expressions and processes including formulas and other algebraic expressions to solve practical problems in community, business and industry contexts.

This area of study includes:

- mathematical conventions notations for number and number operations
- rational numbers and irrational numbers related to measurement, ratios and proportions in a practical context
- direct and indirect variation
- symbolic expressions, equations and formulas
- graphical and algebraic analysis of relations including transposition of formulas and finding a break-even point using simultaneous equations
- estimation and approximation including interval estimates, rounding, significant figures, leading-digit approximations, floor and ceiling values and percentage error.

Area of Study 2

Data analysis, probability and statistics

In this area of study students cover collection, presentation and analysis of gathered and provided data from community, work, recreation and media contexts, including consideration of suitable forms of representation and summaries. This area of study incorporates the ability to critically reflect on statistical data and results, and to be able to communicate and report on the outcomes and any implications.

This area of study includes:

- development and specification of data collection requirements and methods, including consideration of audience and purpose of data collection, errors and misrepresentations in statistics
- collection and modelling of data, including the construction of tables or spreadsheets and graphs to represent data and correct representations
- contemporary representations of data and graphs derived from technology including reviewing appropriateness of graphical representations, including pictograms, bubble, Mekko, radar, sunburst, heat map and stacked area charts
- long-term data and relative frequencies in practical situation such as in relation to epidemics, climate, environment, sport and marketing
- interpolation and extrapolation of data, predictions, limitations, inferences and conclusions comparing and interpreting data sets and graphs, including using measures of central tendency and spread (percentiles and standard deviation) and cumulative frequency.

Area of Study 3

Discrete mathematics

Financial and consumer mathematics

In this area of study students cover the use and application of different forms of numbers and calculations, relationships and formulae, and their application in relation to the analysis of, and critical reflection on, personal, local, national and global financial, consumer and global matters.

This area of study includes:

- money management including investments and loans, credit and debit, comparing mortgages versus rental costs and debt consolidation
- taxation systems at the personal and business level
- income and expenditure calculations such as GST, invoicing and BAS
- comparison of financial products and services such as insurance
- informal consideration of financial risk at the national and global level (short, medium and long term)
- analysis and interpretation of financial information and data sets, trends and economic indicators and their impact (at the personal, community, national or global level) such as gender pay gap, career trends and interruption, currency fluctuations and inflation, stock market movements and recessions.

Area of Study 4

Space and measurement

In this area of study students cover the use and application of the metric system and related measurement in a variety of domestic, societal, industrial and commercial contexts, including consideration of accuracy, precision and error.

This area of study includes:

- spatial and geometric constructions including transformations, similarity, symmetry and projections
- calculations of enlargement and reduction using scaling techniques for two-dimensional and three-dimensional plans, diagrams and models
- measurements and related quantities including derived quantities, metric and relevant non-metric measures
- conventions, properties and measurement of perimeter, area, surface area and volume of compound shapes and objects
- calibration and error in measurement, including tolerance, accuracy and precision.

Personal Development Skills

VCE Vocational Major Personal Development Skills (PDS) takes an active approach to personal development, self-realisation and citizenship by exploring interrelationships between individuals and communities. PDS focuses on health, wellbeing, community engagement and social sciences, and provides a framework through which students seek to understand and optimise their potential as individuals and as members of their community.

This study provides opportunities for students to explore influences on identity, set and achieve personal goals, interact positively with diverse communities, and identify and respond to challenges. Students will develop skills in self-knowledge and care, accessing reliable information, teamwork, and identifying their goals and future pathways.

PDS explores concepts of effective leadership, self-management, project planning and teamwork to support students to engage in their work, community and personal environments.

Through self-reflection, independent research, critical and creative thinking and collaborative action, students will extend their capacity to understand and connect with the world they live in, and build their potential to be resilient, capable citizens.

An outline for each of the Personal Development Skills Units is outlined below;

Unit 1	Unit 2	Unit 3	Unit 4
Area of study 1; Personal Identity and Emotional Intelligence	Area of study 1; What is Community?	Area of study 1; Social awareness and interpersonal skills	Area of study 1; Planning a community project
Area of study 2; Community Health and Wellbeing	Area of study 2; Community Cohesion	Area of study 2; Effective leadership	Area of study 2; Implementing a community project
Area of study 3; Promoting a Healthy Life	Area of study 3; Engaging and supporting community	Area of study 3; Effective teamwork	Area of study 3; Evaluating a community project

Work Related Skills

VCE Vocational Major Work Related Skills (WRS) examines a range of skills, knowledge and capabilities relevant to achieving individual career and educational goals. Students will develop a broad understanding of workplace environments and the future of work and education, in order to engage in theoretical and practical planning and decision-making for a successful transition to their desired pathway.

The study considers four key areas: the future of work; workplace skills and capabilities; industrial relations and the workplace environment and practice; and the development of a personal portfolio.

Students will have the opportunity to apply the knowledge and skills gained from this study in the classroom environment and through Structured Workplace Learning (SWL).

An outline for each of the Work Related Skills Units is outlined below;

Unit 1	Unit 2	Unit 3	Unit 4
Area of study 1; Future Careers	Area of study 1; Skills and capabilities for employment and further education	Area of study 1; Workplace wellbeing and personal accountability	Area of study 1; Portfolio development
Area of study 2; Presentation of career and education goals	Area of study 2; Transferable skills and capabilities	Area of study 2; Workplace responsibility and rights	Area of study 2; Portfolio presentation
		Area of study 3; Communication and collaboration	

Structured Workplace Learning

Structured Workplace Learning (SWL) provides an opportunity for students to apply the skills and knowledge they have learnt in their VET program within an appropriately matched work place. The learning experiences help students to relate the theoretical information to a real world work context and develop their employability skills.

Structured Workplace Learning Recognition (SWLR) involves the development and maintenance of the workplace learning record (WLR).

This means that students will receive a 'unit' which will count towards their studies for 80 hours of workplace learning.

VET (Vocational Education and Training) Subjects

At Kyabram P-12 College, students enrolled in the VCE-VM have the opportunity to undertake a VET qualification as part of their course. Information about the VET subjects offered at Kyabram P-12 College can be found in the VET section of this course booklet. Those completed at Goulburn Ovens TAFE can be found in the GO TAFE information booklets provided to our school.

Please note, to successfully achieve the VCE-VM, a student needs to successfully undertake 180 nominal hours of a Certificate II or above VET course.

Victorian Pathways Certificate (VPC) - Subject Code: VPC1 & VPC2

For further information about individual subjects or the course as a whole, please contact the Applied Learning Teacher: Mr Mitchell Coombs – Mitchell.Coombs@education.vic.edu.au

What is the VPC?

The Victorian Pathways Certificate (VPC) is an inclusive Year 11 and 12 standards-based certificate that meets the needs of a smaller number of students who are not able or ready to complete the VCE (including the VCE Vocational Major). It provides an enriched curriculum and excellent support for students to develop the skills, capabilities and qualities for success in personal and civic life.

The VPC is an accredited foundation secondary qualification under the Education and Training Reform Act 2006. It aligns to Level 1 in the Australian Qualifications Framework. While the VPC is not a senior secondary qualification, it can be a pathway to the VCE.

The VPC is designed to develop and extend pathways for young people, while providing flexibility for different cohorts. The VPC is suitable for students whose previous schooling experience may have been disrupted for a variety of reasons, including students with additional needs, students who have missed significant periods of learning and vulnerable students at risk of disengaging from their education. Students will gain the skills, knowledge, values and capabilities to make informed choices about pathways into a senior secondary qualification, entry level vocational education and training (VET) course or employment.

The curriculum accommodates student aspirations and future employment goals. VPC learning programs connect students to industry experiences and active participation in the community. Through participation in the VPC students will gain necessary foundation skills to allow them to make a post-schooling transition.

Our College focus

The Applied Learning students have diverse pathways which lead them in many directions, including into apprenticeships, retail jobs and positions with local employers, all of which, largely, have them contributing to the community. It is within this certificate that it is our hope to get the students better prepared for the workforce by giving them practical experiences, but also improving their work-related skills such as communication, teamwork, problem solving, initiative and enterprise, planning and organising, learning, self-management, the use of technology, independence, responsibility, handling money and leadership. By developing these skills we also hope to strengthen transferable life-skills so they can be successful in whatever their future brings.

To support this, we deliver a VPC program in an integrated format. This means that students are meeting the requirements for multiple subjects at any given time.

To enable success, students will be in 'VPC' for every period of study, with the exception of any VCE or VET subjects they might undertake and their 'Amplify' class.

Structure

Within 'VPC' time, students will be enrolled in the following subjects, with the option of work placement on one day.

Year 11	Year 12
Literacy – Unit 1	Literacy – Unit 3
Literacy – Unit 2	Literacy – Unit 4
VCE Foundation Maths – Unit 1	VCE Foundation Maths – Unit 2
Personal Development Skills – Unit 1	Personal Development Skills – Unit 3
Personal Development Skills – Unit 2	Personal Development Skills – Unit 4
Work Related Skills – Unit 1	Work Related Skills – Unit 3
Work Related Skills – Unit 2	Work Related Skills – Unit 4
VET choice 1	VET choice 1
VET choice 2 (by consultation)	VET choice 2 (by consultation)
VCE subject (by consultation)	VCE subject (by consultation)

There is the option to complete VCE subjects, by consultation.

An example timetable looks as follows;

Period	Monday	Tuesday	Wednesday	Thursday	Friday
1	VET Engineering	VPC	VPC	Work Placement	VET Engineering
2					VPC
Recess					
3	VPC	VPC	VPC		VPC
4					
Lunch					
5	VPC	VPC	VET Engineering		VPC

Literacy

VPC Literacy aims to develop students' abilities to read, write, speak and listen in everyday and familiar contexts. The curriculum will assist students to develop an understanding of the different ways in which knowledge and opinion are represented and developed in texts drawn from daily life. This Literacy study is based upon applied learning principles, making strong connections between students' lives and their learning. By engaging with a wide range of text types and content drawn from a range of local and global cultures, forms and genres, including First Nations peoples' knowledge and voices, students learn how information can be shown through print, visual, oral, digital and multimodal representations.

Along with the literacy practices necessary for reading and interpreting texts, it is important that students will develop their capacity to respond to texts. Listening, viewing, reading, speaking and writing are developed systematically and concurrently. As students engage with texts in class, they develop their understanding of how texts are designed to meet the demands of different audiences, purposes and contexts. They will apply this understanding in their own writing, learning to adapt language to respond to more familiar or specific audiences, purposes and contexts.

An outline for each of the Literacy Units is outlined below;

Unit 1	Unit 2	Unit 3	Unit 4
Module 1; Literacy for Personal Use	Module 1; Exploring and Understanding issues and voices	Module 1; Literacy for civic participation	Module 1; Negotiated project
Module 2; Understanding and Creating Digital texts	Module 2; Informed discussion	Module 2; Literacy for pathways and further learning	

VCE Foundation Maths – Unit 1 (Year 11) and Unit 2 (Year 12)

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'.

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, 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.

Area of Study 1

Space, shape and design

In this area of study students cover the geometric properties of lines and curves, and shapes and objects, and their graphical and diagrammatic representations with attention to scale and drawing conventions used in domestic, societal, industrial and commercial plans, maps and diagrams.

This area of study includes:

- geometric conventions and properties of shapes and objects
- interpretation and use of plans, elevations, maps, models and diagrams
- application and use of similarity and symmetry
- enlargement and reduction of diagrams and models
- interpretation and use of location, distance, direction and scale on diagrams, maps and plans
- application of Pythagoras' theorem in practical situations.

Area of Study 2

Patterns and number

In this area of study students cover estimation, the use and application of different forms of numbers and calculations, and the representation of patterns and generalisations in number including formulas and other algebraic expressions in everyday contexts.

This area of study includes:

- application of integers, decimals, fractions, ratios, proportions, percentages and rates to solve practical problems
- estimation, approximation and reasonableness of results
- use and interpretation of formulas and algebraic expressions to describe relationships between variables and to model patterns
- manipulation and solution of expressions and equations to solve problems including predicting a required quantity or finding a break-even point.

Area of Study 3

Data

In this area of study students cover collection, presentation and analysis of gathered and provided data from community, work, recreation and media contexts, including consideration of suitable forms of representation and summaries.

This area of study includes:

- features, conventions and terminology used when representing information in diagrammatic, graphical and tabular forms
- collection and representation of data in diagrammatic, tabular and graphical forms
- interpretation of diagrams, charts, tables and graphs
- use of measures of central tendency (averages) and spread to summarise and interpret data
- comparison and interpretation of data sets.

Area of Study 4

Measurement

In this area of study students cover the use and application of the metric system and related measurement in a variety of domestic, societal, industrial and commercial contexts, including consideration of accuracy.

This area of study includes:

- application and use of metric units and measures, including derived measures
- interpretation of scales on digital and analogue instruments
- solution of personal, societal and workplace problems involving metric measurement with consideration of error, required accuracy and tolerances
- estimation and approximation strategies
- interpretation and use of time and duration including time and date specifications, conventions, schedules, timetables and time zones.

Personal Development Skills

VPC Personal Development Skills provides a framework through which students can increase their self-understanding, build their capacity for self-care and engage meaningfully with both their student cohort and the broader community. This study equips students to set and achieve challenging personal goals, and to take action to improve their health and wellbeing.

Through coursework and participation in both independent and collaborative activities, students develop skills that contribute to personal development, build experience and create opportunities, for example teamwork, communication, time management and problem-solving.

PDS enables students to explore and address personal and collective questions and challenges. It builds the capacity of students to be motivated, independent and purposeful individuals and community members, prepared to navigate the future world of work, education and personal relationships.

An outline for each of the Personal Development Skills Units is outlined below (**NB. Units 3&4 are still yet to be written**);

Unit 1	Unit 2	Unit 3	Unit 4
Module 1; Understanding self	Module 1; Exploring and connecting with community	Module 1; TBC	Module 1; TBC
Module 2; Developing self	Module 2; Community participation	Module 2; TBC	Module 2; TBC

Work Related Skills

VPC Work Related Skills provides a framework through which students can continue to build their educational knowledge and skills, prepare to transition to the workforce and to further education, best placing them for success. This study helps students develop an understanding of the motivation, behaviours, rights and responsibilities of self and others, as well as the skills to communicate effectively, to work within a team and the capacity to reflect and improve when applying knowledge, experiences and skills to a real-world situation.

The study of WRS leads to opportunities across different industries and further education providers, giving young people the tools they need to succeed in the future.

An outline for each of the Work Related Skills Units is outlined below;

Unit 1	Unit 2	Unit 3	Unit 4
Module 1; Interests, skills and capabilities within the workplace	Module 1; Identifying and planning for a work-related activity	Module 1; Healthy workplace practice	Module 1; Explore and plan for potential pathways
Module 2; Employment opportunities and workplace conditions	Module 2; Completing and reviewing a small-scale work-related activity	Module 2; Rights and responsibilities	Module 2; Employment seeking activities and the application process
Module 3; Applying for an employment opportunity	Module 3; Reporting on a small-scale activity	Module 3; Physical health and safety	Module 3; Interview

Structured Workplace Learning

Structured Workplace Learning (SWL) provides an opportunity for students to apply the skills and knowledge they have learnt in their VET program within an appropriately matched work place. The learning experiences help students to relate the theoretical information to a real world work context and develop their employability skills.

Structured Workplace Learning Recognition (SWLR) involves the development and maintenance of the workplace learning record (WLR).

This means that students will receive a 'unit' which will count towards their studies for 80 hours of workplace learning.

VET (Vocational Education and Training) Subjects

At Kyabram P-12 College, students enrolled in the VPC have the opportunity to undertake a VET qualification as part of their course. Information about the VET subjects offered at Kyabram P-12 College can be found in the VET section of this course booklet. Those completed at Goulburn Ovens TAFE can be found in the GO TAFE information booklets provided to our school.

VET

For further information about the VET subjects offered, please contact
VET Co-ordinator, Mrs Louise Mellington: Louise.Mellington@education.vic.gov.au

Subjects Offered

VCE / VET Program offered at Kyabram P-12	Certificate code and title	Study score available	Provider
Animal Studies	ACM20117 Certificate II in Animal Studies	No	Goulburn Ovens Institute of TAFE
Agriculture	AHC20116 Certificate II in Agriculture	No	To be confirmed
Automotive	AUR20716 Certificate II in Automotive Vocational	No	Kyabram P-12 College
Building and Construction	22338VIC Certificate II in Building and Construction (pre-apprenticeship) (partial completion)	No	Kyabram P-12 College
Community Services	CHC32015 Certificate II in Community Services (incorporates CHC22015)	Yes	Goulburn Ovens Institute of TAFE
Design	CUA30715 Certificate III in Design Fundamentals	No	Goulburn Ovens Institute of TAFE
Early Childhood Education	CHC30113 Certificate III in Early Childhood Education and Care (partial completion)	No	Goulburn Ovens Institute of TAFE
Education Support	CHC30213 Certificate III in Education Support (partial completion)	No	Goulburn Ovens Institute of TAFE
Electrical	UEE22011 Certificate II in Electro technology (Career Start)	No	Goulburn Ovens Institute of TAFE
Engineering	22470VIC Certificate II in Engineering Studies	Yes	Kyabram P-12 College
Equine Industry	22513VIC Certificate III in Equine Industry	Yes	Goulburn Ovens Institute of TAFE
Salon Assistant (Hair)	SHB20216 Certificate II in Salon Assistant	No	Goulburn Ovens Institute of TAFE

Health	HLT33015 Certificate III in Allied Health Assistance	Yes	Goulburn Ovens Institute of TAFE
Kitchen Operations (Hospitality)	SIT20416 Certificate II in Kitchen Operations	Yes	Goulburn Ovens Institute of TAFE
Information Technology	ICT30115 Certificate III in Information, Digital Media and Technology (partial completion)	Yes	Kyabram P-12 College
Make-Up	SHB30215 Certificate III in Make-Up	No	Goulburn Ovens Institute of TAFE
Plumbing	22304VIC Certificate II in Plumbing (pre-apprenticeship)	No	Goulburn Ovens Institute of TAFE
Sport & Recreation	SIS30115 Certificate III in Sport and Recreation	Yes	Goulburn Ovens Institute of TAFE
Tourism	SIT30116 Certificate III in Tourism	No	Goulburn Ovens Institute of TAFE

There are several other National Training Certificates offered to students at Kyabram P-12 College, these VET or FE (Further Education) programs, outside the suite of VCAA designed programs, may offer Block Credit Recognition towards the VCE and nominal hour credit towards the VCAL. Further information about Block Credit Recognition can be found on the [VCAA website](#).

If there are other areas which may be of interest to you, please see Mrs Louise Mellington or Mrs Donna Campbell at the Secondary Campus.

VET Agriculture - Subject Code: *to be confirmed**AHC20116 Certificate II in Agriculture**Provider:**To be confirmed*

This course is delivered within the Kyabram P-12 College timetable.

VCE Credit:

Up to four units: Two units at Units 1 and 2, and a Units 3 and 4 sequence.

Description

This qualification provides a general vocational outcome in agriculture. Vocational means that students are able to learn the skills through practical application. The qualification enables individuals to select a livestock production, cropping or livestock context as a job focus or, in the case of mixed farming enterprises, both cropping and livestock.

AHC20116 Certificate II in Agriculture	
Compulsory Units	
Code	Unit of Competence Title
AHCWHS201	Participate in work health and safety processes
AHCWRK204	Work effectively in the industry
AHCWRK209	Participate in environmentally sustainable work practices
Elective Units	
AHCBAC205	Assist agricultural crop establishment
AHCBAC206	Assist agricultural crop maintenance
AHCBAC207	Assist agricultural crop harvesting
AHCBIO203	Inspect and clean machinery, tools and equipment to preserve biosecurity
AHCBIO204	Follow site biosecurity procedures
AHCCHM201	Apply chemicals under supervision
AHCINF201	Carry out basic electric fencing operations
AHCINF202	Install, maintain and repair farm fencing
AHCLSK202	Care for health and welfare of livestock
AHCLSK204	Carry out regular livestock observation
AHCLSK205	Handle livestock using basic techniques
AHCLSK206	Identify and mark livestock
AHCLSK209	Monitor water supplies
AHCLSK210	Muster and move livestock
AHCLSK211	Provide feed for livestock
AHCPMG201	Treat weeds
AHCPMG202	Treat plant pests, diseases and disorders

Career opportunities:

Individuals with this qualification carry out routine tasks under general supervision and exercise limited autonomy with some accountability for their own work. Job roles vary across different industry sectors and may include:

- Assistant animal attendant/stockperson
- Assistant farm or station hand
- Assistant farm or station worker
- Assistant farm or station labourer
- .

ATAR Contribution

Students who receive a Units 3 and 4 sequence for the VCE VET Agriculture will be eligible for a 10% increment towards their ATAR (10% of the average of the primary four scaled studies).

Work Placement

This program provides the opportunity to complete Work Placement (Structured Workplace Learning- SWL).

Related Subjects you could include in your course:

- VCE Agricultural and Horticultural Studies,
- VCE Environmental Sciences,
- VCE Outdoor Education,
- VCE Business Management

Useful Links

- <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>
- <https://training.gov.au/Training/Details/AHC20116>
- <https://myfuture.edu.au/bullseyes/details/31--rural-studies>

VCE VET Automotive - Subject Code: VAU

AUR20720 Certificate II in Automotive Vocational

Provider:

Kyabram P-12 College RTO: 22264

Delivered within the Kyabram P-12 College timetable.

VCE Credit:

Students who complete AUR20716 Certificate II in Automotive Vocational will be eligible for four units credit towards their VCE: two units at Units 1 and 2, and a Units 3 and 4 sequence.

Description

The Certificate II in Automotive Vocational consists of:

- two core units of competence
- elective units of competence

It is undertaken over a two year period. On successful completion of this program students are eligible for the award of AUR20716 Certificate II in Automotive Vocational.

AUR20716 Certificate II in Automotive Vocational	
Compulsory	
Code	Unit of competence title
AURAEA002	Follow environmental and sustainability best practice in an automotive
AURAF003	Communicate effectively in an automotive workplace
AURAF004	Resolve routine problems in an automotive workplace practice in an
AURASA002	Follow safe working practices in an automotive
AURETR003	Identify automotive electrical systems and components
AURLTA001	Identify automotive mechanical systems and component
AURTTK002	Use and maintain tools and equipment in an automotive workplace
Elective Modules	
AURETR015	Inspect, test and service batteries
AURETR046	Remove and refit vehicle batteries
AURETR047	Recharge vehicle batteries
AURTTJ003	Remove and replace wheel and tyre assemblies
AURTTA027	Carry out basic vehicle servicing operations
AURTTB007	Remove and replace brake assemblies
AURTTE009	Remove and replace engine cylinder heads
AURVTW010	Set up and use welding equipment
AURTTC004	Remove and replace radiators
AURVTA005	Clean vehicles

Career opportunities

The two year program of Certificate II in Automotive Vocational provides students with a broad base of skills necessary to maintain and service a wide range of motor vehicles. This solid grounding in the principles of automotive maintenance and repair will give you a head start in gaining an automotive apprenticeship.

Automotive apprenticeships are available in four industry specific strands. These are electrical, mechanical, mechanics and vehicle body. Each strand has individual occupational streams and their own specialist qualifications. For example, mechanical – diesel fitter, heavy vehicle road transport, motorcycle.

ATAR Contribution

Students who receive a Units 3 and 4 sequence for AUR20716 Certificate II in Automotive Vocational will be eligible for a 10% increment towards their ATAR (10% of the average of the primary four scaled studies).

Work Placement

This program includes the opportunity for work placement (Structured Workplace Learning- SWL)

Related Subjects you could include in your course:

- Product Design and Technology
- Systems Engineering – Mechanical / Electrical / Electronic
- Industry and Enterprise
- Mathematics

Useful Links

- www.vcaa.vic.edu.au/vet/programs/automotive/automotive.html
- <http://trainingsupport.skills.vic.gov.au/curriculumDisplay.cfm>
- <http://www.vcaa.vic.edu.au/vet/programs/automotive/automotiveflyer.pdf>

VCE VET Building and Construction- Subject Code: VBC

22338VIC Certificate II in Building and Construction - Pre-apprenticeship (Partial completion)

Provider:

Kyabram P-12 College RTO: 22264

This course is delivered within the Kyabram P-12 College timetable.

VCE Credit:

Up to four units: Two units at Units 1 and 2, and a Units 3 and 4 sequence.

Description

The Carpentry stream of this pre-apprenticeship program is offered at Kyabram P-12 College. It consists of thirteen core modules and eleven Carpentry specific modules. On completion of this program, students will have gained partial completion of the 22338VIC Certificate II in Building and Construction Pre-apprenticeship

.22338VIC Certificate II in Building and Construction - Pre-apprenticeship (Partial completion)	
Compulsory Units	
Code	Unit of Competence Title
CPCCCM1012A	Work effectively and sustainably in the construction industry
CPCCCM1014A	Conduct workplace communication
CPCCCM1015A	Carry out measurements and calculations
CPCCCM2006	Apply basic levelling procedures
CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry
CPCCWHS1001	Prepare to work safely in the construction industry
VU22014	Prepare for work in the building and construction industry
VU22015	Interpret and apply basic plans and drawings
VU22016	Erect and safely use working platforms
Elective Units	
VU22022	Identify and handle carpentry tools and equipment
VU22023	Perform basic setting out
VU22024	Construct basic sub floor
VU22025	Construct basic wall frames
VU22026	Construct a basic roof frame
VU22027	Install basic external cladding
VU22028	Install basic window and door frames
VU22029	Install interior fixings
VU22030	Carry out basic demolition of timber structures
VU22031	Construct basic formwork for concreting

Career opportunities:

Upon successful completion the training undertaken may give you a head start to gaining an apprenticeship in the Building and Construction industry.

Trade qualifications are available, through apprenticeship, in General Construction: Painting and Decorating, Bricklaying/ Blocklaying or Carpentry – Framework/Formwork/Finishing and this pre-apprenticeship course could be recognised as partial completion within these courses.

ATAR Contribution

Students who receive a Units 3 and 4 sequence for the VCE VET Building and Construction program will be eligible for a 10% increment towards their ATAR (10% of the average of the primary four scaled studies).

Work Placement

This program provides the opportunity to complete Work Placement (Structured Workplace Learning- SWL).

Related Subjects you could include in your course:

- Product Design and Technology
- Industry and Enterprise
- Mathematics
- Visual Communication and Design

Useful Links

- www.vcaa.vic.edu.au/vet/programs/building/buildconst.html
- <http://trainingsupport.skills.vic.gov.au/curriculumDisplay.cfm>
- <http://www.vcaa.vic.edu.au/vet/programs/building/bldgconstructflyer.pdf>

VCE VET Engineering - Subject Code: VEN

22470VIC – Certificate II in Engineering Studies

Provider:

Kyabram P-12 College RTO: 22264

This course is delivered within the Kyabram P-12 College timetable.

VCE Credit:

Students who complete the two year program, 22470VIC Certificate II in Engineering Studies, are eligible for four unit's credit towards their VCE: Two units at Units 1 and 2 and a Units 3 and 4 sequence.

Description

Certificate II in Engineering Studies provides students with the practical skills and theoretical knowledge to undertake an apprenticeship in the engineering trades. The two year program consists of a total of 11 Units of Competence: 7 core units and four elective units.

Program structure:

22470VIC Certificate II in Engineering Studies	
Compulsory Units	
Code	Unit of Competence Title
MEM13014A	Apply principles of Occupational Health and Safety in work environment
MEM18001C	Use hand tools
VU22329	Report on a range of sectors in the manufacturing, engineering and related industries
VU22330	Select and interpret drawings and prepare three dimensional (3D) sketches and drawings
VU22331	Perform basic manufacturing processes
VU22332	Apply basic fabrication techniques
MEMPE006A	Undertake a basic engineering project
VU22333	Perform intermediate engineering computations (F/M/T)
Elective Units	
MEM18002B	Use power tools/hand held operations
VU22336	Perform metal fabrication operations
VU22337	Perform basic welding and thermal cutting processes to fabricate engineering structures

Career opportunities:

Certificate II in Engineering Studies prepares students for an engineering apprenticeship which, upon completion, can lead into a range of careers in the engineering and manufacturing industries. These include roles in conception, design, manufacture, assembly, installation, repair, replacement, packaging and sales of a wide range of products. As a qualified tradesperson occupations may include: boiler maker, welder, tool/die maker, hydraulics/avionics/mechanical technician, draftsman, mechanical fitter.

ATAR Contribution

Students wishing to receive an ATAR contribution for the Units 3 and 4 sequence of VCE VET Engineering Studies must undertake scored assessment for the purpose of achieving a study score. This study score can contribute directly to the primary four or as a fifth or sixth study.

Work Placement

This program includes the possibility to complete work placement (Structured Workplace Learning- SWL). It is strongly recommended that students undertake a minimum of 80 hours structured workplace learning. It is a key feature of the course and aspects of training in the workplace can contribute to assessment. Students are able to practise skills gained in a 'real work situation' and put into practice the social skills necessary to be an effective member of an engineering team.

Useful Links

- <http://www.vcaa.vic.edu.au/vet/programs/engineering/engineering.html>
- <http://www.vcaa.vic.edu.au/vet/programs/engineering/engineeringflyer.pdf>