Kerang Technical High School

2024

HANDBOOK

Yr10 – VCE – VCE VM – VET

Senior School

RESPECT RESILIENCE RESPONSIBILITY

SUBJECTS OFFERED

YEAR 10

In Year 10 students complete 3 core subjects and 3 elective subjects each Semester.
All students in Year 10 will undertake the following core subjects:

- English
- Mathematics
- Science

As students enter Senior School they have been exposed to a variety of subjects across all domains throughout Junior School. The school curriculum plan recognises that in Senior years of schooling some students begin to focus on areas of specialisation related to both their future schooling and intended pathways beyond school. This can include commencement of aspects of their VCE qualification, including VET qualifications.
As mandated by the Education Department, Students are expected to choose a unit of Physical Education for at least one semester in Year 10.

AIMS

Year 10 should provide students with an opportunity to:

- choose a course to suit their needs and interests;
- perform to the best of their ability;
- be motivated towards learning;
- prepare well for the transition from school to work and/or further training; and
- prepare adequately for Years 11 and 12.

This is an important time for preparation for the future. Students are advised to extend existing interests and obtain grounding for Year 11 and 12 and for life after school.

CONTENTS

SELECTION OF SUBJECTS

Students will study the three core units and three electives each semester. These electives should be placed in order of preference from a selection sheet. From here a grid will be formulated to best accommodate the selections from the students.

1. Students Core subjects will be pre-filled
2. Subject Choices made from a list of units on offer at KTHS. Students must select 8 subjects they wish to study in order of preference.
3. The senior Grid constructed from data obtained from the subject choices.
4. Any students who have chosen subjects, which KTHS is not able to offer, or who have chosen subjects, which clash on the grid, will be further counselled and asked to make another selection.
5. Student/parent Interview with a panel of counsellors if required.

Every endeavour will be made to accommodate the student preferences from the initial choices. However, the construction of the Grid may mean that some students will be required to make changes from their initial preferences.

Course Selection Sheet

A course selection sheet must be filled out and signed by a parent.

Advice in making choices

- Aim for a balance across all subject areas.
- Read the subject descriptions in this handbook.
- Discuss with parents and teachers.
- Find out which subjects would be useful for Year 11 VCE/VET.

Year 10

A VCE or VET unit counts as an elective. A year 10 student will complete 3 core subjects and 6 elective subjects per year (9 subjects in total). Each core subject counts as one subject even though it lasts for the whole year.

Including a VCE/VET Subject

Year 10 students may elect to do a VCE or VET subject. These options require counselling and approval from Senior School Manager.

SELECTION RULES

1 Your Core subjects will be allocated.

2 You cannot repeat subjects that have been completed successfully.

3 Students must select at least ONE unit of Physical Education.

4 Year 10 students may elect to do a VCE or VET Unit instead of a Year 10 subject. This requires prior arrangement from Senior School Manager with consultation from the relevant VCE/VET teacher.

HOMEWORK

Students are expected to do regular homework and study for at least 1 $^{1}/_{2}$ hours per week night. At the beginning of each year students will receive a Student Record Book which is expected to be used in class to organise their time effectively. Homework expectations have been published in this book. The Student Record book will be used on occasions by teachers to communicate with parents. We request that parents regularly check and sign the Record Book and this will be checked by Home group teachers.

Pre-requisites for Year 11 VCE/VET

There are no pre-requisites for Year 11 V.C.E. subjects, but each subject area will recommend that some electives should be studied in that area prior to undertaking the VCE/VET subjects. Students are advised to read each subject section in this handbook and prepare well for year 11 and 12. They may also discus with the relevant teacher as to their suitability and skill set particularly the skills for VET subjects.

Thinking About the Future...

Choosing Year 10 electives must be done with a thought to future schooling and employment. To check on the level of education and subjects needed for any proposed career, visiting www.myfuture.edu.au will provide you with a number of resources including quizzes designed to assist in choosing your career pathway. Further to this, our Careers Teacher is available for consultation with both students and parents and would welcome the opportunity to assist.

BYOD

KTHS students have the opportunity to bring their own personal digital learning device (BYOD - laptop or tablet computer).

The BYOD booklet contains information for parents, carers and students on suitable devices, our BYOD policy, purchasing options and support resources. Students and families can design their digital learning through selecting a device that best suits their learning needs and future pathways.

Students have three options:

1. Purchase a recommended device from our supplier
2. Purchase a recommended device from an independent store
3. Bring a suitable device from home if they already own one.

Full details and the Acceptable Use Agreement can be found at http://kerangths.vic.edu.au

The Victorian Curriculum F-10

The Victorian Curriculum F–10 sets out a single, coherent and comprehensive set of content descriptions and associated achievement standards to enable teachers to plan, monitor, assess and report on the learning achievement of every student.
The Victorian Curriculum F–10 incorporates and reflects much of the Australian Curriculum F–10, but differs in some important respects, most notably the representation of the curriculum as a continuum of learning and the structural design.
The students in Years 10 will be working towards LEVEL 10, which is the standard expected at the end of Year 10.

Subjects in Senior School		
The Victorian Curriculum F-10 Learning Areas	Year 10	VCE/VET Subject
The Arts	Art Visual Communication & Design Music	Art Creative Practice Visual Communication Design
Humanities	Legal Studies Business Studies History Geography	Legal Studies Business Management Modern History 1&2 Revolutions 3&4 Australian History 3&4
Health & Physical Education	Health Physical Education	Health & Human Development Physical Education
English	English	English
Mathematics	Mathematics	Foundation Mathematics General Mathematics *Maths Methods (VVLN)* *Specialist Maths (VVLN)*
Science	Science	Physics Chemistry Biology Psychology
Technology Studies	Food Studies Auto Systems Engineering Metal Fabrication Woodwork	VET Agriculture VET Cookery VET Automotive VET Engineering Studies VET Furnishing

CORE SUBJECTS OFFERED

ENGLISH DOMAIN

ENGLISH

In Year 10 students continue to challenge and develop their English skills from their previous years. Students will be assessed against Victorian Curriculum F-10 progression points in each of the strands.
Reading and Viewing:
Involves students understanding, interpreting, critically analysing, reflecting upon, and enjoying written and visual, print and non-print text.

Writing:
Writing involves students in the active process of conceiving, planning, composing, editing and publishing a range of texts. Writing involves using appropriate language for particular purposes or occasions, both formal and informal.

Speaking and Listening:
Speaking and Listening refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice.

Students will complete the following activities throughout the academic year. In their reading students will:

- Read a selection of contemporary texts in a range of genres with attention to purpose, audience and literary features; including Of Mice and Men and additional mentor texts as chosen by relevant teachers.
- Read a selection of persuasive and media texts; focussing on contemporary media issues

In their writing students will:

- Complete exercises to develop grammatical accuracy, complexity and expressiveness.
- Complete a viewing journal focussing on making personal and wider connections.
- Complete sustained responses to text studies including one analytical, one personal and one creative.
- Develop a persuasive writing style through media analysis.

In their Speaking and Listening students will:

- Prepare and present a sustained oral point of view on a chosen contemporary media issue.

ASSESSMENT TASKS

Students need to complete all set work requirements to achieve a satisfactory result for this subject. These may include written assignments; research projects; essay writing; oral presentations, tests a mid-year exam and an end of year exam.

MATHEMATICS DOMAIN

Mathematics provides students with access to important mathematical ideas, knowledge and skills that they will draw on in their personal and work lives. The curriculum also provides students, as life-long learners, with the basis on which further study and research in mathematics and applications in many other fields are built.

Skills:

The Mathematics curriculum for Year 10 aims to provide all students with:

- Common numerical skills required in work.
- An appreciation of how Mathematics can be used in understanding the world.
- Problem solving and communication skills.
- The opportunity to be challenged/extended, appropriate to their ability and interest.
- A thorough preparation for VCE Mathematics in years 11 and 12 (if desired).
- The mathematical skills required in other subjects.

Topics:

Topics are drawn from all strands, including:

- Linear Equations and Graphs
- Simultaneous Equations
- Measurement and Similar Triangles
- Pythagoras' Theorem
- Finance
- Trigonometry
- Quadratic Equations and Graphs
- Statistics
- Probability
- Inverse proportions

Assessment:

- Class work
- Projects
- Assignments
- PAT Testing
- Topic tests

SCIENCE DOMAIN

In Science, from Year 7 to 10, the aim is to develop the student's scientific knowledge and ability in carrying out scientific investigations. At each level the students build on the previous level to further develop these areas. In Year 10 the students will be working from all areas of the Science curriculum covering topics from the biological sciences, chemical sciences, earth and space sciences and the physical sciences.

Topics that will be covered in Year 10 Science are:

Biology:

- The transmission of heritable characteristics from one generation to the next involves DNA and genes.
- The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence.

Chemistry:

- The atomic structure and properties of elements are used to organise them in the periodic table.
- Chemical reactions involve rearranging atoms to form new substances; during a chemical reaction mass is not created or destroyed
- Different types of chemical reactions are used to produce a range of products and can occur at different rates.
- Chemical reactions, including combustion and the reactions of acids, are important in both non- living and living systems and involve energy transfer

Earth and Space Sciences:

- The universe contains features including galaxies, stars, and solar systems.
- The Big Bang theory can be used to explain the origin of the universe.
- Global systems, including the carbon cycle, rely on the interactions involving the biosphere, lithosphere, hydrosphere and atmosphere.

Physical Science:

- Energy flow in Earth's atmosphere can be explained by the processes of heat transfer
- The explanation of the motion of objects involves the interactions of forces and the exchange of energy and can be described and predicted using the laws of physics
- Science as Human Endeavour
- Advances in scientific understanding often rely on developments in technology and technological advances are often linked to scientific discoveries
- The values and needs of contemporary society can influence the focus of scientific research
- Scientific understandings, including models and theories are contestable and are refined over time through a process of review by the scientific community

Assessment:

Achievement in Science will be assessed using a number of different techniques including:

- Maintaining a record of all practical work completed using correct scientific report format.
- Tests
- Assignments
- Other assessment tasks as indicated by the classroom teacher.

ELECTIVE SUBJECTS OFFERED

ELECTIVES YEAR 10

Year 10 students must complete 6 electives during the year. They can also include VCE and VET subjects. 18 Electives on offer

ARTS	HEALTH & PE	HUMANITIES	TECHNOLOGY
10AT ART	10HE Health	10HI History	10AS Automotive Studies
10VCD Visual Communication and Design in Practice	10PEP “PE PERFORMANCE”	10GE Geography	10EP Engineering and Electronics.
10MU Music	10PED “PE DEVELOPMENT”	10LS Legal Studies	10FS Food Studies
		10BU Business Studies	10MF Metal Fabrication
			10WK Woodwork

THE ARTS _____

10AT Art

Students will learn methods of analysis to help in interpreting the meanings and messages of contemporary and traditional artworks. Students will produce a folio of visual responses that relate to observations on how artists use and combine formal elements and principles, and how they use techniques to express themselves. Students will focus on drawing skills that can be applied in Art and VCD, a variety of advanced painting techniques, and construction methods relating to ceramics and sculpture.

Topics/skills covered:

- Drawing
- Painting
- 3D construction
- Colour Theory
- Proportion, foreshortening and shading
- Art elements and principles
- Visual analysis
- Art room etiquette and safety

Assessment:

Students will be assessed on the completion of a folio of teacher directed activities with accompanying research and development work that explores a range of skills and techniques using a variety of media. They will be required to display an ability to analyse and interpret artwork from different historical and cultural backgrounds and understand Art terminology and processes.

10 VCD Visual Communication Design

Students will focus on the environmental, communication and industrial design fields. They will explore different styles of design, what influences designers, and how they can convey their ideas through design. They will learn how to manipulate the Elements and Principles to develop and refine their ideas using the design process. Students will create their own designs using both manual and digital methods including Adobe Illustrator, Adobe Photoshop and Adobe In Design.

Topics/skills covered:

- Elements and Principles of Design
- The Design Process
- Design in industry

Technical Drawing

Assessment

- manual and digital drawing
- The Design Process
- Application of elements and principles
- Technical Drawing Conventions

10MU Music

In year 10 music students will develop their performance and listening skills by examining different musical styles and techniques including aural perception, notation and composition. Students will create musical scores for several instruments by developing a rudimentary understanding of layered compositions. They will study a variety of music genres and define recognisable characteristics of those genres. Students will also be required to select a musical instrument that will be their main focus during practical music lessons. This subject will aim to prepare students for VCE Music in subsequent years of schooling.

HEALTH AND PHYSICAL EDUCATION _____

10HE Health

Personal, Social and Community Health

In Year 10 Health, students will critically analyse contextual factors that influence their identities, relationships, decision and behaviours. The study analyses the impact of attitudes and beliefs about diversity on community connection and wellbeing. Students will investigate, access, synthesise and apply health information from credible sources to propose and justify responses to a variety of situations. They will also evaluate a range of health sources including Medicare, Private Health Insurance and Pharmaceutical Benefits Scheme to inform health decisions.

Being healthy, safe and active

- Evaluate factors that shape identities, and analyse how individual impact the identities of others.
- Identify and critique the accessibility and effectiveness of support services based in the community that impact on the ability to make health and safe choices.

Communicating and interacting for health and wellbeing

- Evaluate situations and propose appropriate emotional responses and then reflect on possible outcomes of different responses to health and wellbeing.

- Evaluate health information from a range of sources and apply to health decisions and situations

Contributing to healthy and active communities.

- Plan, implement and critique strategies to enhance the health, safety and wellbeing of their communities
- Critique behaviours and contextual factor that influence the health and wellbeing of their communities.

Assessment:

- Completion of all work requirements.
- Respectful Relationships -Multimedia Presentation
- Road Safety - Visual representation
- Health Promotion- Participation in group work and HPE activities

10PEP "PE PERFORMANCE"

Movement and Physical Activity

Physical Education Performance examines the biological, physiological, psychological, social and cultural influences on performance and participation in physical activity. This study enables students to apply criteria to make judgements about and refine their own and others' specialised movement skills and movement performances. Students will work collaboratively to design and apply solutions to movement challenges.

Moving the Body

- Perform and refine specialised movement skills in challenging movement situations.
- Develop, implement and evaluate movement concepts and strategies for successful outcomes.

Understanding movement

- Design, implement and evaluate personalised plans for improving or maintain their own and other's physical activity and fitness levels
- Examine the role physical activity, outdoor recreation and sport play in the lives of Australians and investigate how this has changed over time.

Learning through movement

- Transfer understanding from previous movement experiences to create solutions to movement challenges.
- Reflect on how fair play and ethical behaviour can influence the outcomes of movement activities.

Assessment:

Students must wear correct uniform and actively participate in at least 80% of classes demonstrating a satisfactory attitude and level of achievement. Students must also maintain an up to date work book, and complete all work requirements.

- Training program
- Fitness testing analysis

10PED "PE DEVELOPMENT"

Movement and Physical Activity

Physical Education Development examines a range of coaching practices and their contribution to effective coaching and improved performance of an athlete. Students will explain the importance of cooperation, leadership and fair play across a range of health and movement contexts. They will also compare and contrast a range of action that could be undertaken to enhance their own and others' health, safety and wellbeing.

Moving the Body

- Perform and refine specialised movement skills in challenging movement situations.
- Evaluate own and others' movement compositions and provide and apply feedback in order to enhance performance situations.
- Develop, implement and evaluate movement concepts and strategies for successful outcomes.

Understanding movement

- Analyse the impact of effort, space, time, objects and people when composing and performing movement sequences.

Learning through movement

- Devise, implement and refine strategies for demonstrating leadership and collaboration skills when working in groups or teams
- Reflect on how fair play and ethical behaviour can influence the outcomes of movement activities.

Assessment:

Students must wear correct uniform and actively participate in at least 80% of classes demonstrating a satisfactory attitude and level of achievement. Students must also maintain an up to date work book, and complete all work requirements.

- Skill Acquisition
- Peer Teach
- Biomechanics Test

YEAR 10 HUMANITIES _____

10HI History

Students will analyse the causes and effects of important post WWI Twentieth Century events, actions, beliefs and values from a range of perspectives in order to explain their significance. They will sequence events and developments in a chronological framework, and evaluate the patterns of change and continuity over time. Using appropriate historical terms and concepts, students will evaluate the different interpretations of the past, and compare and contrast the evidence identified in historical sources to evaluate their accuracy, usefulness and reliability.

In doing so students are provided with the opportunity to develop the following knowledge, skills, attitudes and values:

- Knowledge: Includes definitions, dates, important individuals, chronology, and appropriate use of historical terms and concepts.
- Attitudes and Values: The development of attitude and values to help in understanding and tolerating ideas, aspirations and cultural differences of other times, places and people.
- Skills: The development of the ability to think critically, express ideas adequately, choose correct terms, research relevant facts from reputable sources, and marshal evidence to support opinions and distinguish between assumptions and conclusions based on evidence. To be able to Identify and analyse different historical perspectives and interpretations and use of a range of communication forms (oral, graphic, written) and digital technologies.

Topics:

- The inter-war years
- The causes of World War II
- The course and consequence of World War II
- Rights and freedoms
- The Globalising World
- Cold War Conflicts

Assessment:

Work requirements may include the following:

- Tests
- Assignments / Research Tasks
- Folio of Exercises
- Examination

10LS Legal Studies

This unit will increase students' awareness of government in Australia and how democracy works in this country. They will also study the court system and law as it relates to young people in our society.

Students will study features of Australia's political system, and identify and analyse the influences on people's electoral choices. They will compare and evaluate the key features and values of systems of government, and analyse Australia's global roles and responsibilities. They will investigate the role of the High Court and consider how Australia's international legal obligations influence law and government policy. Students will study explain the key principles of Australia's system of justice and analyse the role of Australia's court system. They will evaluate a range of factors that sustain democratic societies and analyse ways they can be more active and informed citizens.

Topics/skills covered:

- Brief outline of constitution, structures of parliament and local government.
- Passage of a bill through parliament.
- How individuals can influence the law.
- Court hierarchy and procedures – going to court.
- Role of Police – their rights.
- Your rights – Am I old enough?
- Outcomes of criminal and civil trials.
- Contract Law.

Assessment:

Work requirements may include the following:

- Tests
- Assignments / Research Tasks
- Folio of Exercises
- Examination

10GE Geography

Geography is concerned with the arrangements of features and people on the Earth's surface. Geography studies are the key to knowing more about your world and the future of your world. In Year 10 a student undertaking Geographical will:

- Develop skills, concepts and values in understanding and caring for our environment.
- Develop an investigative approach in solving geographic problems, in research skills and in fieldwork activities.

- Develop mapping abilities and better understand how 'things' are arranged on the Earth's surface.
- Apply a geographic viewpoint to a variety of issues from the local to the global.

Throughout the subject students will be exploring the operation of different systems that are part of the biosphere and atmosphere, such as the hydrological cycle, plate tectonics and the weather. They will be investigating the interaction of human activities with these natural systems through the study of issues such as air and water pollution, land degradation and urban development. Students will develop skills to evaluate and identify strategies for management of these issues. Fieldwork investigations and research tasks will be used to gather, collate, analyse and evaluate data relating to the natural systems and issues being studied. They will apply geographical skills and techniques in these tasks.

Students will predict changes in the characteristics of places over time and identify the possible implications of change for the future. They will do this when conducting fieldwork by analysing significant spatial distributions, patterns and interconnections. In doing so they will identify possible implications and evaluate changes and further consequences. Students will also investigate environmental, economic and technological factors that influence environmental change and human responses to its management. They will evaluate management responses to environmental change, and predict the future consequences of these responses to the environment.

Topics/skills covered:
- Coastal Systems
- Water
- Eco-Tourism
- Pollution

Assessment:
- Folio of exercises
- Completion of assignments, research tasks and practical exercises
- Topic tests
- Completion of fieldwork and report
- Annotated visual displays
- Examination

10BU – Business Studies

Students will investigate how people manage financial risks and rewards in the current Australian financial landscape. They will identify and explain the indicators of economic performance, examine how Australia's economy is performing, and analyse links between economic performance and living standards. Students will explore the nature of innovation and discuss how businesses seek to create and maintain a competitive advantage in both local and global markets. They will research the way the business environment is changing in contemporary Australia and analyse the implications of this for future enterprises. Students will investigate the viability of business options and use cost-benefit analysis to recommend and justify a course of action. They will also study economic and business trends and make predictions regarding the consequences of economic and business decisions.

Topics/skills covered:
- Basic Business Documents
- Profit & Loss Statement
- Risk Analysis - Managing financial risks and rewards
- Viability Studies
- Analysis & Interpretation of Business Performance
- The changing business environment
- Resource Allocation - Understanding the economy

Assessment:

Work requirements may include the following:
- Tests
- Assignments / Research Tasks
- Folio of Exercises
- Examination

TECHNOLOGY _____

10AS Automotive Studies

Students are introduced to the ancillary systems of an internal combustion engine. These include ignition, starting/charging, fuel, exhaust, cooling systems.
There will be practical work to reinforce theoretical learning. Students will not only learn to identify components but also to determine serviceability and diagnose faults.
Students must supply their own protective clothing and work in accordance with industry standards of OH&S.

Topics/skills covered:

- Identify components and detail their function.
- Investigate the differences between the fuel options available in Australia.
- An awareness of emissions from internal combustion relative to the fuel type used.

Assessment:

- Display an ability to diagnose common faults in various systems.
- Carry out all work with consideration to safe work practices and respect for equipment.
- Research the effect of LPG or methanol on the components of an internal combustion engine.

10EP Engineering and Electronics.

This unit is for students who wish to advance their skills in the Engineering workshop. Skills taught include reading and working from technical drawings to produce part for their project work as well as learning to sketch and dimension their own work plans. Precision machining, accurate measuring and marking out create a pathway to improve an understanding of accuracy and quality control used in the engineering industry.
Workshop safety and OH&S issues are studied in relation to working with machines such as centre-lathes and grinders during the manufacture of a range of projects. Pricing of materials and working from engineering supply manuals to produce quotations for a range of products will be produced on spreadsheets.
Studying electrical circuitry to manufacture a project not only improves machining skills but also give an insight into Electronics as a future career option.
Using relays and switching gear during practical classes when soldering components or circuit planning will highlight wiring techniques used in the electrical field as well as the automotive industry.
The work undertaken in this unit will help prepare students who decide to do V.E.T. Certificate 2. Engineering in YR 11 as well as gaining advanced skills in the engineering environment.

Costs: Students are required to pay for material for some projects Topics/ skills covered.

- Interpreting electrical drawings to determine components and their function in a circuit.
- Skills used in soldering and assembling of electrical components.
- Accuracy tests using measuring equipment when machining to work with an accuracy of 0.05mm.
- Research assignment on electrical test equipment and how to use multimeters.
- Working from drawings and logical instructions to construct project work.

Assessment.

- Work book.
- Practical work.
- Tests.
- Quotation spreadsheet

10MF Metal Fabrication

This unit is for students who wish to advance or gain skills in the Metal Fabrication industry. All students will be exposed to a number of different welding methods and machinery used in the industry. Initially students will use Gas welding to manufacture a project using the Brazing or Silver Soldering techniques.
Students will then be able to choose between MIG Welding and TIG Welding to complete a second project.
TIG Welding is a specialised welding process suited to the welding of Alloys and Stainless Steel.
MIG Welding is a welding process that can also be utilised for Stainless and Alloy but is very well suited to the welding of mild steel and is widely used in all aspects of the industry.
Students will learn the safe use and operation of many different types of equipment and processes and will follow industry level OH&S procedures at all times.
Costs: Students pay for their own materials to produce their projects. Students are required to wear fully enclosed leather footwear and overalls.

Topics/skills covered:

- Successfully complete selected weld coupons.
- Complete an investigation into either MIG or TIG Welding

- A folio with design brief, drawings, investigation, and analysis/evaluation.
- Production of own project using skills learnt.

Assessment:

- Completion of weld coupons and weld write-ups.
- Complete set investigations.
- Evaluation of practical projects.

10WK Woodwork

This unit is an introduction to basic furniture construction and associated design skills. To complete a work plan students will study the development of a range of products over a period of time to see how products change to meet human need. Students will view how design options are considered and how to justify their selection of appropriate ideas.
During the production phase specific safety requirements feature in their studies to prepare students for the use of hand tools, power tools and associated machinery used in the woodworking area. When completing the projects students will evaluate the finished project by comparing it to the original plan and by assessing the improvement in their skill level over a period of time.

Topics/skills covered.

- Basic skills used in the wood work environment.
- Research/ investigate appropriate materials.
- Evaluate design options.
- Establish evaluation criteria for project or part of project choice.
- Work sheets incorporating OH&S in the workplace.
- Plans – Drawings and sketches.
- Final evaluation of the finished product.

10FS Food Studies

In this unit students will learn about a range of complex processes and range of cooking skills and techniques. Students will learn about design briefs, technical terms, and equipment. Students will learn OHS and foods safety. This will give students the understanding of VCE foods.

Topics/skills covered

- The application of hygiene and safety rules for commercial and domestic kitchens.
- Food styling menu and recipe design
- Food costing
- Food wastage
- Knife and equipment skills
- Cooking vocabulary
- Hygiene and safety

Assessment

- Satisfactory completion of all production tasks
- Satisfactory completion of major assignment
- Completion of worksheets/folio
- Satisfactory completion of projects and evaluations.
- Cooking processes
- Design briefs
- Analysing and evaluating
- Food storage
- Food nutrient
- Cleaning
- Impromptu cooking
- Cultural foods
- Presentation of folder containing all theory work and details of production work.
- Investigation
- Participation in class discussions
- Exam

VCE – VET – Vocational Major

VCE

The VCE is a minimum 2-year course of studies taught in Secondary Schools and Technical and Further Education (TAFE) Colleges under the administration of the Victorian Curriculum Assessment Authority (VCAA).

At KTHS Year 11 students will undertake 12 units (that is, 6 per semester) and Year 12 students will undertake 10 units (that is, 5 per semester). We also encourage Year 10's to consider taking on a Unit 1 and 2 subject if they are capable.

Satisfactory Completion of the VCE
To be awarded the VCE, students must satisfactorily complete 16 units of study. These 16 units must include:

- 3 units of English (these units may be selected from VCE English or Literature but must include 3&4)
- Three sequences of Units 3 and 4 in studies other than English;

Units 1 and 2 can be completed as single units but Units 3 and 4 must still be taken as a sequence. To pass a VCE unit all specified unit outcomes must be satisfactorily completed.

Unit Outcomes
An outcome is what a student must know, or be able to do, in order to satisfactorily complete a unit as specified in the study design. A study design specifies the content for the study and how the students' work is to be assessed. Each VCE unit includes a set of two to four outcomes. These outcomes must be achieved by the unit deadline for satisfactory completion of the unit. The achievement of outcomes is based on the performance of assessment tasks designated for the unit.

Assessment of VCE Units 1 and 2
Each study specifies a number of assessment tasks that are set by the teacher to assess students' achievements of the unit outcomes.
On the basis of the work done by the students each outcome will be assessed as either S (satisfactory) or N (not satisfactory). The assessment tasks are reported as raw score percentages...

Assessment of VCE Units 3 and 4
All studies have a combination of both school assessment and examination(s). There will be three assessments reported as grades (A+ to E; UG) for each study.

School-based assessments are set by your teacher and include School-assessed Coursework (SAC) that is completed at school, and School-assessed Tasks (SAT) that are completed at school and home. These are marked at your school. The VCAA checks the marks to make sure that all schools in Victoria.

Examinations
All Unit 3&4 studies have at least one examination in November. Performance/oral examinations are held in October.

Study Scores
Students' overall achievements for each study will be calculated and reported as a Study Score on a scale of 0 to 50. To qualify for a Study Score, a student must have satisfactorily completed both Units 3 and 4 in that study.

Universities and TAFE colleges use various means to select students for tertiary courses. Some of the selection mechanisms include:

- The completion of prescribed pre-requisite VCE Units (often to a minimum study score).
- Interview.

- Folio (for example, a selection of art works).
- Australian Tertiary Admissions Rank (ATAR).
- Reference.
- Scores on Examinations.
- Undergraduate Medicine & Health Sciences Admission Test (UMAT).

It is important for students to be aware of pre-requisite units of study when determining their VCE program, particularly if they have a specific tertiary course they wish to undertake.

The Victorian Tertiary Admissions Centre (VTAC) assists Tertiary Institutions such as Universities and TAFE colleges with the selection of students into University and some TAFE courses. Essential requirements and admission criteria are listed within each course entry on **CourseSearch** and may vary for different applicant groups. You will be considered current year 12 students

A main criterion for tertiary course selection is the Australian Tertiary Admissions Rank (ATAR), which is calculated by VTAC. The ATAR is a percentile ranking of students at Year 12. For example, an ATAR of 70 means that the student has scored better than 70% of other students. Details of the ATAR can be found in the document "ATAR into Tertiary Study," published by VTAC. www.vtac.edu.au

Vocational Education and Training (VET)

The Vocational Education and Training in Schools program (VETiS) enables VCE students to complete their studies as well as a vocational certificate that is nationally recognised (including the new part-time apprenticeships). The program enables both students who wish to pursue further education as well as those who will be seeking a job after Year 12 to gain additional qualifications while at school.

VET in Schools is a viable option for those students who want to gain industry experience before leaving school so that they can make considered decisions about their post-school destinations.

VET is now a component part of the VCE.

Students starting an education/training pathway at school via VET in the VCE has a number of positive advantages:

Students gain industry specific training and experience, in the work place, along with nationally recognised qualifications. They possess 'hands-on' skills acquired in the workplace, which makes them highly employable.

After completing school they have the opportunity to articulate into apprenticeships, traineeships and education and training programs that meet the skill needs of their local communities.

- Keeping the youth of the region, in the region, has been identified as one of the integral requirements of successful development and growth in rural communities.
- VET Certificates can contribute to the ATAR.
- Each VET program requires some work placement. SWL this provides an opportunity for employers and students to develop connections and exposure to a number of industries in the area.

NEW: VCE VOCATIONAL MAJOR

VOCATIONAL MAJOR (VCE VM)

What is the VCE Vocational Major (VM)?

The VCE Vocational Major (VM) is a new vocational and applied learning program that sits within the VCE. It comprises of four subjects that have been added to the VCE subjects offered. The new Vocational Major has an 'Applied Learning Approach' which involves students engaging in relevant and authentic learning experiences.
The Vocational Major is the replacement for the Intermediate and Senior VCAL and is a two-year program at Years 11 and 12.

The Vocational Major will prepare students for a transition into apprenticeships, traineeships, further education and training. There can be university access through alternative entry programs, and it also provides direct access into the workforce.
There are no external examinations for the VCE VM studies and therefore students completing a Unit 3 & 4 subject will not receive a Study Score (as they do in VCE) and are not eligible for an ATAR.

How is the VCE VM structured?

The VCE VM has specific subjects designed to prepare students for a vocational pathway. Students study four specific subjects; VM Numeracy (or through VCE Foundation Maths), VM Literacy, VM Personal Development Skills, VM Work Related Skills and a VET Certificate). Students at the college will also have the ability to study Units 1 & 2 VCE subject and complete structured work placements.
Each subject has four units (students complete two units each year) and each unit has a set of outcomes which are assessed through a range of learning activities and tasks. Students have the opportunity to apply their knowledge and skills in practical setting and also undertake community-based activities and projects that involve them working in a team.

What do students have to do to complete their VCE VM?
Students must satisfactorily complete at least 16 units over the two years of the VM Certificate including:

- 3 VCE VM Literacy or VCE English units (including a Unit 3-4 sequence

3 other Unit 3-4 sequences (mainly from the list below)

- 2 VCE VM Numeracy or VCE Foundation/General Mathematics units
- 2 VCE VM Work Related Skills units
- 2 VCE VM Personal Development Skills and
- 2 VET credits at Certificate II or above (180 hours)
- Students will also undertake structured workplace learning relating to their VET certificate

Satisfactory Completion of a VCE or VM unit
The decision to award a Satisfactory or Not Satisfactory is determined at the school level of each unit. The decision is based on the work submitted and completed by the student and must follow VCAA, and school rules and procedures.

SCHOOL BASEED APPRENTICESHIPS AND TRAINEESHIPS

An SBAT offers students the option of combining a senior secondary program with part-time employment, school and training. The program is undertaken under a Training Contract with an employer and has a training plan registered with the Victorian Registration and Qualifications Authority (VRQA). The training must lead to a nationally recognised qualification.

An SBAT is an integral part of the student's senior secondary learning program and study timetable. Regular school attendance is combined with a minimum of one timetabled day a week of employment and/or structured training. The time requirements of work and training for the SBAT are undertaken at an average of 13 hours a week over each four month period, each year. The VRQA is responsible for regulating the minimum hours per week for employment and training for SBATs. The full policy can be accessed at: http://www.vrqa.vic.gov.au/apptrain/Pages/schemes.aspx

For an apprenticeship or traineeship to be registered as an SBAT it must:

- be a student aged 15 or above enrolled in VCE or VCAL
- Be under a Training Contract with an employer
- include paid work carried out under an appropriate industrial instrument that endorses part-time apprenticeships or traineeships
- include work relevant to the qualification being undertaken by the student
- lead to a nationally recognised qualification at Certificate II, III or IV level
- be integrated into the student's school-based learning program, study timetable and career plan, and
- include training that complies with an approved training scheme for the certificate being undertaken and at a level appropriate for the student

For further information on SBAT's please see Ms McClure you Careers Advisor.

SENIOR SCHOOL POLICIES

This section provides a brief overview of the policies that have been adopted at this school. Details of these policies are provided to each student in their school diaries.

Student Handbook Policies
The student diary contains policies that outline the student, teacher and school responsibilities as they relate to the VCE. It is important that students are aware of the contents of their dairy and that they retain it for reference throughout the year.

Timetable
The timetable for Senior School is based on 6 blocks. Year 10 and 11 students will select 1 Unit from each block and Year 12 students will select a Unit from five of the blocks. The overall timetable blocking arrangement is known as the "Grid" and is generated from an initial survey of students (refer to the section "Selecting a VCE Course"). KTHS operates on a 10-day timetable. Each Senior Study is allocated 10 periods per 10-day cycle.

Assessment
For all VCE units at 1 to 4 levels, the school undertakes the assessment internally. Students will receive 'S' (satisfactorily completed) or 'N' (not satisfactorily completed) for each unit undertaken. In order to satisfactorily complete a VCE Unit, students must satisfactorily complete all of the Unit Outcomes as outlined and detailed to students at the beginning of the units by their teachers.

In each unit, there will also be an assessment of performance levels. At Units 1 and 2 levels, each outcome has an assessment task that is reported as a raw score. If a student does not submit the assessment task, or does not submit it by the due date, he/she will receive NA (not assessed) grade. At Units 3 and 4 level the assessment is a combination of School-assessed Coursework (some Studies also have School-assessed Tasks) and Examination.

At the beginning of each Semester deadlines and due dates for all school assessment are published in the Tech Talk and the School's Internet Website.

Authentication
It is a requirement for satisfactory completion of all units that students submit work that is clearly their own. Copying of another student's work or work from other sources, or gaining undue assistance is unacceptable. The VCAA clearly directs students to the requirements that they must regularly produce evidence to their teachers regarding the development of their work eg. drafts, log entries etc. so that both student and teacher can attest that work submitted is the product of the student. These requirements are designed to protect students, but they clearly state that the submission of previously unsighted work jeopardises a student's chances of "S".
Where breaches of this rule are suspected, an Authentication Panel is set up to investigate, and, if appropriate, to impose penalties.

The panel comprises:
- Assistant Principal
- Senior School Manager
- Relevant Domain Leaders.

In extreme cases, the result in an outcome or assessment task may be cancelled and hence the student would not satisfactorily complete the unit. In such cases both the student and VCAA will be advised and the student has the right of appeal.

The authentication rules for VCE are clearly set out for students in their student dairy as well as procedures to be followed when authentication cases are detected. The diary also provides details about procedures to be followed regarding appeals to decisions made by the Authentication Panel.

Attendance
Students are required to be in attendance for more than 90% of class time. Failure to do so may result in the student's work not being authenticated. This will necessitate the student being called before the Authentication Panel. Less than 90% attendance may also lead to an "N" result.

Extensions of Time
Students who have genuine reasons for submitting set work after a due date or deadline may apply for an extension of time to allow the work to be graded. A genuine reason may be an overnight illness or a medical/dental appointment. Students need to fill out the appropriate form obtained from the Senior School Manager. The Senior School Manager, in consultation with the classroom teacher, will decide if an extension of time is warranted. Appropriate evidence e.g. a medical certificate, will be needed to support the application. Extensions will not be given for reasons that are within the student's control e.g. Driving tests, shopping, non school related trips, including family holidays. The VCAA clearly states that failure of technology is not a reason for extension of time.
Where a student has an extended illness or major problem that affects a number of studies then he or she needs to apply for special provision (see below). In addition, students in Unit 3 and 4 Studies who are affected in the completion of School-assessed Coursework must also apply for Special Provision.

Special Provision
Special Provision may be arranged for students who, for particular reasons, are not able to meet deadlines and due dates set by teachers. Special provision may be granted to students who are:
- Affected by a long term illness or Affected by illness for an assessment in Units 3 - 4.
- Disadvantaged by permanent disability.
- Disadvantaged because of a non-English speaking background.
- Affected by a traumatic event or other personal circumstance.

A Special Provision Panel has been set up to consider applications from students. This panel consists of:
- Assistant Principal.
- Senior School Manager

Students may also use a parent or any other suitable person as an advocate in presenting a case for special consideration to the panel.
Applicants for special provision will need complete a form providing details of the circumstances and relevant supporting documentation in writing on the appropriate request form available from the Senior School Manager. In cases of illness medical documentation will be required.
Details of the special provision policy are given in the student diary. Information is also given in this handbook about the procedures for a student appealing a decision made by the Special Provision Panel.

Student Agreement
All students at KTHS undertaking the VCE will be required to comply with a school/student agreement. This agreement outlines the responsibilities of senior students and recognises the need for senior students to express commitment to a two-year program of studies which demands motivation, self management skills and a co-operative endeavour between staff and students. A copy of the agreement can be found in each student diary.

Due Dates for Work
All students of Units 3 & 4 must submit the work required for a School-assessed Coursework Task or SAT by 4.00 pm on the specific date for submission. At 4 pm on those dates, the Senior School Manager will certify the submission of School-assessed Coursework Task/SAT by the due date. No work can be accepted after that time except by authorisation of the Special Provision Panel.
All students of Units 3 and 4 must have submitted all parts of all the assessment tasks to a satisfactory standard by 4.00pm on the last specified date of each semester for their units. These dates are clearly indicated to students at the beginning of each semester.

All students of Units 1 and 2 must ensure that they meet the due dates of assessment tasks as specified by their teachers, and again, the timeline is 4.00 pm on the relevant dates.

Reporting
Students undertaking a Units 1 and 2 Study will receive a KTHS generated report with results and descriptive comments on their achievements at the end of the semester 1 and 2 (in addition to Interim Reports and Parent Teacher interviews).

Students undertaking a Unit 3 and 4 Study will receive a KTHS generated report at the end of the first semester as well as an Interim Report and Parent Teacher interview. Scores given by teachers for School-Assessed Coursework may be given to the students during the semester. However, these scores must be considered as provisional only as they are subject to statistical moderation by VCAA at the end of each unit.

Returning to Study
KTHS recognises the needs of mature age people wishing to take up interrupted studies, and has a policy of accepting mature age applicants conditional upon the endorsement of a panel which may consist of the Principal or Assistant Principal and Year Level Coordinator (if the student is returning to KTHS) or the Senior School Manager. Mature age students may take up the option of a support person at KTHS.

SENIOR SELECTION PROCESS

The process of selecting a senior course involves a four-stage process. These stages are listed as:

1. Subject Choices made from a list of VCE and VET Units on offer at KTHS.
2. The senior Grid constructed from data obtained from the subject choices.
3. Any students who have chosen subjects, which KTHS is not able to offer, or who have chosen subjects, which clash on the grid, will be further counselled and asked to make another selection.
4. Student/parent Interview with a panel of counsellors. Linking subject selections are appropriately aligned to career pathways, capabilities and skills.

Every endeavour will be made to accommodate the student preferences from the initial choices. However, the construction of the Grid may mean that some students will be required to make changes from their initial preferences. In making an informed decision in the selection of a course, students in Year 9, 10 and 11 need to take note of the following sections:

Year 10 Students Undertaking VCE / VET

Year 10 students will be given an initial choice sheet to fill out – In making selection of Units, students will need to take into consideration the following:

- Students should consult subject teachers and Domain leaders at the Senior School Expo to get more information about each Unit content.
- The career wanted. This will mean investigating the appropriate Units that match the career in terms of recommended Units and pre-requisite Units.
- Students need to discuss with their subjects selected with their current teachers to obtain recommendations. The student requires the signature of each Teacher on the selection sheet to acknowledge their consultation.
- Parents need to sign the subject choice sheet.
- Once selections are complete the Senior School Manager or Careers Adviser will run counselling sessions to ensure a reasonable selection of units has been done.

Year 11 & 12 Students Completing their VCE / VM / VET

Students will need to consider the following when completing their subject choice sheet:

- Refer to selections made in the counselling interviews held last year.
- For the proposed tertiary course are all the pre-requisite units selected?
- Parents need to sign the subject choice sheet.
- VCE requires commitment, organization and a regular work schedule from day one of each semester.
- VCE requires an increasing emphasis on student responsibility for learning. Students will be expected to initiate, undertake and review independent projects. Students will receive guidance from teachers, but ultimately, the product is theirs.
- An essential part of VCE success is efficient student management of time and tasks. All Senior School students receive a diary with study management techniques and advice. All tasks in VCE have due dates and each semester has a deadline; students must learn to work within given time frames and the diary is the appropriate tool to organize this. KTHS encourages parents to assist student progress through the diaries.

Contact People:

- Senior School Manager: Nathan Henry
- Careers Advisor: Jan McClure

VIRTUAL LEARNING ("OTHER SUBJECTS")

Under certain conditions, tuition is available in subjects not available in the school, through the Virtual School Victoria or the VVLN based at Bendigo Senior Secondary College.

For a student to be granted permission to study via these method they must show ability to work independently of others and submit an application to the School Principal and Senior School Manager detailing their request to study via VSV.

The VSV centre has very strict guidelines on eligibility for enrolment and the most likely acceptances are:

- Students transferring from one school to another during the year and are unable to continue a subject; and
- Students committed to studying a subject not available in the school, for example, Foreign Languages

Studying a subject by correspondence requires an independent approach and a strong sense of self-discipline and organization.

ART	ENGLISH	HEALTH & PHYSICAL EDUCATION	HUMANITIES	MATHEMATICS	SCIENCE	TECHNOLOGY
Art: Creative Practice 1 & 2 3 & 4	English 1 & 2 3 & 4	Physical Education 1 & 2 3 & 4	Legal Studies 1 & 2 3 & 4	Foundation Mathematics 1 & 2	Biology 1 & 2 3 & 4	VET Automotive 1 & 2 3 & 4
Visual Communication Design 1 & 2 3 & 4		Health & Human Development 1 & 2 3 & 4	Modern History 1 & 2	General Mathematics 1 & 2 3 & 4	Chemistry 1 & 2	VET Engineering 1 & 2 3 & 4
			Revolutions 3 & 4	Mathematical Methods (VVLN) 1 & 2 3&4	Physics 1 & 2	VET Furnishing 1 & 2 3 & 4
			Australian History 3&4	Specialist Mathematics (VVLN) 1 & 2	Psychology 1 & 2 3 & 4	VET Cookery 1&2 3&4
			Business Management 1 & 2 3 & 4			VET Agriculture 1&2 3&4

SUBJECTS OFFERED IN THE

ENGLISH DOMAIN

ENGLISH

UNIT 1

AREA OF STUDY 1 – READING AND EXPLORING TEXTS
In this area of study, students engage in reading and viewing texts with a focus on personal connections with the story. They develop and strengthen inferential reading and viewing skills.
Students' exploration of texts involves understanding and appreciating the role of vocabulary, text structures and language features in creating story and meaning. They contemplate the ways a text can present and reflect human experiences, and how stories or aspects of stories resonate with their own memories and lives.

Students develop their own thinking and engage with the ideas of others to extend their understanding of a text. For this outcome, students will read and explore one set text.

AREA OF STUDY 2 – CRAFTING TEXTS

Students read and engage imaginatively and critically with mentor texts that model effective writing. Through guided reading of mentor texts, students develop an understanding of the diverse ways that vocabulary, text structures, language features and ideas can interweave to craft compelling texts. Students employ and experiment with the qualities of effective writing in their own work. They extend their creativity, fluency and range. The mentor texts can include short stories, speeches or monologues (with transcripts), essays (comment, opinion, reflective, personal), podcasts (with transcripts), poetry/ songs, feature articles (including a series of blog or social media postings) and memoirs and biography.

UNIT 2

AREA OF STUDY 1 – READING AND EXPLORING TEXTS
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 read or view a text, engaging with the ideas, concerns and tensions, and recognise ways vocabulary, text structures, language features and conventions of a text work together to create meaning. Developing analytical writing about a text provides students with opportunities to build skills to discuss ideas, apply appropriate metalanguage, integrate evidence from a text to support key points, and explore organisational structures such as formal essays.

AREA OF STUDY 2 – EXPLORING ARGUMENT

Students practise analysing persuasive texts using note taking, summaries and short-answer questions, and through formal, analytical writing. Students craft their writing using evidence from the texts to support their analysis. They draft and revise their writing and invite feedback from their teacher and other students to refine their ideas and expression.

UNIT 3

AREA OF STUDY 1 – READING AND RESPONDING TO TEXTS
In this area of study, students apply reading and viewing strategies to critically engage with a text, considering its dynamics and complexities and reflecting on the motivations of its characters. They analyse the ways authors construct meaning through vocabulary, text structures, language features and conventions, and the presentation of ideas. They are provided with opportunities to understand and explore the historical context, and the social and cultural values of a text, and recognise how these elements influence the way a text is read or viewed, is understood by different audiences, and positions its readers in different ways.

AREA OF STUDY 2 – CREATING TEXTS

In this area of study, students build on the knowledge and skills developed through Unit 1. They read and engage imaginatively and critically with mentor texts, and effective and cohesive writing within identified contexts. Through close reading, students expand

their understanding of the diverse ways that vocabulary, text structures, language features, conventions and ideas can interweave to create compelling texts. They further consider mentor texts through their understanding of the ways that purpose, context (including mode), and specific and situated audiences influence and shape writing.
Contribution to final assessment:
School-assessed Coursework for Unit 3 will contribute 25 per cent to the study score.

UNIT 4

AREA OF STUDY 1 – READING AND RESPONDING TO TEXTS

In this area of study, students further sharpen their skills of reading and viewing texts, developed in the corresponding area of study in Unit 3. Students consolidate their capacity to critically analyse texts and deepen their understanding of the ideas and values a text can convey.
Students apply reading and viewing strategies to engage with a text, and discuss and analyse the ways authors construct meaning in a text through the presentation of ideas, concerns and conflicts, and the use of vocabulary, text structures and language features. They engage with the dynamics of a text and explore the explicit and implicit ideas and values presented in a text. They recognise and explain the ways the historical context, and social and cultural values can affect a reader, and analyse how these social and cultural values are presented. They establish how these values can influence the way a text is read or viewed, can be understood by different audiences, and can position readers in different ways.

AREA OF STUDY 2 – ANALYSING ARGUMENT

In this area of study, students analyse the use of argument and language, and visuals in texts that debate a contemporary and significant national or international issue. The texts must have appeared in the media since 1 September of the previous year and teachers are advised to work with their students to select an issue of relevance to the cohort. Students read, view and/or listen to a variety of texts from the media, including print and digital, and audio and audio visual, and develop their understanding of the ways in which arguments and language complement one another to position an intended audience in relation to a selected issue.

Contribution to final assessment:
School-assessed Coursework for Unit 4 will contribute 25 per cent to the study score.
External assessment:
The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50 per cent.

SUBJECTS OFFERED IN THE

ART DOMAIN

ART: CREATIVE PRACTICE

UNIT 1: INTERPRETING ARTWORKS AND EXPLORING THE CREATIVE PRACTICE

AREA OF STUDY 1 – ARTISTS, ARTWORKS AND AUDIENCES

In this area of study students are introduced to the Structural and the Personal Lenses by researching and analysing three artists, their practices and their artworks. They analyse one artwork by each artist and interpret meanings and messages using the Structural and Personal Lenses. In doing so, students will discover how the Structural and Personal Lenses can enhance their understanding of artworks and the way they reflect the artist's interests, experiences and thinking.

The students also develop an understanding of how the interpretation of meanings and messages is influenced by the personal experiences of the viewer or audience and the context of the artwork. They also learn how to use evidence from artworks and a range of sources to support their personal interpretation and point of view.

AREA OF STUDY 2 – THE CREATIVE PRACTICE

In this area of study students are introduced to the Creative Practice through Experiential learning activities guided by the teacher. Students explore at least three art forms. They respond to a range of artworks, ideas and the practices of artists through experimentation and exploration. They build skills using materials, techniques and processes, and explore areas of personal interest to develop and make visual responses.

AREA OF STUDY 3 – DOCUMENTING AND REFLECTING ON THE CREATIVE PRACTICE

Students develop their art practice by responding to the ways artists conceptualise, develop and make their artworks. They provide annotated documentation of their experiences in Making and Responding. Students reflect on their research and document the visual responses to the ideas they have explored, their creative and critical thinking, and their trials

and experimentation with materials and techniques. As artists, students reflect on their use of the Creative Practice, and evaluate and annotate their use of visual language to communicate ideas of personal interest.

UNIT 2: INTERPRETING ARTWORKS AND DEVELOPING THE CREATIVE PRACTICE

AREA OF STUDY 1 – THE ARTIST, SOCIETY AND CULTURE

In this area of study students focus on the ways in which art reflects and communicates the values, beliefs and traditions of the societies in which it was created. They will apply the Cultural Lens to study the practices of at least three artists from different cultures and times.

AREA OF STUDY 2 – THE COLLABORATIVE CREATIVE PRACTICE

In this area of study students continue to develop their art practice as they explore collaborative practices to make and present artworks. Students explore ideas of personal interest related to culture. They continue to experiment with visual language to communicate their ideas using the Creative Practice. Ideas inspired by culture may be used as starting points to experiment with techniques, materials, processes and art forms.

Students resolve at least one finished artwork and consider presentation of their artwork and the context in which it will be viewed, including considering the relationships between the artwork, context, and viewer or audience.

AREA OF STUDY 3 – DOCUMENTATION OF COLLABORATION USING THE CREATIVE PRACTICE

In this area of study students build on their knowledge and skills, and continue to document their art practice. They develop and evaluate their use of visual language. Students explore and reflect upon the relationship between the artist, artwork and audience. They respond to artworks, and the collaborative practices of artists, to make and present their own artworks. Students present a critique of their use of the

Creative Practice and respond to the feedback they receive to resolve their artwork. Students document and reflect on their own art practice, identifying and discussing how they have used the Creative Practice and developed their visual language. Students reflect upon and evaluate the use of collaboration in their art making and discuss how cultural ideas and issues are communicated in their artworks.

UNIT 3: INVESTIGATION, IDEAS, ARTWORKS AND THE CREATIVE PRACTICE

AREA OF STUDY 1 – INVESTIGATION AND PRESENTATION
Research and exploration- In this area of study students use Project-based learning as they begin to develop a Body
of Work. Students research one artwork by a selected contemporary or historical artist as inspiration for their own art practice. The student's Body of Work begins with a personal response, presented in a finished artwork, and the research and documentation of their art practice.
Resolution, presentation and critique- Students refine their skills and visual language in the resolution and presentation of at least one finished artwork. They will demonstrate how the idea they have chosen to explore relates and responds to their research. Students evaluate, reflect and talk about their use of the Creative Practice in a critique.

AREA OF STUDY 2 – PERSONAL INVESTIGATION USING THE CREATIVE PRACTICE
In this area of study students continue to develop a Body of Work through Inquiry learning. They use the Creative Practice to develop their own visual responses inspired by ideas and experiences. Students progressively explore and develop their ideas, and investigate and experiment with materials, techniques and processes using art forms of their choice. Students develop their personal visual language as well as document, critically analyse and evaluate their responses and art making.

UNIT 4: INTERPRETING, RESOLVING AND PRESENTING ARTWORKS AND THE CREATIVE PRACTICE

AREA OF STUDY 1 – DOCUMENTATION AND CRITIQUE OF THE CREATIVE PRACTICE
In this area of study students continue to use the Creative Practice to develop, refine and resolve the ideas they developed in Unit 3. They evaluate how they have responded to inspiration and influences throughout their Body of Work, and how they have explored and experimented with materials, techniques and processes in at least one selected art form to establish their visual language in personal visual responses. Through discussion, students identify and classify emerging ideas in their artworks.

AREA OF STUDY 2 – RESOLUTION AND PRESENTATION OF A BODY OF WORK
In this area of study students continue to use Inquiry and Project-based learning as the basis for their use of the Creative Practice. They further develop and refine the Body of Work commenced in Unit 3, and continue their ongoing exploration and experimentation of personal responses.
Using the feedback received from their critique, students progressively refine and resolve their ideas and visual language in their artworks. Students also consider the presentation and context of their Body of Work, and how ideas and meaning are communicated to a viewer or audience.

AREA OF STUDY 3 – COMPARISONS OF ARTISTS, THEIR PRACTICE AND THEIR ARTWORKS.
In this area of study students undertake research of artists, their practices and their artworks. They critically analyse and interpret the meanings and messages of artworks and use evidence and the appropriate Interpretive Lenses to support their interpretation and point of view. Using appropriate terminology, they compare the meanings and messages of historical and contemporary artworks.
Assessment:
The School-assessed Task over Units 3 and 4 will contribute 60 per cent of the study score.
School-assessed Coursework for Unit 4 will contribute 10 per cent to the study score.
External assessment:
The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination.
The examination will contribute 30 per cent to the study score.

VISUAL COMMUNICATION DESIGN

UNIT 1: INTRODUCTION TO VISUAL COMMUNICATION DESIGN

AREA OF STUDY 1 – FINDING, REFRAMING AND RESOLVING DESIGN PROBLEMS

In this unit students are introduced to the practices and processes used by designers to identify, reframe and resolve human-centred design problems. They learn how design can improve life and living for people, communities and societies, and how understandings of good design have changed over time. Students learn the value of human-centred research methods, working collaboratively to discover design problems and understand the perspectives of stakeholders. They draw on these new insights to determine communication needs and prepare design criteria in the form of a brief.

AREA OF STUDY 2 – SOLVING COMMUNICATION DESIGN PROBLEMS

In this area of study, students draw on conceptions of good design and their understanding of human-centred design problems when developing visual language for a brand or business. They learn that visual language serves as part of a larger strategy to increase engagement, influence behaviour and reposition the brand or business among audiences or users. It can include but is not limited to a visual identity applied to various outcomes and collateral, a signature colour palette, graphic icons and typography.

AREA OF STUDY 3 – DESIGN'S INFLUENCE AND INFLUENCES ON DESIGN

In this area of study, students learn about factors that impact design decisions, as well as the impact of design on people and our planet. They consider these influences when designing three-dimensional objects for specific purposes, contexts and users. Students integrate newly developed understandings of good design, and move beyond human-centred mindsets to also consider the needs of other species, our planet and its future. In doing so, sustainability and circular design practices become an area of particular focus.

UNIT 2: DESIGN CONTEXTS AND CONNECTIONS

AREA OF STUDY 1 – DESIGN, PLACE AND TIME

In this area of study, students explore the designer's ethical and legal responsibilities when drawing on knowledge and designs belonging to Indigenous communities from Australia or abroad. They learn how to adopt culturally appropriate design practices, including protocols for the creation and commercial use of Indigenous knowledge such as those published in the Australian Indigenous Design Charter. In particular, students develop a deep appreciation for the histories, practices and foundational contributions of Aboriginal and Torres Strait Islander peoples to Australian design identity, while learning about respectful and appropriate representations of Aboriginal and Torres Strait Islander culture in design.

AREA OF STUDY 2 – CULTURAL OWNERSHIP AND DESIGN

Increasing advancements in the digital communication of information has led to a greater need to understand the meaning and function of typography in visual language. In this area of study students develop knowledge and skills in manipulating type and images when communicating ideas and concepts. They consider historical and contemporary factors that have influenced the style and layout of print and screen- based presentation formats. Students develop and apply skills in selecting and manipulating type to evoke different moods and emotions, and use a range of manual and digital methods when creating and manipulating images.

AREA OF STUDY 3 – DESIGNING INTERACTIVE EXPERIENCES

In this area of study, students examine the role of visual communication in shaping positive interactive experiences, and in catering for the diverse needs of users when interacting with devices, systems or services. They explore how interaction designers contribute to larger user-experience (UX) projects, focusing on the design of visual interfaces rather than their underlying functionality. They adopt inclusive practices and principles during the design of a user interface for a digital site or device, prioritising accessibility and usability. In doing so, students synthesise key understandings from previous outcomes: good design, human-centred research methods, design's influence and the influences on design, and the significance of place and time.

UNIT 3: VISUAL COMMUNICATION IN DESIGN PRACTICE

AREA OF STUDY 1 – PROFESSIONAL DESIGN PRACTICE

In this area of study, students investigate how and where designers work, identifying the role of visual communication in professional design practice. Contemporary designers working in one or more fields of design practice are selected for study. Students

compare the contexts in which these designers work, their applications of a design process, and the ways in which they use visual language to communicate ideas and concepts, and present design solutions. Students explore how designers collaborate with both stakeholders and specialists to shape and resolve design problems. They also identify the impact of ethical and legal obligations, including issues of ownership and intellectual property, and the extent to which contemporary designers adopt sustainable and circular design practices. In doing so, students learn how contemporary design practices differ from those in the past and how they may change in the future, identifying the influence of technological, economic, cultural, environmental and social factors.

AREA OF STUDY 2 – DESIGN ANALYSIS

In this area of study, students learn how visual language is used to effectively communicate ideas and information to audiences or users. Students analyse the aesthetic decisions made by designers when producing messages, objects, environments or interactive experiences. They compare two or more design examples, considering how the design elements and principles are used in combination with media, methods and materials to address perceived communication needs. Drawing on conceptions of good design, students describe, analyse and evaluate how aesthetic decisions reflect the purposes, contexts and audiences or users of the selected design examples. They also consider the influence of technological, economic, cultural, social or environmental factors on the selected design examples.

AREA OF STUDY 3 – DESIGN PROCESS: DEFINING PROBLEMS AND DEVELOPING IDEAS

In this area of study, students explore the Discover, Define and Develop phases of the VCD design process, and apply understandings of good design when addressing a selected design problem. Students begin the Discover phase by using divergent thinking strategies and applying ethical research methods to identify a design problem or opportunity. They gather insights about stakeholder perspectives and other influential factors using a range of research methods such as but not limited to interviews and surveys, audience or user personas, competitor analysis and secondary research.

UNIT 4: DELIVERING DESIGN SOLUTIONS

AREA OF STUDY 1 – DESIGN PROCESS: REFINING AND RESOLVING DESIGN CONCEPTS

In this area of study, students reflect critically on feedback received in Unit 3, Outcome 3 as they evaluate, select and evolve design ideas into concepts for further refinement and testing. In doing so, students explore the Deliver phase of the VCD design process.
Students engage in an iterative cycle as they rework ideas, revisit research and review the client's needs. They manipulate the design elements and principles in response to the brief and develop expertise in a range of appropriate manual and digital methods, materials and media. Development and documentation drawings, together with mock-ups, models and low-fidelity prototypes, may be used to assist with visualising, testing and resolving design concepts. During this process, students move from divergent to convergent thinking, drawing on conceptions of good design when synthesising ideas and using annotations to evaluate their potential. The refinement of design concepts for each communication need continues as two separate design processes, with students ensuring that these are distinct from one another in purpose and presentation format.

AREA OF STUDY 2 – PRESENTING DESIGN SOLUTIONS

In this area of study, students present design solutions for each of the communication needs addressed in Area of Study 1. They choose how best to use visual language to communicate solutions to stakeholders, considering aesthetic impact through applications of design elements and principles. Students select materials, methods and media appropriate for the presentation of final design solutions that are distinct from one another in purpose and presentation format, and that address design criteria specified in the brief.

Assessment of levels of achievement
The student's level of achievement in Unit 3 Outcome 3 and in Unit 4 Outcomes 1 and 2 will be assessed through a School-assessed Task. The School-assessed Task contributes 50 per cent to the study score.

Unit 3 Outcome 1 and 2 are assessed by school-assessed Coursework which will contribute 20 per cent to the study score.

The examination will contribute 30 per cent to the study score.

SUBJECTS OFFERED IN THE

HUMANITIES DOMAIN

LEGAL STUDIES

UNIT 1 – GUILT AND LIABILITY:

AREA OF STUDY 1 – LEGAL FOUNDATIONS

This area of study provides students with foundational knowledge of laws and the Australian legal system. Students explore the role of individuals, laws and the legal system in achieving social cohesion and protecting the rights if individuals. Students consider the characteristics of an effective law, and source and types of law. They examine the relationship between parliament and the courts, and the reasons for a court hierarchy in Victoria, and develop an appreciation of the principles of justice.

AREA OF STUDY 2 – THE PRESUMPTION OF INNOCENCE

In this area of study students develop an understanding of key concepts in criminal law and types of crime, and investigate two criminal offences in detail. For each offence, students consider actual and/or hypothetical scenarios in which an accused has been charged with the offence, use legal reasoning to determine possible culpability and explain the impact of the offence in individuals and society.

AREA OF STUDY 3 – CIVIL LIABILITY

In this area of study students develop an understanding of key concepts in civil law and investigate two areas of civil law in details. Possible areas of civil law could include negligence, defamation, nuisance, trespass and contracts. For each area of civil law, students consider actual and/or hypothetical scenarios giving rise to a civil claim, apply legal reasoning to determine possible liability for a breach of civil law and explain the impact of a breach of civil law in the parties.

UNIT 2 – SANCTIONS, REMEDIES AND RIGHTS:

AREA OF STUDY 1 – SANCTIONS

In this area of study 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. Through an investigation of two criminal cases from the past four years, either decided or still being decided, students explore the extent to which the principles of justice were or could be achieved.

AREA OF STUDY 2 – REMEDIES

In this area of study 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. Through an investigation of two civil cases from the past four years, either decided or still being decided, students explore the extent to which the principles of justice were or could be achieved.

AREA OF STUDY 3 – RIGHTS

Rights are protected in Australia through the Australian Constitution, the Victorian Charter of Human Rights and Responsibilities and through common law and statute law such as through statutes relating to racial discrimination, sex discrimination and equal opportunity. In this area of study students examine the ways in which rights are protected in Australia and compare this approach with that of another country. They consider possible reforms and investigate an Australian case that had an impact on the protection of rights in Australia and develop their understanding of the role of an individual in taking a case to court.

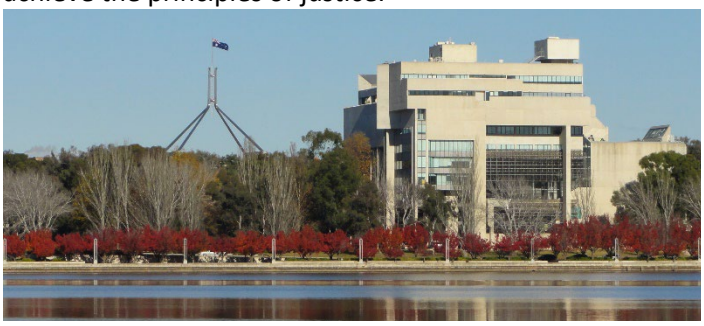
UNIT 3 – RIGHTS AND JUSTICE:

AREA OF STUDY 1 – THE VICTORIAN CRIMINAL JUSTICE SYSTEM

The Victorian criminal justice system is used to determine whether an accused person is guilty beyond reasonable doubt of an offence for which they are charged, and to impose sanctions where guilt has been found or pleaded. The system involves a range of institutions including courts (the Magistrates' Court, County Court and Supreme Court) and others available to assist an accused. In this area of study students explore the criminal justice system, its range of personnel and institutions and the various means it uses to determine a criminal case. Students investigate the rights of the accused and of victims, and explore the purposes and types of sanctions and sentencing considerations. Students consider factors that affect the ability of the criminal justice system to achieve the principles of justice. They examine recent reforms from the past four years and recommended reforms to enhance the ability of the criminal justice system to achieve the principles of justice.

AREA OF STUDY 2 – THE VICTORIAN CIVIL JUSTICE SYSTEM

The Victorian civil justice system aims to restore a wronged party to the position they were originally in before the breach of civil law occurred. The system involves a range of institutions to resolve a civil dispute, including courts (the Magistrates' Court, County Court and Supreme Court), complaints bodies and tribunals. In this area of study 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. Students consider factors that affect the ability of the civil justice system to achieve the principles of justice. They examine recent reforms from the past four years and recommended reforms to enhance the ability of the civil justice system to achieve the principles of justice.



UNIT 4: THE PEOPLE AND THE LAW

AREA OF STUDY 1 – THE PEOPLE AND THE AUSTRALIAN CONSTITUTION

The Australian Constitution establishes Australia's parliamentary system and provides mechanisms to ensure that parliament does not make laws beyond its powers. In this area of study 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 in law-making. Students investigate the involvement of the Australian people in the referendum process and the role of the High Court in acting as the guardian of the Australian Constitution.

AREA OF STUDY 2 – THE PEOPLE, THE PARLIAMENT AND THE COURTS

Parliament is the supreme law-making body, and courts have a complementary role to parliament in making laws. Courts can make laws through the doctrine of precedent and through statutory interpretation when determining cases. In this area of study students investigate factors that affect the ability

of parliament and courts to make law. They examine the relationship between parliament and courts in law-making and consider the capacity of both institutions to respond to the need for law reform. In exploring the influences on law reform, students draw on examples of individuals and the media, as well as examples from the past four years of law reform bodies recommending legislative change.

ASSESSMENT:

School-assessed Coursework for Unit 3 and 4 combined will contribute 50 per cent to the study score.

EXTERNAL ASSESSMENT:

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 50 per cent to the study score.

MODERN HISTORY

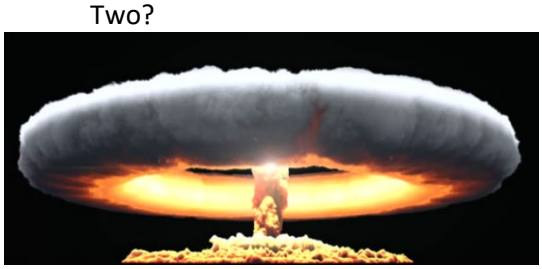
UNIT 1 – CHANGE AND CONFLICT:

In this unit students investigate the nature of social, political, economic and cultural change in the later part of the 19th century and the first half of the 20th century. Modern History provides students with an opportunity to explore the significant events, ideas, individuals and movements that shaped the social, political, economic and technological conditions and developments that have defined the modern world.

AREA OF STUDY 1 - IDEOLOGY AND CONFLICT

On completion of this unit the student should be able to explain how significant events, ideologies and individuals contributed to political and economic changes in the first half of the 20th century, and analyse how these contributed to the causes of World War Two.

- How did significant events and ideas contribute to conflict and change?
- How did individuals and movements challenge existing political and economic conditions?
- What were the consequences of World War One?
- How did ideology influence the emergence of new nation states?
- To what extent did the events, ideologies, individuals, movements and new nations contribute to the causes of World War Two?



AREA OF STUDY 2 - SOCIAL AND CULTURAL CHANGE

On completion of this unit the student should be able to explain patterns of social and cultural change in everyday life in the first half of the twentieth century, and analyse the conditions which influenced these changes.

- How did society and culture change?
- How did cultural life both reflect and challenge the prevailing political, economic and social conditions?
- How did ideologies contribute to continuities and changes in society and culture?
- What role did individuals, groups and movements play in social and cultural continuity and/or change?

UNIT 2 – THE CHANGING WORLD ORDER:
In this unit students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century.
AREA OF STUDY 1- CAUSES, COURSE AND CONSEQUENCES OF THE COLD WAR
On completion of this unit the student should be able to explain the causes of the Cold War and analyse its consequences on nations and people.

- What were the causes of the Cold War?
- How did Cold War ideology contribute to increased tensions and conflict?
- What were the consequences of the Cold War on nations and peoples?
- What caused the end of the Cold War?
- How did the social, political, economic and cultural conditions influence and change the post-Cold War world?

AREA OF STUDY 2- CHALLENGE AND CHANGE
On completion of this unit the student should be able to explain the challenges to social, political and/or economic structures of power and evaluate the extent to which continuity and change occurred.

- What caused the challenges to existing political and/or social structures and conditions?
- How did the actions and ideas of popular movements and individuals contribute to continuity and change?
- To what extent did change occur?
- What were the perspectives and experiences of those who demanded and/or resisted change?

AUSTRALIAN HISTORY

In Australian History, students explore significant moments in Australia's history and consider the contributions of different individuals, groups and movements. They analyse a variety of diverse and competing perspectives and historical interpretations, and evaluate the actions and responses of those who advocated for, challenged and/or resisted change. These include the struggles over political rights and freedoms, shifting conceptions of who is an Australian, and Australia's engagement in global and regional conflict.
During the course students will complete historical investigations into the following areas:

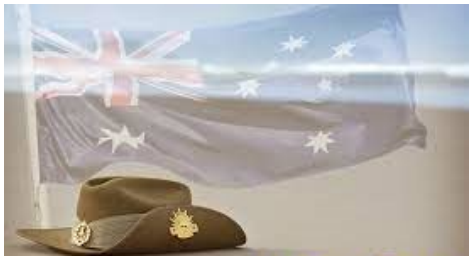
- War and upheaval (1909–1992)
- Creating a nation (1834–2008).

AREA OF STUDY 1 – FOUNDATIONS (For both Unit 3 and 4):

- What were the foundations of continuity and change in Australia?
- How did significant individuals and movements demand and/or resist change?
- How were Australians challenged over time by ideas and events?
- To what extent were there continuities and changes in Australian society?
- How did Australians influence and experience continuity and change?

UNIT 3 - WAR AND UPHEAVAL (1909–1950):
Students investigate the debates and perspectives about Australia's participation in World War One and World War Two. Students analyse the ways in which social, political and economic cohesion of the nation was influenced by the impacts of these conflicts, including different perspectives about participation in war and conflict, enlistment and conscription and the ways that different groups experienced the war.
UNIT 4 - CREATING A NATION (1834–1913):
Students investigate the changing patterns of migration to and within the colonies and federated

Australia, and the social, political and economic factors influencing the colonies. They examine the attitudes towards Indigenous peoples and the influence of European and Chinese migration on the diverse perspectives about who was included and who belonged. Students examine debates that influenced immigration and forced migration to the colonies and federated Australia, and the treatment of Aboriginal and Torres Strait Islander peoples. Students consider how these perspectives influenced the new nation after 1901 and decisions about who was to be included or excluded.



AREA OF STUDY 2 - TRANSFORMATIONS (For both Unit 3 and 4):

- What were the motivations for seeking continuity and change in modern Australia?
- How did significant individuals and movements demand and/or resist change?
- How were Australians challenged over time by events and ideas?
- To what extent were there continuities and changes in Australian society?
- How did Australians influence and experience continuity and change?

UNIT 3 - WAR AND UPHEAVAL (1950–1992):
Students investigate Australia's involvement and reasons for participation in post-World War Two conflicts and the subsequent debates arising from these conflicts. The changing reasons for Australia's participation in conflicts was influenced by shifting alliances, fears of Communism, desires for regional security, concerns regarding terrorism and the evolving nature of enlistment and service in the military forces. Students consider the impacts of these conflicts on groups in Australian society and the differing ways in which Australians responded.
UNIT 4 - CREATING A NATION (1945–2008):
Students investigate the ways in which the push to 'populate or perish' and attitudes to Aboriginal and Torres Strait Islander peoples after World War Two changed Australian society. They examine perspectives about who could migrate and belong in the Australia nation, including an expanding concept of citizenship and migration and how that would challenge the White Australia Policy and contribute to a multicultural society.

ASSESSMENT:
School-assessed Coursework for Unit 3 and 4 combined will contribute 50 per cent to the study score.
EXTERNAL ASSESSMENT:
The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 50 per cent to the study score.

REVOLUTIONS

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point in the collapse and destruction of an existing political order which results in extensive change to society. The implementation of revolutionary ideology was often challenged internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror.
Two of the following revolutionary wars will be studied:

• The American Revolution

• The Russian Revolution

• The French Revolution

• The Chinese Revolution

AREA OF STUDY 1 – CAUSES OF REVOLUTION (For both Unit 3 and 4):

- What were the significant causes of revolution?
- How did the actions of popular movements and particular individuals contribute to triggering a revolution?

- To what extent did social tensions and ideological conflicts contribute to the outbreak of revolution?

The key knowledge for this area of study in Units 3 and 4 comes from the following timeframes:

- The American Revolution (1754–4 July 1776)
- The French Revolution (1774–4 August 1789)
- The Russian Revolution (1896– 26 October 1917)
- The Chinese Revolution (1912–1 October 1949).

AREA OF STUDY 2 – CONSEQUENCES OF REVOLUTION (For both Unit 3 and 4):

- What were the consequences of revolution?
- How did the new regime consolidate its power?
- What were the experiences of those who lived through the revolution?
- To what extent was society changed and revolutionary ideas achieved or compromised?

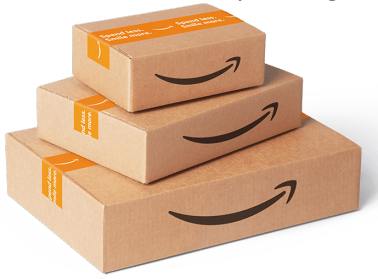
The key knowledge for this area of study in Units 3 and 4 comes from the following timeframes:

- The American Revolution (4 July 1776–1789)
- The French Revolution (5 August 1789–1795)
- The Russian Revolution (26 October 1917–1927)
- The Chinese Revolution (October 1949–1976).

ASSESSMENT:
School-assessed Coursework for Unit 3 and 4 combined will contribute 50 per cent to the study score.
EXTERNAL ASSESSMENT:
The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 50 per cent to the study score.

BUSINESS MANAGEMENT

UNIT 1 – PLANNING A BUSINESS:
AREA OF STUDY 1 – THE BUSINESS IDEA
In this area of study students investigate the concept of entrepreneurship. They consider how business ideas are created and how conditions can be fostered for new business ideas to emerge. New business ideas come from a range of sources, such as identifying a gap in the market, technological developments and changing customer needs. Students explore some of the considerations to be made before a business can be established as well as the importance of businesses to the national economy and social wellbeing.
AREA OF STUDY 2 – INTERNAL BUSINESS ENVIRONMENT AND PLANNING
The internal environment affects the approach a business takes to planning and the extent to which planning is successful. A business owner will generally have more control over the activities, functions and pressures that occur within the business. decisions involving these factors may affect the ultimate success of a business, with success being measured by the extent to which business objectives are met within a specific timeframe.
AREA OF STUDY 3 – INTERNAL BUSINESS ENVIRONMENT AND PLANNING
The external environment consists of all elements outside a business that may act as pressures or forces on business operations. Students consider factors from the external environment such as legal, political, social, economic,
technological, global and corporate social responsibility factors and the effects these may have on the decisions made when planning a business.



UNIT 2 – ESTABLISHING A BUSINESS:
AREA OF STUDY 1 – LEGAL REQUIREMENTS AND FINANCIAL CONSIDERATIONS
It is essential to deal with legal and financial matters when establishing a business. In this area of study students
are introduced to the legal requirements and financial considerations that are vital in establishing a business. They also consider the implications for the business if legal and financial requirements are not met.
AREA OF STUDY 2 – MARKETING A BUSINESS
Establishing a strong customer base for a business is an important component of success. In this area of study students develop an understanding that marketing encompasses a wide range of management practices, from identifying the needs of the target market and creating a brand presence through to consideration of the 7Ps of marketing and the impact of rapidly changing technology on marketing practices. They also consider effective public relations

strategies and the benefits these can bring to a business.

AREA OF STUDY 3 – STAFFING A BUSINESS

Staff, as one of the greatest assets of a business, are an important consideration during the establishment phase. In this area of study students consider staffing requirements that will meet the needs of a business and contribute to productivity and achievement of business objectives. They research the processes undertaken by the business in relation to the recruitment, selection and induction of staff. Students consider the opportunities that the skills and capabilities of staff can offer a business, the legal obligations that must be addressed in relation to staff, and the relationship between employers and employees within a business.

UNIT 3 – MANAGING A BUSINESS:

AREA OF STUDY 1 – BUSINESS FOUNDATIONS

This area of study introduces students to the key characteristics of businesses and their stakeholders. Students investigate potential conflicts between the different demands of stakeholders on a business. They examine corporate culture and a range of management styles and management skills that may be used when managing a business, and apply these to contemporary business case studies from the past four years.

AREA OF STUDY 2 – HUMAN RESOURCE MANAGEMENT

In this area of study students investigate considerations for the effective management of employees to ensure business objectives are achieved. They consider employee motivation in terms of a number of motivation Theories. Using these theories of motivation and motivation strategies, students propose and justify possible strategies for employee management in contemporary business case studies from the past four years. Students study an overview of workplace relations.

AREA OF STUDY 3 – OPERATIONS MANAGEMENT

The production of goods and services is a core objective of businesses. Effective management of the process of transforming inputs into outputs is vital to maximising the efficiency and effectiveness of the production process and meeting the needs of stakeholders. In this area of study students examine operations management and consider the best and most responsible use of available resources to produce a quality final good or service in a competitive, global environment.

UNIT 4 – TRANSFORMING A BUSINESS:

AREA OF STUDY 1 – REVIEWING PERFORMANCE THE NEED FOR CHANGE

In this area of study students develop their understanding of the need for change. Managers regularly review and evaluate business performance through use of key performance indicators and use the results to make decisions affecting the future of a business. Managers can take both a proactive and reactive approach to change. Students investigate the ways a business can search for new business opportunities. They apply Lewin's Force Field Analysis theory to contemporary case studies from the past four years and consider approaches to strategic management using Porter's Generic Strategies.

AREA OF STUDY 2 – IMPLEMENTING CHANGE

In this area of study students explore how businesses respond to evaluation data. Students consider the importance of leadership in change management and discuss and evaluate effective strategies for managing change. Students consider how leaders can inspire change and the effect change can have on stakeholders of a business. They consider change management theories. Using one or more contemporary business case studies from the past four years, students evaluate business practice against theory, considering how corporate social responsibility can be incorporated.

ASSESSMENT:

School-assessed Coursework for Unit 3 and 4 combined will contribute 50 per cent to the study score.

EXTERNAL ASSESSMENT:

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 50 per cent to the study score.

SUBJECTS OFFERED IN THE

HEALTH & PHYSICAL EDUCATION DOMAIN

PHYSICAL EDUCATION

UNIT 1: THE HUMAN BODY IN MOTION

AREA OF STUDY 1 – HOW DOES THE MUSCULOSKELETAL SYSTEM WORK TO PRODUCE MOVEMENT?
In this area of study students examine the musculoskeletal system of the human body and how the muscles and bones work together to produce movement. Through practical activities they explore the major components of the musculoskeletal system and their contributions and interactions during physical activity, sport and exercise. Students evaluate the social, cultural and environmental influences on movement, and how the capacity and functioning of the muscular
and skeletal systems may act as an enabler or barrier to participation in physical activity.

AREA OF STUDY 2 – HOW DOES THE CARDIORESPIRATORY SYSTEM FUNCTION AT REST AND DURING PHYSICAL ACTIVITY?
In this area of study students examine the cardiovascular and respiratory systems of the human body and how the heart, blood vessels and lungs function at rest and during physical activity. Through practical activities students explore the structure and function of the cardiorespiratory system and their contributions and interactions during physical activity, sport and exercise. Enablers and barriers to the capacity and functioning of the cardiovascular and respiratory systems are investigated from a sociocultural, environmental and physical perspective. Students explore the ethical and performance considerations of the use of a variety of legal and illegal practices and substances specific to each system.

UNIT 2: PHYSICAL ACTIVITY, SPORT AND SOCIETY

AREA OF STUDY 1 – WHAT ARE THE RELATIONSHIPS BETWEEN PHYSICAL ACTIVITY, SPORT, HEALTH AND SOCIETY?
In this area of study students focus on the role of physical activity, sport and society in developing and promoting healthy lifestyles and participation in physical activity across the lifespan. Students explore the social, cultural and historical influences on participation in various forms of physical
activity, including sport. They investigate at the individual and population levels the physical, social, mental and emotional benefits of participation in regular physical activity and the potential negative physical, social, mental and emotional consequences of physical inactivity and sedentary behaviour, including hypokinetic diseases such as Type 2 diabetes and obesity.

AREA OF STUDY 2 – WHAT ARE THE CONTEMPORARY ISSUES ASSOCIATED WITH PHYSICAL ACTIVITY AND SPORT?
In this area of study students focus on a range of contemporary issues associated with physical activity and/or sport at the local, national and global level. They investigate in detail
one issue relevant to physical activity and/ or sport. Possible issues suitable for investigation include declining levels of physical activity across the lifespan, active transport, gender equity in physical activity and sport, cultural diversity and inclusion in physical activity, risk management and safety in physical activity and sport, children and competitive sport, the community and recreation, access to physical activity for population groups such as children, rural and remote communities, cultural groups, Aboriginal and Torres Strait Islanders and people with disabilities.

UNIT 3: MOVEMENT SKILLS AND ENERGY FOR PHYSICAL ACTIVITY

AREA OF STUDY 1 – HOW ARE MOVEMENT SKILLS IMPROVED?
In this area of study students examine the biomechanical and skill acquisition principles that can be applied when analysing and improving movement skills used in physical activity and sport. Through coaching and involvement in a
variety of practical activities, students investigate and analyse movements to develop an understanding of how the correct application of biomechanical and skill acquisition principles leads to greater efficiency and accuracy in movement skills.

AREA OF STUDY 2 – HOW DOES THE BODY PRODUCE ENERGY?
In this area of study students explore the various systems and mechanisms associated with the production of energy required for human movement. They consider the cardiovascular, respiratory and muscular systems and the roles of each in supplying oxygen and energy to the working muscles. They examine the way in which energy for activity is produced
by the three energy systems and the associated fuels used for activities of varying intensity and duration. Students also consider the many factors contributing to fatigue as well as recovery strategies used to return to pre-exercise conditions.
Through practical activities students explore the interplay of the energy systems during physical activity
Assessment:
School-assessed Coursework for Unit 3 will contribute 25 per cent to the study score.

UNIT 4: TRAINING TO IMPROVE PERFORMANCE

AREA OF STUDY 1 – WHAT ARE THE FOUNDATIONS OF AN EFFECTIVE TRAINING PROGRAM?
In this area of study students focus on the information required to form the foundation of an effective training program. They use data from an activity analysis and determine the fitness requirements of a selected physical activity. They also use data collected from participating in a series of fitness tests to inform the design of the training program. Students determine the relevant factors that affect each of the fitness components, and conduct a series of fitness tests that demonstrate correct and ethical implementation of testing protocols and procedures.

AREA OF STUDY 2 – HOW IS TRAINING IMPLEMENTED EFFECTIVELY TO IMPROVE FITNESS?
In this area of study students focus on the implementation and evaluation of training principles and methods from a practical and theoretical perspective. They consider the manner in which fitness can be improved through the application of appropriate training principles and methods. Students identify and consider components of an exercise training session, they
monitor, record and adjust training. Students explain the chronic adaptations to the cardiovascular, respiratory and muscular systems.
Assessment:
School-assessed Coursework for Unit 4 will contribute 25 per cent to the study score.
External assessment:
The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 50 per cent to the study score.

HEALTH AND HUMAN DEVELOPMENT

UNIT 1: Understanding health and wellbeing
Areas of study
1. Health perspectives and influences
On completion of this unit the student should be able to explain multiple dimensions of health and wellbeing, explain indicators used to measure health status and analyse factors that contribute to variations in health status of youth.
2. Health and nutrition
On completion of this unit the student should be able to apply nutrition knowledge and tools to the selection of food and the evaluation of nutrition information.
3. Youth health and wellbeing
On completion of this unit the student should be able to interpret data to identify key areas for improving youth health and wellbeing, and plan for action by analysing one particular area in detail.

Unit 2: Managing health and development
Areas of study
1. Developmental transitions
On completion of this unit the student should be able to explain developmental changes in the transition from youth to adulthood, analyse factors that contribute to healthy development during prenatal and early childhood stages of the lifespan and explain health and wellbeing as an intergenerational concept.
2. Health care in Australia
On completion of this unit the student should be able to describe how to access Australia's health system, explain how it promotes health and wellbeing in their local community, and analyse a range of issues associated with the use of new and emerging health procedures and technologies.

UNIT 3: AUSTRALIA'S HEALTH IN A GLOBALISED WORLD

AREA OF STUDY 1 – UNDERSTANDING HEALTH AND WELLBEING

This area of study explores health and wellbeing and illness as complex, dynamic and subjective concepts. While the major focus is on the health of Australians, this area of study also emphasises that Australia's health is not isolated from the rest of the world. Students inquire into the WHO's prerequisites for health and wellbeing and reflect on both the universality of public health goals and the increasing influence of global conditions on Australians. Students develop their understanding of the indicators used to measure and evaluate health status, and the factors that contribute to variations between population groups in Australia.

AREA OF STUDY 2 – PROMOTING HEALTH AND WELLBEING

This area of study looks at different approaches to public health over time, with an emphasis on changes and strategies that have succeeded in improving health and wellbeing. Students examine the progression of public health in Australia since 1900, noting global changes and influences such as the Ottawa Charter for Health Promotion and the general transition of focus from the health and wellbeing of individuals to that of populations. Students investigate the Australian health system and its role in promoting health and wellbeing. They conduct a detailed study on a successful health promotion campaign or program, and inquire into priorities for health improvements in Australia.

UNIT 4: HEALTH AND HUMAN DEVELOPMENT IN A GLOBAL CONTEXT

AREA OF STUDY 1 – HEALTH AND WELLBEING IN A GLOBAL CONTEXT

This area of study looks at similarities and differences in major burdens of disease in low- , middle- and high-income countries, including Australia. Students investigate a range of factors that contribute to health inequalities and study the concepts of sustainability, human development and the Human Development Index to further their understanding of health in a global context. Students consider the global reach of product marketing and inquire into the effects of particular global trends on health and wellbeing.

AREA OF STUDY 2 – HEALTH AND THE SUSTAINABLE DEVELOPMENT GOALS

This area of study looks at action for promoting health globally.

It looks at the rationale, objectives and interdependencies of the UN's SDGs, focusing on their promotion of health and wellbeing and human development. Students investigate the priorities and work of the WHO and evaluate Australia's aid program and the role of non-government organisations, selecting one aid program for detailed research and analysis. They reflect on meaningful and achievable individual actions that could contribute to the work of national and international organisations that promote health and wellbeing.

Assessment:

School-assessed Coursework for Unit 3 and 4 will contribute 50 per cent to the study score.

External assessment:

The examination will contribute 50 per cent to the study score.

SUBJECTS OFFERED IN THE

MATHEMATICS DOMAIN

Please consult your MATHS TEACHERS in Year 10 for constructive advice and refer also to the Careers Adviser and the Tertiary Entrance Guidelines on pre-requisites for your tertiary year. Please keep in mind the increasing demand for maths learning and skills.

Year 10	Year 11	Year 12
Mathematics	Units 1 & 2 Foundation Mathematics	Units 3 & 4 Foundation Mathematics
Mathematics	Units 1 & 2 General Mathematics	Units 3 & 4 General Mathematics *or* Units 3 & 4 Foundation Mathematics
Mathematics (high level)	Units 1 & 2 Mathematical Methods	Units 3 & 4 Mathematical Methods *and/or* Units 3 & 4 General Mathematics
Mathematics (high level)	Units 1 & 2 Mathematical Methods *and* Units 1 & 2 Specialist Mathematics	Units 3 & 4 Mathematical Methods *and* Units 3 & 4 Specialist Mathematics *or* Units 3 & 4 Mathematical Methods
Units 1 & 2 General Mathematics	Units 1 & 2 Mathematical Methods *and* Units 3 & 4 General Mathematics	Units 3 & 4 Mathematical Methods

FOUNDATION MATHEMATICS

FOUNDATION MATHEMATICS UNITS 1 & 2

Foundation Mathematics is a course designed to allow students' opportunities to engage in real world mathematics and provides a pathway for students who may be finding Year 10 General Mathematics challenging.

Foundation Mathematics Units 1 and 2 focus on providing students with the mathematical knowledge, skills, understanding and dispositions to solve problems in real contexts for a range of workplace, personal, further learning, and community settings relevant to contemporary society. They are also designed as preparation for Foundation Mathematics Units 3 and 4 and contain assumed knowledge and skills for these units.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving integer, rational and real arithmetic, sets, lists and tables, contemporary data displays, diagrams, plans, geometric objects and constructions, 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, statistical and financial functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Areas of Study:

- Algebra, number and structure
- Data analysis, probability and statistics
- Financial and consumer mathematics
- Space and measurement

FOUNDATION MATHEMATICS UNITS 3 & 4

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.

Assumed knowledge and skills for Foundation Mathematics Units 3 and 4 are contained in Foundation Mathematics Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and key skills for the outcomes.

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.

Areas of Study:

- Algebra, number and structure
- Data analysis, probability and statistics
- Financial and consumer mathematics
- Space and measurement

Internal assessment:

School-assessed Coursework for Unit 3 will contribute 40 per cent to the study score. School-assessed Coursework for Unit 4 will contribute 20 per cent to the study score. Each area of study is to be covered in at least one of the three mathematical investigations across Units 3 and 4.

External assessment:

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 40 per cent to the study score.

The examination will be of two hours' duration and student access to a scientific calculator will be assumed. One bound reference text (which may be annotated) or lecture pad may be brought into the examination. VCAA examination rules will apply.

GENERAL MATHEMATICS

GENERAL MATHEMATICS UNIT 1&2

General Mathematics is designed to be widely accessible for students who consistently produce satisfactory results in

Year 10 Mathematics and may lead on to general Mathematics Units 3 & 4. It is suitable for students who do not require a high level of mathematics as a prerequisite for tertiary studies but wish to continue with their mathematical education. Calculator technology and summary reference material are used throughout the teaching, learning and assessment.

General Mathematics Units 1 and 2 cater for a range of student interests, provide preparation for the study of VCE General Mathematics at the Units 3 and 4 level and contain assumed knowledge and skills for these units.

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

Areas of Study:

Unit 1:

- Investigating and comparing data distributions
- Arithmetic and geometric sequences, first order linear recurrence relations and financial mathematics
- Linear functions, graphs, equations and models
- Matrices Unit 2:
- Investigating relationships between two numerical variables
- Graphs and networks
- Variation
- Space, measurement and applications of trigonometry

GENERAL MATHEMATICS UNITS 3 & 4

General Mathematics Units 3 and 4 focus on real-life application of mathematics.

Assumed knowledge and skills for General Mathematics Units 3 and 4 are contained in General Mathematics Units 1 and 2, and will be drawn on, as applicable, in the development of related content from the areas of study, and key knowledge and key skills for the outcomes of General Mathematics Units 3 and 4.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists, tables and matrices, diagrams, networks, algorithms, algebraic manipulation, recurrence relations, equations and graphs. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic statistical and financial functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Areas of Study:

- Data Analysis
- Recursion and financial modelling

- Matrices
- Networks and decision mathematics

Internal assessment:
School-assessed Coursework for Unit 3 will contribute 60 per cent to the study score. School-assessed Coursework for Unit 4 will contribute 40 per cent to the study score allocation.
External assessment:
The level of achievement for Units 3 and 4 is also assessed by two end-of-year examinations.
The examinations will contribute 60 per cent to the study score. Each examination will contribute 30 per cent to the study score.

MATHEMATICAL METHODS

MATHEMATICAL METHODS UNITS 1 & 2
Mathematical Methods is a rigorous course, requiring higher order thinking and application of algebraic and graphical skills and techniques. Students considering enrolling in Mathematical Methods should have a prerequisite deep understanding
of linear and quadratic algebra and graphs, and should be performing at a high level in Year 10 Mathematics. This course is designed as a pathway to Mathematical Methods 3 & 4.
The Mathematical Methods 1 & 2 course can be completed by itself, or taken alongside Specialist Mathematics 1 & 2.
Mathematical Methods Units 1 and 2 provide an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. The units are designed as preparation for Mathematical Methods Units 3 and 4 and contain assumed knowledge and skills for these units.
In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs and differentiation, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation.
The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the unit as applicable.

Areas of Study:
- Functions, relations and graphs
- Algebra, number and structure
- Calculus
- Data analysis, probability and statistics

MATHEMATICAL METHODS UNITS 3 & 4
Mathematical Methods Units 3 and 4 extend the introductory study of simple elementary functions of a single real variable, to include combinations of these functions, algebra, calculus, probability and statistics, and their applications in a variety of practical and theoretical contexts. Assumed knowledge and skills for Mathematical Methods Units 3 and 4 are contained in Mathematical Methods Units 1 and 2, and will be drawn
on, as applicable, in the development of related content from the areas of study, and key knowledge and key skills for the outcomes of Mathematical Methods Units 3 and 4.
For Unit 3 a selection of content would typically include the areas of study ‘Functions, relations and graphs’ and ‘Algebra, number and structure’, applications of derivatives
and differentiation, and identifying and analysing key features of the functions and their graphs from the ‘Calculus’ area of study. For Unit 4, a corresponding selection of content would typically consist of remaining content from ‘Functions, relations and graphs’, ‘Algebra, number and structure’ and ‘Calculus’ areas of study, and the study of random variables, discrete
and continuous probability distributions, and the distribution of sample proportions from the ‘Data analysis, probability and statistics’ area of study. For Unit 4, the content from the
‘Calculus’ area of study would be likely to include the treatment of anti-differentiation, integration, the relation between integration and the area of regions specified by lines or curves described by the rules of functions, and simple applications of this content, including to probability distributions of continuous random variables.
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, algorithms, algebraic manipulation, equations, graphs, differentiation, anti-differentiation, integration and inference, 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.
Areas of Study:
- Functions, relations and graphs
- Algebra, number and structure
- Calculus
- Data analysis, probability and statistics

Internal assessment:
School-assessed Coursework for Unit 3 will contribute 20 per cent to the study score.
School-assessed Coursework for Unit 4 will contribute 20 per cent to the study score.
External assessment:
The level of achievement for Units 3 and 4 is also assessed by two end-of-year examinations.
Examination 1 will contribute 20 per cent to the study score and Examination 2 will contribute 40 per cent to the study score.

SPECIALIST MATHEMATICS

SPECIALIST MATHEMATICS UNITS 1 & 2
Specialist Mathematics is taken alongside Mathematical Methods for those students wishing to undertake an in-depth analysis of mathematics, exploring application to science and engineering. To consider including Specialist Mathematics
in VCE pathways students should be attaining consistently very high results across all topics in their Year 10 course and particularly enjoy the challenge of mathematics.
Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling,
problem-solving, reasoning and proof. This study has a focus on interest in the discipline of mathematics and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields.
Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. Study of Specialist Mathematics Units 3 and 4 also assumes concurrent study or previous completion of Mathematical Methods Units 3 and 4.

In undertaking this unit, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists, tables and matrices, diagrams, graphs, logic gates and geometric constructions, algorithms, algebraic manipulation, recurrence relations, equations and graphs, with and without the use of technology. They are expected to be able to construct proofs and develop and interpret algorithms to solve problems. 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.

Areas of Study:
Unit 1:
- Proof and number
- Graph and theory
- Logic and algorithms
- Sequences and series
- Combinatorics
- Matrices Unit 2:
- Simulation, sampling and sampling distributions
- Trigonometry
- Transformations
- Vectors in the plane
- Complex numbers
- Functions, relations and graphs

SPECIALIST MATHEMATICS UNITS 3 & 4
Specialist Mathematics Units 3 and 4 assumes familiarity with the key knowledge and key skills from Mathematical Methods Units 1 and 2; the key knowledge and key skills from Specialist Mathematics Units 1 and 2; and concurrent study or previous completion of Mathematical Methods Units 3 and 4. Together these cover the assumed knowledge and skills for Specialist Mathematics Units 3 and 4, which are drawn on as applicable in the development of content from the areas of study and key knowledge and key skills for the outcomes.
For Unit 3 a selection of content would typically include content from the ‘Discrete mathematics’, ‘Functions, relations and graphs’, ‘Algebra, number and structure’, ‘Space and measurement’ and ‘Calculus’ areas of study. In Unit 4 the corresponding selection of content would typically consist
of the remaining content from the ‘Discrete mathematics’, ‘Calculus’, and ‘Space and

measurement' areas of study and the content from the 'Data analysis, probability and statistics' area of study.
In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists, tables and vectors, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs, differentiation, anti-differentiation and integration and inference, 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.

Areas of Study:

- Logic and proof
- Functions, relations and graphs
- Complex numbers
- Calculus
- Space and measurement
- Data analysis, probability and statistics

Internal assessment:
School-assessed Coursework for Unit 3 will contribute 20 per cent to the study score.
School-assessed Coursework for Unit 4 will contribute 20 per cent to the study score.
External assessment:
The level of achievement for Units 3 and 4 is also assessed by two end-of-year examinations.
Examination 1 will contribute 20 per cent to the study score and Examination 2 will contribute 40 per cent to the study score.

SUBJECTS OFFERED IN THE

SCIENCE DOMAIN

BIOLOGY

UNIT 1: HOW DO ORGANISMS REGULATE THEIR FUNCTIONS?

AREA OF STUDY 1 – HOW DO CELLS FUNCTION?
In this area of study students examine the structure and functioning of prokaryotic and eukaryotic cells, and how the plasma membrane contributes to survival by controlling the movement of substances into and out of the cell. Students explore cellular growth, replacement and death. They become familiar with the key events and regulation of the cell cycle and the processes for cell division. Students consider the properties of stem cells.

AREA OF STUDY 2 – HOW DO PLANT AND ANIMAL SYSTEM FUNCTION?
In this area of study students explore how systems function through cell specialisation in vascular plants and in digestive, endocrine and excretory systems in animals, focusing on regulation of water balance in plants, and temperature, blood glucose and water balance in animals. Students examine how homeostatic mechanisms in animals help maintain their internal environment.

AREA OF STUDY 3 – HOW DO SCIENTIFIC INVESTIGATIONS DEVELOP UNDERSTANDING OF HOW ORGANISMS REGULATE THEIR FUNCTIONS?
Survival of organisms requires control and regulation of factors within an organism and often outside an organism. In this area of study students adapt or design and then conduct a scientific investigation to generate appropriate qualitative and/ or quantitative data, organise and interpret the data, and reach a conclusion in response to the research question.

UNIT 2: HOW DOES INHERITANCE IMPACT ON DIVERSITY?

AREA OF STUDY 1 – HOW IS INHERITANCE EXPLAINED?
In this area of study students describe the production of gametes in sexual reproduction through the key events in meiosis. They explore the nature of chromosomes and the use of genetic language to read and interpret patterns of
inheritance and predict outcomes of genetic crosses. Students explain how a characteristic or trait can be influenced by one gene, many genes acting together, and genes interacting with external environmental or epigenetic factors. They apply their genetic knowledge to analyse pedigree charts, determine patterns of inheritance and predict.

AREA OF STUDY 2 – HOW DO INHERITED ADAPTATIONS IMPACT ON DIVERSITY?
In this area of study students analyse the advantages and disadvantages of asexual and sexual reproduction and investigate the use and application of reproductive cloning technologies. Students explore the biological importance of genetic diversity. Students explore the interdependencies between species, including the importance and impact of keystone species and top predators. They consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives to the understanding of the adaptations of species in Australian ecosystems.

AREA OF STUDY 3 – HOW DO HUMANS USE SCIENCE TO EXPLORE AND COMMUNICATE CONTEMPORARY BIOETHICAL ISSUES?
In this area of study students explore a contemporary bioethical issue relating to the application of genetic knowledge, reproductive science, inheritance or adaptations and interdependencies beneficial for survival. On completion of this unit the student should be able to identify, analyse and evaluate a bioethical issue in genetics, reproductive science or adaptations beneficial for survival.

UNIT 3: HOW DO CELLS MAINTAIN LIFE?

AREA OF STUDY 1 – WHAT IS THE ROLE OF NUCLEIC ACIDS AND PROTEINS IN MAINTAINING LIFE?
In this area of study students explore the expression of the information encoded in a sequence of DNA to form a protein and outline the nature of the genetic code and the proteome. They apply their knowledge to the structure and function of the DNA molecule to examine how molecular tools and techniques can be used to manipulate the molecule for a particular purpose. Students compare gene technologies used to address human and agricultural issues and consider the ethical implications of their use.

AREA OF STUDY 2 – HOW ARE BIOCHEMICAL PATHWAYS REGULATED?
In this area of study students focus on the structure and regulation of biochemical pathways. They examine how biochemical pathways, specifically photosynthesis and cellular respiration, involve many steps that are controlled by enzymes and assisted by coenzymes. Students investigate factors that affect the rate of cellular reactions and explore applications of biotechnology that focus on the regulation of biochemical pathways.
Assessment:
School-assessed Coursework for Unit 3 will contribute 0 per cent to the study score.

UNIT 4: HOW DOES LIFE CHANGES AND RESPOND TO CHALLENGES?

AREA OF STUDY 1 – HOW DO ORGANISMS RESPOND TO PATHOGENS?
In this area of study students focus on the immune response of organisms to specific pathogens. Students examine unique molecules called antigens and how they illicit an immune response, the nature of immunity and the role of vaccinations in providing immunity. They explain how technological advances assist in managing immune system disorders and how immunotherapies can be applied to the treatment of other diseases. Students consider that in a globally connected world there are biological challenges that can be mediated by identification of pathogens, the prevention of spread and the development of treatments for diseases.

AREA OF STUDY 2 – HOW ARE SPECIES RELATED OVER TIME?
In this area of study students focus on changes to genetic material over time and the evidence for biological evolution. They consider how the field of evolutionary biology is based upon the accumulation of evidence over time and develop an understanding of how interpretations of evidence can change in the light of new evidence as a result of technological advances, particularly in molecular biology. Students consider the biological consequences of changes in allele frequencies and how isolation and divergence are required elements for speciation. They consider the evidence for determining the relatedness between species and examine the evidence for major trends in hominin evolution, including the migration of modern human populations around the world.

AREA OF STUDY 3: HOW IS SCIENTIFIC INQUIRY USED TO INVESTIGATE CELLULAR PROCESSES AND/ OR BIOLOGICAL CHANGE?
Students undertake a student-designed scientific investigation in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation involves the generation of primary data relating to cellular processes and/or how life changes and responds to challenges. The investigation draws on knowledge and related key science skills developed across Units 3 and 4 and is undertaken by students in the laboratory and/or in the field.
Assessment: School-assessed Coursework for Unit 4 will contribute 30 per cent to the study score.
External Assessment:
The examination will contribute 50 per cent to the study score.

CHEMISTRY

UNIT 1: HOW CAN THE DIVERSITY OF MATERIALS BE EXPLAINED?

AREA OF STUDY 1 – HOW DO THE CHEMICAL STRUCTURES OF MATERIALS EXPLAIN THEIR PROPERTIES AND REACTIONS?
In this area of study students focus on elements as the building blocks of useful materials. Students investigate the structures, properties and reactions of carbon compounds, metals and ionic compounds, and use chromatography to separate the components of mixtures. Students develop their skills in the use of scientific equipment and apparatus.

AREA OF STUDY 2 – HOW ARE MATERIALS QUANTIFIED AND CLASSIFIED?
In this area of study students focus on the measurement of quantities in chemistry and the structures and properties of organic compounds. Students learn to calculate mole quantities, use systematic nomenclature to name organic compounds; explain how polymers can be designed for a purpose; and evaluate the consequences for human health and the environment of the production of organic materials and polymers.

AREA OF STUDY 3 – HOW CAN CHEMICAL PRINCIPLES BE APPLIED TO CREATE A MORE SUSTAINABLE FUTURE?

In this area of study students undertake an investigation involving the selection and evaluation of a recent discovery, innovation, advance, case study, issue or challenge linked to the knowledge and skills developed in Unit 1 Area of Study 1 and/or Area of Study 2, including consideration of sustainability concepts (green chemistry principles, sustainable development and the transition towards a circular economy).

UNIT 2: HOW DO CHEMICAL REACTIONS SHAPE THE NATURAL WORLD?

AREA OF STUDY 1 – HOW DO CHEMICALS INTERACT WITH WATER?

In this area of study students focus on understanding the properties of water and investigating acid-base and redox reactions. Students explore water's properties, including its density, specific heat capacity and latent heat of vaporisation. They write equations for acid-base and redox reactions, and apply concepts including pH as a measure of acidity.

AREA OF STUDY 2 – HOW ARE CHEMICALS MEASURED AND ANALYSED?

In this area of study students focus on the analysis and quantification of chemical reactions involving acids, bases, salts and gases. They measure the solubility of substances in water, explore the relationship between solubility and temperature using solubility curves, and learn to predict when a solute will dissolve or crystallise out of solution. Students quantify amounts in chemistry using volumetric analysis, application of the ideal gas equation, stoichiometry and calibration curves.

AREA OF STUDY 3 – HOW DO QUANTITATIVE SCIENTIFIC INVESTIGATIONS DEVELOP OUR UNDERSTANDING OF CHEMICAL REACTIONS?

In this area of study students adapt or design and then conduct a scientific investigation related to chemical equations and/or analysis. Students develop a research question and adapt or design and then conduct a scientific investigation to generate appropriate quantitative data. Students organise and interpret the data and reach a conclusion in response to their research question.

UNIT 3: HOW CAN CHEMICAL PROCESSES BE DESIGNED TO OPTIMISE EFFICIENCY?

AREA OF STUDY 1 – WHAT ARE THE OPTIONS FOR ENERGY PRODUCTION?

In this area of study students focus on analysing and comparing a range of energy resources and technologies, including fossil fuels, biofuels, galvanic cells and fuel cells, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts and potential applications. Students use the specific heat capacity of water and thermochemical equations to determine the enthalpy changes and quantities of reactants and products involved in the combustion reactions of a range of renewable and non- renewable fuels.

AREA OF STUDY 2 – HOW CAN THE YIELD OF A CHEMICAL PRODUCT BE OPTIMISED?

In this area of study students explore the factors that increase the efficiency and percentage yield of a chemical
manufacturing process while reducing the energy demand and associated costs. Students investigate a range of electrolytic cells, including the discharging and recharging processes in rechargeable cells, and apply Faraday's laws to calculate quantities in electrochemistry and to determine cell efficiencies.

UNIT 4: HOW ARE ORGANIC COMPOUNDS CATEGORISED, ANALYSED AND USED?

AREA OF STUDY 1 – HOW CAN THE DIVERSITY OF CARBON COMPOUNDS BE EXPLAINED AND CATEGORISED?

In this area of study students explore why such a vast range of carbon compounds is possible. They examine the structural features of members of several homologous series of compounds, including some of the simpler structural isomers, and learn how they are represented and named. Students investigate trends in the physical and chemical properties of various organic families of compounds. Students learn to deduce or confirm the structure and identity of organic compounds by interpreting data from mass spectrometry, infrared spectroscopy and proton and carbon-13 nuclear magnetic resonance spectroscopy.

AREA OF STUDY 2 – WHAT IS THE CHEMISTRY OF FOOD?

In this area of study students explore the importance of food from a chemical perspective. Students study the major components of food with reference to their structures,
properties and functions. They examine the hydrolysis reactions in which foods are broken down, the condensation reactions in which new biomolecules

are formed and the role of enzymes, assisted by coenzymes, in the metabolism of food.

AREA OF STUDY 3 – PRACTICAL INVESTIGATION

In this area of study students design and conduct a scientific investigation related to energy and/or food. The investigation relates to knowledge and skills developed across Unit 3 and/or Unit 4. Findings are communicated in a scientific poster format.
Assessment:
School-assessed Coursework for Unit 3 will contribute 16 per cent to the study score.
School-assessed Coursework for Unit 4 will contribute 24 per cent to the study score.
The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination.
The examination will contribute 60 per cent to the study score.

PHYSICS

UNIT 1: HOW IS ENERGY USEFUL TO SOCIETY?

AREA OF STUDY 1 – HOW ARE LIGHT AND HEAT EXPLAINED?
In this area of study, students study light using the wave model and thermal energy using a particle model forming an understanding of the fundamental physics ideas of reflection, refraction and dispersion. They use these to understand observations made of the world such as mirages and rainbows.
They investigate energy transfers and explore how light and thermal energy relate to one another. They apply light ideas to explain how light is used through optical fibres in communication, and how physics is used to inform global warming and climate change.

AREA OF STUDY 2 – HOW IS ENERGY FROM THE NUCLEUS UTILISED?
In this area of study, students build on their understanding of energy to explore energy that derives from the nuclei of atoms. They learn about the properties of the radiation from the nucleus and the effects of this radiation on human cells and tissues and apply this understanding to the use of radioisotopes in medical therapy. Students explore the transfer of energy from the nucleus through the processes of fission and fusion and apply these ideas to evaluate the viability of nuclear energy as an energy source for Australia.

AREA OF STUDY 3 – HOW CAN ELECTRICITY BE USED TO TRANSFER ENERGY?
Modelling is a useful tool in developing concepts that explain physical phenomena that cannot be directly observed. In this area of study, students develop conceptual models to analyse electrical phenomena and undertake practical investigations of circuit components. Concepts of electrical safety are developed through the study of safety mechanisms and the effect of current on humans. Students apply and critically assess mathematical models during experimental investigations of DC circuits.

UNIT 2: HOW DOES PHYSICS HELP US TO UNDERSTAND THE WORLD?

AREA OF STUDY 1 – HOW IS MOTION UNDERSTOOD?
In this area of study, students describe and analyse graphically, numerically and algebraically the energy and motion of an object, using specific physics terminology and conventions.
They consider the effects of balanced and unbalanced forces on motion and investigate the translational and rotational forces on static structures. Students apply mathematical models during experimental investigations of motion, and apply their understanding of motion and force through a case study.

AREA OF STUDY – OPTIONS: HOW DOES PHYSICS INFORM CONTEMPORARY ISSUES AND APPLICATIONS IN SOCIETY?
In this area of study, students develop a deeper understanding of an area of interest within diverse areas of physics. They select from eighteen options, explore the related physics and use this physics to form a stance, opinion or solution to a contemporary societal issue or application. In their explorations, a range of investigation methodologies may be used.

AREA OF STUDY 2 – HOW DO PHYSICISTS INVESTIGATE QUESTIONS?
Systematic experimentation is an important aspect of physics inquiry. In this area of study, students adapt or design and then conduct a scientific investigation to generate appropriate primary qualitative and/or quantitative data, organise and interpret the data, and reach and evaluate a conclusion in response to the research question.

UNIT 3: HOW DO FIELDS EXPLAIN MOTION AND ELECTRICITY?

AREA OF STUDY 1 – HOW DO THINGS MOVE WITHOUT CONTACT?
In this area of study students examine the similarities and differences between three fields: gravitational, electric and magnetic. Students explore how positions in fields determine the potential energy of an object and the force on an object. They investigate how concepts related to field models can be applied to construct motors, maintain satellite orbits and to accelerate particles.

AREA OF STUDY 2 – HOW ARE FIELDS USED TO MOVE ELECTRICAL ENERGY?
The production, distribution and use of electricity has had a major impact on human lifestyles. In this area of study students use empirical evidence and models of electric, magnetic and electromagnetic effects to explain how electricity is produced and delivered to homes. They explore magnetic fields and the transformer as critical to the performance of electrical distribution systems.

AREA OF STUDY 3 – HOW FAST CAN THINGS GO?

In this area of study students use Newton's laws of motion to analyse relative motion, circular motion and projectile motion. Newton's laws of motion give important insights into a range of motion both on Earth and beyond. At very high speeds, however, these laws are insufficient to model motion and Einstein's theory of special relativity provides a better model. Students compare Newton's and Einstein's explanations of motion. They explore the relationships between force, energy and mass.
Assessment:
School-assessed Coursework for Unit 3 will contribute 21 per cent to the study score.

UNIT 4: HOW CAN TWO CONTRADICTORY MODELS EXPLAIN BOTH LIGHT AND
MATTER?

AREA OF STUDY 1 – HOW CAN WAVES EXPLAIN THE BEHAVIOUR OF LIGHT?
In this area of study students use evidence from experiments to explore wave concepts in a variety of applications. Wave theory has been used to describe transfers of energy, and is important in explaining phenomena including reflection, refraction, interference and polarisation. Do waves need a medium in order to propagate and, if so, what is the medium? Students investigate the properties of mechanical waves.

AREA OF STUDY 2 – HOW ARE LIGHT AND MATTER SIMILAR?
In this area of study students explore the design of major experiments that have led to the development of theories to describe the most fundamental aspects of the physical world – light and matter. When light and matter are probed they appear to have remarkable similarities. Light, which was previously described as an electromagnetic wave, appears to exhibit both wave-like and particle-like properties.

AREA OF STUDY 3 – PRACTICAL INVESTIGATION

A student-designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4,
or across both Units 3 and 4. The investigation relates to knowledge and skills developed across Units 3 and 4.
Assessment:
School-assessed Coursework for Unit 4 will contribute 19 per cent to the study score. External assessment: The examination will contribute 60 per cent to the study score

PSYCHOLOGY

UNIT 1: HOW ARE BEHAVIOUR AND MENTAL PROCESSES SHAPED?

AREA OF STUDY 1 – WHAT INFLUENCES PSYCHOLOGICAL DEVELOPMENT?
Students consider the interactive influences of hereditary and environmental factors on a person's psychological
development. They explore psychological development across the life span through the lens of emotional, cognitive and social development, including the consideration and evaluation of relevant models and theories. Students explore concepts of normality and neurotypicality and consider how typical or atypical psychological development in individuals may be culturally defined, classified and categorised.

AREA OF STUDY 2 – HOW ARE MENTAL PROCESSES AND BEHAVIOUR INFLUENCED BY THE BRAIN?
In this area of study students explore how the understanding of brain structure and function has

changed over time, considering the influence of different approaches and contributions to understanding the role of the brain. They develop their understanding of how the brain enables humans to interact with the external world around them and analyse the interactions between different areas of the brain.

AREA OF STUDY 3 – HOW DOES CONTEMPORARY PSYCHOLOGY CONDUCT AND VALIDATE PSYCHOLOGICAL RESEARCH?

In this area of study students investigate how science is used to explore and validate contemporary psychological research questions. Making connections between the research of others and their own learning enables students to explore and compare responses to contemporary psychological concepts as well as engage in the analysis and evaluation of methodologies, methods and conclusions of research studies.

UNIT 2: HOW DO INTERNAL AND EXTERNAL FACTORS INFLUENCE BEHAVIOUR AND MENTAL PROCESSES?

AREA OF STUDY 1 – HOW ARE PEOPLE INFLUENCED TO BEHAVE IN PARTICULAR WAYS?

In this area of study students explore the interplay of psychological and social factors that shape the identity and behaviour of individuals and groups. Students consider how factors such as person perception, attributions, attitudes and stereotypes can be used to explain the cause and dynamics of individual and group behaviours. Students explore how cognitive biases may assist with the avoidance of cognitive dissonance.

AREA OF STUDY 2 – WHAT INFLUENCES A PERSON'S PERCEPTION OF THE WORLD?
Students explore the influence of biological, psychological and social factors on visual and gustatory perception. Perceptual distortions of vision and taste are explored when looking at the fallibility of perceptual systems. Students may choose to explore a range of different visual illusions to understand how individuals misinterpret real sensory stimuli.

AREA OF STUDY 3 – HOW DO SCIENTIFIC INVESTIGATIONS DEVELOP UNDERSTANDING OF INFLUENCES ON PERCEPTION BEHAVIOUR?

In this area of study students adapt or design and then conduct a scientific investigation into the internal or external influences on perception and/or behaviour. They generate appropriate qualitative and/or quantitative data, organise and interpret the data, and research a conclusion in response to the research question.

UNIT 3 HOW DOES EXPERIENCE AFFECT BEHAVIOUR AND MENTAL PROCESSES?

AREA OF STUDY 1 – HOW DOES THE NERVOUS SYSTEM ENABLE PSYCHOLOGICAL FUNCTIONING?
In this area of study students explore the role of different branches of the nervous system in enabling a person to integrate, coordinate and respond to internal and external sensory stimuli. Students apply their understanding of neurotransmitters in the transmission of neural information across a neural synapse to produce excitatory and inhibitory effects and explore the effect that neuromodulators have on brain activity.

AREA OF STUDY 2 – HOW DO PEOPLE LEARN AND REMEMBER?
Students explore memory as the process by which knowledge is encoded, stored and later retrieved, as illustrated by Richard Atkinson and Richard Shiffrin's multi-store model of memory, including how information passes through distinct memory stores in order for it to be stored relatively permanently. Students explore the interconnectedness of brain regions in storing explicit and implicit memories and the role of semantic and episodic memory in cognition. They consider the use of mnemonics to increase the encoding, storage and retrieval of information and develop an understanding of the contribution of Aboriginal and Torres Strait Islander knowledges and perspectives in understanding memory and learning.
Assessment:
School-assessed Coursework for Unit 3 will contribute 20 per cent to the study score.

UNIT 4: HOW IS MENTAL WELLBEING SUPPORTED AND MAINTAINED?

AREA OF STUDY 1 – HOW DOES SLEEP AFFECT METAL PROCESSES AND BEHAVIOUR?
In this area of study students focus on sleep as an example of an altered state of consciousness and the different demands humans have for sleep across the life span. They compare REM and NREM sleep as examples of naturally occurring altered states of

consciousness and investigate the biological mechanisms of the sleep-wake cycle in terms of the timing of sleep, what causes individuals to be sleepy at night and why individuals wake when required.

AREA OF STUDY 2 – WHAT INFLUENCE MENTAL WELLBEING?

In this area of study students explore mental wellbeing in terms of social and emotional wellbeing, levels of functioning, and resilience to cope with and manage change and uncertainty.

Students investigate the concept of mental wellbeing as a continuum, recognising that an individual's mental wellbeing is influenced by the interaction of internal and external factors and fluctuates over time. Students apply a biopsychosocial approach to the development and management of a specific phobia.

AREA OF STUDY 3 – HOW IS SCIENTIFIC INQUIRY USED TO INVESTIGATE MENTAL PROCESS AND PSYCHOLOGICAL FUNCTIONING?

Students undertake a student-designed scientific investigation. The investigation involves the generation of primary data relating to mental processes and psychological functioning. The investigation draws on knowledge and related key science skills developed across Units 3 and 4 and is undertaken by students in the laboratory and/or the field.

Assessment:

School-assessed Coursework for Unit 4 will contribute 30 per cent to the study score.

External assessment:

The examination will contribute 50 per cent to the study score.

VET SUBJECTS OFFERED

VCE VET AUTOMOTIVE

AUR20720 Certificate II in Automotive Vocational Preparation
VCE credit: Up to four units: two units at Units 1 and 2, and a Units 3 and 4 sequence.
Description: VCE VET Automotive is a pre-apprenticeship course is provided by the school in partnership with Australian Institute of Education and Training (AIET), RTO Code 121314. It provides students with knowledge and skills to enhance employability within the Automotive Industry.
To increase understanding of the diverse career pathways available within the industry the program includes and Industry Research module. Whilst completing modules, emphasis is placed on industry recognised safe work practices. As part of assessment, all modules require students to display knowledge and demonstrate the competence to complete practical tasks to an industry standard. Modules available include instruction on using electrical test equipment, engine rebuilding, clutch and gearbox repair, steering and suspension removal and brake systems repair.

Further information/useful links:
www.vcaa.vic.edu.au/vet/programs/automotive/automotive.html
http://trainingsupport.skills.vic.gov.au/curriculumDisplay.cfm

STRUCTURED WORK PLACEMENT
Work placement is an integral part of this program. All students are encouraged to undertake at least 10 days in an automotive related industry to qualify for the certificate.

Upon successful completion of all course requirements, the RTO will issue a Certificate. Whereby a student has attained only some units, the RTO will issue a Statement of attainment for those units.

This program will be delivered over the course of 2 years.

VCE VET AGRICULTURE

ACH20116 Certificate II in Agriculture
VCE credit: Up to five units: three units at Units 1 and 2, and a Units 3 and 4 sequence.
Description: Certificate II in Agriculture is designed for students who wish to develop their skills and knowledge to assist farmers and graziers with growing crops and/or feeding and raising livestock. The qualification covers workplace health and safety, industry communication, farm maintenance, use of chemicals, animal husbandry and Fencing construction. Skills are developed in maintaining livestock feed and water supplies animal husbandry, mustering, moving and penning up livestock, and performing routine farm and equipment maintenance. Students will learn how to work effectively in the rural industry as well as the basic technical skills to be a supervised worker in the industry.
Career opportunities: Completion of Certificate II in Agriculture can provide students with the skills to work on properties or in rural enterprises engaged in primary production. Employment opportunities may exist in a number of designated sectors such as beef, dairy, sheep and wool production. With additional training and experience, future employment opportunities may include farm hand, station hand, farm supervisor, wool handler/classer.

Further information/useful links:
www.vcaa.vic.edu.au/vet/programs/agriculture/agriculture.html
www.ntis.gov.au/Default.aspx?/trainingpackage/RTE03/qualification/RTE20103/rules

STRUCTURED WORK PLACEMENT
The students must also undertake 200 hours or 15 days of work placement over the duration of the program. It is suggested that they undertake the placements in different seasons to maximize their experience. After school and weekend agriculturally based work the students do can count as part of this total in most cases.

Upon successful completion of all course requirements, the RTO will issue a Certificate. Whereby a student has attained only some units, the RTO will issue a Statement of attainment for those units.

This program will be delivered over the course of 2 years.

VCE VET ENGINEERING

22470VIC Certificate II in Engineering Studies
VCE credit: Up to four units: two units at Units 1 and 2, and a Units 3 and 4 sequence.
Description: Certificate II in Engineering Studies is provided by the school in partnership with Australian Institute of Education and Training (AIET), RTO Code 121314. It provides students with the practical skills and theoretical knowledge to undertake an apprenticeship in the engineering trades and look at diploma courses in engineering and their relationship to degree courses in engineering. Units 1 and 2 cover areas in basic machine processing, fabrication techniques, occupational health and safety principles, using power tools and using computers for engineering related work activities. Depending on the electives chosen, Units 3 and 4 cover areas such as producing basic engineering sketches and drawings, handling engineering materials, quality control in an engineering setting is studied as well as view sustainable work practices in an engineering environment
Career opportunities: Certificate II in Engineering Studies prepares students for an engineering apprenticeship which can lead into a range of careers in the engineering and manufacturing industries, including 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, draftsperson, mechanical fitter.

Further information/useful links:
www.vcaa.vic.edu.au/vet/programs/engineering/engineering.html
http://trainingsupport.skills.vic.gov.au/curriculumDisplay.cfm

STRUCTURED WORK PLACEMENT
Work placement is an integral part of the VET program. All students are encouraged to undertake at least 10 days in an Engineering related industry to qualify for the certificate.

Upon successful completion of all course requirements, the RTO will issue a Certificate. Whereby a student has attained only some units, the RTO will issue a Statement of attainment for those units.

This program will be delivered over the course of 2 years.

VCE VET FURNISHING

Certificate II in FURNISHING
MSF20516 Certificate II in Furniture Making Pathways..

VCE VET Furnishing program is provided by the school in partnership with Australian Institute of Education and Training (AIET), RTO Code 121314. It is based on qualifications from the MSF Furnishing Training package may be eligible for:

- The award of MSF20516 Certificate II in Furniture Making Pathways.
- Recognition of up to four units.

The VCE VET Furnishing program consists of:

- Five core units of competency
- Seven elective units of competency

Description: VCE VET Furnishing covers a wide range of work areas within the furnishing industry. Students completing this program will have knowledge of timber and other furnishing materials and an ability to read plans while working on a range of projects. Units 1 and 2 includes OH& S procedures, hand making timber joints and following plans to assemble production furniture. Elective units include providing basic emergency life support, joining solid timber, constructing a basic timber product and preparing surfaces for finish. Units 3 and 4 cover areas such as assembling furnishing components, using furniture making hand and power tools and constructing furniture using leg and rail method.

Upon successful completion of all course requirements, the RTO will issue a Certificate. Whereby a student has attained only some units, the RTO will issue a Statement of attainment for those units.

This program will be delivered over the course of 2 years.

VCE VET COOKERY

VCE VET Cookery
SIT20416 Certificate II in Cookery
https://www.vcaa.vic.edu.au/assessment/vet-assessment/past-examinations/Pages/VCEVETHospitalityKitchenOperations.aspx
https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/Pages/hospitality.aspx
On successful completion will be eligible for:
· the award of SIT20421 Certificate II in Cookery
· a minimum of four VCE VET units: Units 1 and 2, and a Units 3 and 4 sequence.
Description: Certificate II Cookery program aims to provide participants with the knowledge, skills, and competency that will enhance their employment prospects in the hospitality and service industries. Also enable participants to gain a recognised credential and to make an informed choice of vocation or career path.
SIT20421 Certificate II in Cookery This program option comprises a minimum of 13 units of competency: seven compulsory units and a minimum of one elective unit at the Units 1 and 2 level and five compulsory units at the Units 3 and 4 level. Scored assessment is available for the Cookery qualifications. To gain a study score a student must: be competent in the prescribed training; complete all scored VCE VET assessments; and complete an end of year examination.

This qualification may prepare individuals with a limited range of food preparation and cookery skills to prepare food and menu items in a kitchen. Graduates typically provide routine and repetitive tasks and are directly supervised. This qualification does not provide the skills required by commercial cooks, which are covered in SIT30816 Certificate III in Commercial Cookery.

Pathways may include employment into various workplaces within the hospitality industry such as restaurants, hotels, catering operations, clubs, pubs, cafés, coffee shops, institutions, aged care facilities, hospitals, prisons, and schools. Typical roles include breakfast cook, catering assistant, fast food cook, sandwich hand, and takeaway cook.
Upon successful completion of all course requirements, the RTO will issue a Certificate.

Whereby a student has attained only some units, the RTO will issue a Statement of attainment for those units.

This program will be delivered over the course of 2 years.

VCE VOCATIONAL MAJOR

Entry Requirements

A pathways meeting will be required for any student choosing a VCE VM Program.

The VCE Vocational Major Program

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.

VCE VM Literacy

VCE Vocational Major Literacy focuses on the development of the knowledge and skills required to be literate in Australia today. The key knowledge and key skills encompass a student's ability to interpret and create texts that have purpose, and are accurate and effective, with confidence and fluency.

Texts will be drawn from a wide range of contexts and be focused on participating in the workplace and community. Further to this, texts are drawn from a range of sources including media texts, multimodal texts, texts used in daily interactions, and workplace texts from increasingly complex and unfamiliar settings.

As students develop these skills, they engage with texts that encompass the everyday language of personal experience to the more abstract, specialised and technical language of different workplaces, including the language of further study.

VCE VM Numeracy

VCE Vocational Major Numeracy focuses on enabling students to develop and enhance their numeracy skills to make sense of their personal, public and vocational lives. Students develop mathematical skills with consideration of their local, national and global environments and contexts, and an awareness and use of appropriate technologies.

This study allows students to explore the underpinning mathematical knowledge of number and quantity, measurement, shape, dimensions and directions, data and chance, the understanding and use of systems and processes, and mathematical relationships and thinking. This mathematical knowledge is then applied to tasks which are part of the students' daily routines and practices, but also extends to applications outside the immediate personal environment, such as the workplace and community.

The contexts are the starting point and the focus, and are framed in terms of personal, financial, civic, health, recreational and vocational classifications. These numeracies are developed using a problem-solving cycle with four components: formulating; acting on and using mathematics; evaluating and reflecting; and communicating and reporting.

VCE VM 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).

VCE VM 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.

VET

Students must choose a VET option offered here at school please refer to the previous section relating to VET offerings at Kerang Technical High School.

Glossary of Terms

ATAR: Australian Tertiary Admission Rank.

GAT: General Achievement Test undertaken by each student who is enrolled in at least one Unit 3 & 4 study.

Outcomes: These are sets of key knowledge and skills.

Outcome Tasks: A task set by the teacher to assess students' achievements of unit outcomes.

Pre-requisite Studies: are those nominated by tertiary institutions that must be satisfactorily completed by students to be eligible for admission to a course.

S/N: S refers to Satisfactory Completion. N refers to Non-satisfactory Completion.

School-Assessed Coursework: Assessment set by teacher and completed at school at Unit 3 and 4 level.

School-Assessed Tasks: Major Assessment tasks in selected Unit 3 and 4 Studies (Art and Visual Design and Development).

Semester - Half year.

Sequence - Two units of level 3 and 4 in the same Study. For example, English 3 & 4.

Special Provision: Arrangements that are made to allow students who are experiencing significant hardship the maximum opportunity to demonstrate both what they know and what they can do.

Statistical Moderation: The process to ensure that school's assessments are comparable throughout the state. It involves adjusting each school's coursework scores for each study to match the level and spread of the combined examination and GAT scores for the students in that school doing that study.

Study Design: The study design describes the units available within a particular study and prescribes the areas of study, outcomes and assessment for each of the units.

Study Score: A numerical score (0-50) awarded to students who satisfactorily complete Units 3 and 4 Studies and based on the assessment in these units.

Study: A subject. Most VCE studies are made up of 4 units, which are at levels 1, 2, 3 and 4.

TAFE: Technical and Further Education, a wide range of vocational and training courses available on over 100 campuses in Victoria. Some require separate application forms for each course; some are applied for on the Tertiary Entrance Application Form.

Unit: A semester length course within a study. The Unit can be one of four levels 1, 2, 3 and 4.

Units 1 & 2: Units at the first two levels of study and of a level of difficulty usually associated with Year 11.

Units 3 & 4: Level of difficulty usually associated with Year 12.

VCE: Victorian Certificate of Education.

VET: Vocation Education and Training.

VICTER: Victorian Tertiary Entrance Requirements.

VTAC: Victorian Tertiary Admissions Centre. The centre that processes student applications to most courses in tertiary colleges and universities as well as the major TAFE courses.