

# Senior Pathways

A guide to VCE, VCAL & VET  
subjects and course information  
at  
Rutherglen High School

**2022**





# Rutherglen High School

PRINCIPAL: Mr. Phillip Rogers

Email: [rutherglen.hs@edumail.vic.gov.au](mailto:rutherglen.hs@edumail.vic.gov.au)

Internet: <http://www.rutherglenhs.vic.edu.au>

A VICTORIAN SECONDARY COLLEGE

PO Box 84, Rutherglen, Vic, 3685

Phone: 02) 6032 9483

FAX: 02) 6032 9185

## Choosing and following a Pathway

Students going into the Senior School years at Rutherglen High School have a wide variety of programs and pathways open to them. They are able to pursue units and programs from within the Victorian Certificate of Education (V.C.E.) and/or Victorian Certificate of Applied Learning (V.C.A.L.). They can also enrol in Vocational Education & Training in Schools (VETiS) courses and School Based Apprenticeships & Traineeships (S.B.A.T.s). Indeed many students participate in a program with several of these different elements and courses.

Students should find out more about the world of work and life beyond school before making decisions. In part this includes the Industry and Enterprise subject in Year 10 as well as Work Experience and Work Placements and even part-time work. It includes completing a Managed Individual Pathways (MIPs) Plan as well as individual counselling. However it also includes the student showing initiative to undertake individual research and asking questions of people in related occupations.

The most important thing is for students to select a program and individual subjects or courses which will assist them in moving along the pathway that takes them towards their dream career. If they don't have a clear or specific dream, then they should ensure they keep their options open. By law, students are required to be in education or training until they are 17 years old. However, there is compelling evidence that there are long term major advantages in completing secondary school and also in completing tertiary education at TAFE or university.

Students should select subjects which are of interest and value to them. They are more inclined to work hard and achieve more in a subject they like. Selecting a subject or program because their friends are doing it is not a wise choice.

In the end, students will get out of their Senior School years what they put in. These years can be stressful and difficult. Anytime you are striving to achieve excellence, it is necessary to push yourself and work hard. However you should also ensure that you achieve a sense of balance between the different aspects of your life. It is still possible to be involved in part-time work, sport and have a social life. However, your dream will not just drop in your lap – you need to go out and make it happen. Make that your approach: **dream, research, investigate, select, strive and achieve.**

Good luck.

Phil Rogers  
Principal

# VCE

## VCE PROGRAM

This handbook describes the initial unit offerings. From it, students can complete their Initial Program Selections. These selections will then provide the basis for the final unit offerings.

### **NOTE:**

1. If there are insufficient student numbers selection for a particular unit, students will be asked to select an alternative unit.
2. If a unit combination is not possible due to timetabling restrictions, students will be asked to select an alternative unit.
3. Year 11 students are able to revise their programs at mid-year and end-of-year. (Not all student requests for changes are possible though).
4. Students will be counselled before their program is finalised.
5. Whether a unit runs will ultimately depend on the availability of staff and resources. The Principal in consultation with the LAC Committee will make the final decisions on which Units will run.

## CHOOSING A PROGRAM

### **Remember:**

1. Choose a program which is realistic to your academic background.
2. Choose a program which is consistent with your future career. Students must make themselves aware of any pre-requisite for a particular career or course. This can be done by contacting the careers teacher
3. Seek guidance from your present teachers on the suitability of your selection of units.
4. Try to broaden your program beyond those subjects strictly required for any particular vocations.

### **People who can help you in making decision about your program are:**

CO-ORDINATORS:	Any queries on program units or general information.
CAREERS TEACHER:	Any questions re careers and pre-requisites for courses.
YEAR 10/11 TEACHERS:	These people probably best know your capabilities, and should be consulted.
PARENTS:	Know your goals, strengths and weaknesses and will do their best to be supportive and helpful.

## **THE STUDENT PROGRAM**

In order to successfully complete the VCE requirements, students enrolled in VCE must satisfactorily complete at least 16 units.

These units must include:

- Three (3) Units of English with at least two Units at Unit 3 or 4 level.
- Three (3) sequences of level 3 and 4 Units other than English, these sequences can include VCE VET Unit 3 and 4 sequences.
- The 16 units may include an unlimited number of VET units.

To obtain an ATAR score a student must pass Unit 3 & 4 English as well as three other Unit 3 and 4 sequences.

## **AT RUTHERGLEN HIGH SCHOOL**

### **YEAR 11**

In general, Year 11 students would be advised to select from VCE Units 1 and 2. However, some students may wish to attempt some VCE 3 & 4 Units. Such selections will need to be made after careful discussion with the appropriate teacher and a Senior School Co-ordinator. Year 11 students wishing to study a Unit 3/4 subject will need to fill out and submit an 'Accelerated Subject' form. Students will only be permitted to do a 3/4 sequence if they have performed well in Year 10. The results from the 3 & 4 Unit will be added to the following year's results and so contribute to the student's ATAR score.

Year 11 students are expected to study 12 VCE/VET/VCAL Units (6 subjects) throughout the year.

### **YEAR 12**

It is anticipated that the "normal" program in Year 12 will be at least 10 Units. This may include VET subjects and/or some VCE 1 and 2 units, or it could also include 'Enrichment Units' which are offered by some universities.



## VCE UNITS OFFERED AT RUTHERGLEN HIGH SCHOOL 2022

### UNITS 1 & 2

English

#### Arts/Humanity Grouping

Art  
Health and Human Development  
History – Ancient History  
Legal Studies  
Physical Education  
Literature  
Visual Communication and Design

#### Maths/Science/Technology Grouping

Agricultural Studies  
Biology  
Product Design and Technology  
Food & Technology  
Psychology

Accounting.....Accounting  
Chemistry.....Chemistry  
General Maths..... Further Mathematics  
Mathematical Methods.....Mathematical Methods  
Physics.....Physics

### UNITS 3 & 4

English

Art  
Health and Human Development  
History – Ancient History  
Legal Studies  
Physical Education  
Literature  
Visual Communication and Design

Agricultural Studies  
Biology  
Product Design and Technology  
Food & Technology  
Psychology

**NOTE:** ..... represents: Studies for which subjects it is recommended that you do Units 1 and/or 2 before attempting Units 3 and 4.

# VET

## VOCATIONAL EDUCATION AND TRAINING

VET programs are vocational studies approved by the Victorian Curriculum and Assessment Authority (VCAA) as appropriate for senior secondary school students. This allows a student to complete a nationally recognised Vocational Education and Training (V.E.T) qualification as well as gain credit for VCE/VCAL during Year 10, 11 and 12.

Students study VET subjects to broaden their subject choice and gain another type of qualification.

Some VET modules are recognised as equivalent to VCE units 1 & 2 and 3 & 4. As long as you satisfactorily complete the whole program, these modules will form part of your VCE. They also contribute to VCAL.

Some VET courses have graded assessment tasks and students must sit an end of year exam. This gives the student a study score and contributes to their ATAR.

Rutherglen HS offers three VET subjects that add to their VCE results.

VCE VET Studies in Engineering [contributes to ATAR if studied at Year 12 level]

VCE VET Hospitality [contributes to ATAR if studied at Year 12 level]

VET Music [Cert II, contributes to VCE Units 1 & 2 and also VCAL]

VET Music [Cert III, contributes to VCE Units 3 & 4 and also VCAL]

These subjects are taught at School and require some training time at either Wodonga TAFE or GOTAFE in Wangaratta.

Most VET courses require you to complete work placement within the relevant industry.

Students may also do external VET subjects through a TAFE. This may require the student to attend TAFE one day per week or complete the course 'On-line'. Examples of these include.

Cert II in Animal Studies

Cert III in Beauty Services

Cert II in Equine Industries

For a more comprehensive list of VET subjects see Mr. Thomas or Mr. Webb.

# VCAL

## (Victorian Certificate of Applied Learning)

**OVERVIEW:** The Victorian Certificate of Applied Learning (VCAL) is a senior school certificate that is based on hands on learning. VCAL aims to develop skills that will assist in preparing students for further education, training or employment. It allows students to complete their secondary education and gain hands-on skills, which will help them move into meaningful employment.

VCAL has three levels – Foundation, Intermediate and Senior. Senior is the highest level and is aimed at students who demonstrate high personal motivation and an ability to work independently. Students would start at the level that best suits their skills and capabilities and allows them to proceed through the levels as they gain competency and skills. These levels are not timed based, and as soon as students complete the competency based outcomes they are free to try for the next level.

VCAL has been specifically designed to meet the needs of students in Year 11 and Year 12 who need a course based themed on practical experience.

**CAREERS:** Since starting VCAL at RHS in 2003 students have gained employment in many Industries including Automotive, Building, Engineering, Hospitality, Hair and Beauty, Nursing, Animal care industry, Warehousing and Logistics, The Aged care industry and many more.

### **What types of subjects make up the VCAL?**

#### **Strand 1 - Literacy and Numeracy**

The VCAL learning program must include a form of Literacy and Numeracy. This may involve, for example, VCE English and Maths or actual VCAL Literacy and Numeracy units provided by the Victorian Qualifications Authority.

#### **Strand 2 - Industry specific skills**

The VCAL learning program must include units of vocational training based on V.E.T. programs or a School Based Apprenticeship Traineeship (SBAT). eg. VET Business, VET Engineering, VET Hospitality etc.

#### **Strand 3 – Work related skills**

The VCAL learning program may include part-time work, new apprenticeships, work experience and work placement units in preparing for work such as Occupational Health and Safety or job interview skills. Students will be required to complete 10 days of structured work placement each semester, in a field of their choice.

#### **Strand 4 - Personal development skills**

The VCAL learning program will include local and community based projects, voluntary work and structured activities to help develop self-confidence, personal organisation skills, teamwork and other skills important for life and work.

**VCAL ASSESSMENT:** Assessment is undertaken as an ongoing process which integrates the student's knowledge and skills with their practical application over a period of time. Evidence is collected through teacher observations, the written records of students work and through the collection of pictures, diagrams, models and projects completed by students.

To successfully complete a VCAL certificate at any level students must achieve 10 credits. These are achieved by successfully completing the 2 units of learning outcomes in each of the 3 levels.

VCAL will give students the opportunity to approach their senior years of secondary education **knowing** that they are working towards a planned desired outcome whilst still at school.

The above strands are pre-requisites in Foundation Intermediate and Senior level VCAL. Subject choices should be made in consultation between student, parents, careers teacher and Senior School Co-ordinators.

An example of a VCAL Course may include:

- VCAL Numeracy **OR** any VCE Maths units (compulsory)
- VCAL Literacy **OR** students could choose to do VCE English Units (compulsory)
- VCAL personal development skills (compulsory)
- VCAL work related skills. (compulsory) **OR** a VET subject
- Design and Technology
- Work placement selected by the student.
- A VET course **OR** a School Based Apprenticeship Traineeship (SBAT).

This type of course selection allows students some flexibility in their subject choices; however, the acquiring of a work placement is extremely important.

To gain VCAL, students **MUST** pass all of the learning outcomes within each subject area. VCAL demands that students demonstrate self management and personal motivation.

If you would like to complete your secondary education and gain valuable work skills, consider gaining VCAL.

**Careers Information**  
**[www.rutherglenhighcareers.com](http://www.rutherglenhighcareers.com)**

This section is meant to guide you to the correct source of information rather than supply the information. It is important to remember that prerequisites for post school courses and careers are changing from year to year, so it is vital that you seek out the most recent information.

The correct VCE/VCAL course selection can only result if you have already selected a career direction. Once the career direction has been decided, you should work out which pathway will lead you there (VCE, VCAL, VET, SBAT, external study and/or Work Placements).

When choosing VCE subjects, you may need to ask yourself the following:

- Do you have some ability in the type of Units you wish to do?
- Do you enjoy the content of the Units?
- Are you interested in the industries that completing the Units may lead to?
- How do the Units relate to your career intention?
- Are there prerequisite units required for your intended post school pathway? (e.g. Defence Force, Teaching courses)

It is important that you maintain a variety of subjects as:

- Your own career aims may change over the next couple of years.
- Prerequisites and demands of tertiary institutions and their courses may change.
- You may not be able to enter the particular field or course of your choice due to unforeseen circumstances, thus it is essential to have thought of some alternatives.

Visit [www.rutherglenhighcareers.com](http://www.rutherglenhighcareers.com) for quick and easy reference materials relating to post school options. This includes job/career information searches, career interests, industries, resumes, tertiary institution information and more. If you log into the student area using an email address you will have access to even more resources. A weekly *Career Newsletter* is also published by the Careers Adviser.

A range of information relating to careers and tertiary institutions is also available in the Careers Room and in the Senior Study Centre. For individual careers counselling and /or advice, make an appointment with the Careers Adviser.

**Structured Workplace Learning (SWL) and Work Experience**

There are a number of opportunities to participate in either SWL or Work Experience depending on your chosen subjects. Please speak to your Careers Adviser for further information if you would like to do Work Experience outside of a given subject. They can help you to source and organise.

## **SENIOR SPORT**

Senior students are encouraged to maintain their health and fitness by continuing to be involved in the School's Sports program.

They have the opportunity to participate in interschool sport and are expected to participate in the Interhouse competitions.

Senior students also have the use of the community centre at lunchtime throughout the week.

## **Senior HOMEWORK EXPECTATIONS**

Homework – this is work to be completed outside of formal class time. It may include the completion of unfinished class work, revision for tests and exams, or the completion of specific projects or tasks.

All Year 11 and 12 students are expected to do homework on a regular basis.

They should establish a regular pattern of homework and ensure they use their Diary (Electronic or Hard copy).

Students should also use their school email account, google classroom and Compass for communication with Teachers.

Students should work steadily over the set period of time. They should start on the night the work is set.

Students should list all Work Requirements and their due dates, and then plan their work to meet the due date.

The amount of time necessary for each student will vary. Subjects outline minimum requirements in the course description. On average students can be expected to complete up to 3 hours a day. VCE students should also spend time revising work in preparation for exams.

If you consider a student is doing excessive amount of homework, please contact the year level co-ordinator.

## **HONOURS POLICY**

Honours are not awarded to students studying VCE Units 3 and 4, VET Units or VCAL Units. However, Honours can be awarded to students studying VCE Units 1 and 2.

## **STUDENTS WHO DRIVE THEMSELVES TO SCHOOL**

Any student, who intends to drive themselves to school at some stage, must obtain a 'Car Usage' form from the Senior School Coordinator. This form outlines the School's policy on student car use and must be signed by both the student and a parent/guardian. In short this form states that any student who drives to school can bring to school or take from school any siblings who attend the school but **NO** other students.

## **STUDENT EXPECTATIONS AND RESPONSIBILITIES**

Senior students are treated as young adults at this school. They are given a number of privileges. With these privileges come a number of responsibilities and expectations.

The school expects the senior students to play a leadership role in the school, to set a good example to younger students and to act in a responsible, adult manner.

Some of the expectations of senior students include:

- ☐ Use the Senior Study Centre responsibly
- ☐ Maintain respective locker areas in a tidy manner
- ☐ Actively participate in all timetabled classes
- ☐ Use the private study periods in an effective manner
- ☐ Complete at least 2 hours of home study per week per subject
- ☐ Respect the rights of other students to learn
- ☐ Make the most of their educational opportunity
- ☐ Abide by normal school rules with regard to uniform, attendance (at least 80%), punctuality, motor car usage, lunch passes and leaving the school grounds during the school day.

We trust the senior students will grow and develop into fine young men and women and display levels of maturity and a social conscience expected of 16, 17 and 18 year old students.

## **SCHOOL ASSESSED COURSEWORK (SAC)**

### **WHAT ARE SACS?**

SACs must be part of the regular teaching and learning program of all VCE subjects. They must be completed mainly in class. SACs comprises of a variety of tasks that range from projects to essays to tests to completing an experiment. Results of SACs at a Year 12 level count towards a students study score in each subject and ultimately towards their ATAR score. SACs at a Year 11 level are the assessment components of each subject and may count towards a student satisfying the Outcomes of a particular subject.

### **WHAT HAPPENS IF A STUDENT IS ABSENT FROM CLASS WHEN A SAC IS BEING HELD**

It is inevitable that at some stage throughout any particular year a student will be absent from school when a SAC is being held. Especially when it is taken into account that some SACs are held in each lesson over a two-week period in some subjects.

If a VCE student misses a SAC for a school related reason (e.g. Sport, Debating, Excursion etc) the student must be given the chance to complete the SAC or a similar SAC at a mutually agreeable time to the student and the subject teacher.

If a student misses a SAC through illness and can produce a Doctors Certificate, they must be given the chance to complete the SAC or a similar SAC at a mutually agreeable time to the student and the subject teacher.

If a student misses a SAC through illness but doesn't go to a doctor, they must make sure that a parent (or guardian) contacts the School (preferably the Senior School Coordinator) early in the school day (before the SAC is being held). If this happens the student will be given the chance to complete the SAC or a similar SAC at a mutually agreeable time to the student and the subject teacher.

If a student misses a SAC through exceptional pressing family circumstances that are accepted by the Principal, they will be given the chance to complete the SAC or a similar SAC at a mutually agreeable time to the student and the subject teacher. Hopefully, if some such circumstances do occur, the family must make every effort to contact the school prior to the SAC.

However, if a student misses a SAC and there has been no parental contact with the school to give a reason for the absence beforehand, the student will not be given the chance to catch up on the time missed. The student will be given zero marks for the work missed and in some cases may have to complete extra work to satisfy those parts of a subject's outcomes that the SAC was covering.

Consequently, if a student is in a situation where they are going to be absent from a SAC on a particular day, they must ensure that a parent (or guardian) contacts the school before the time of the SAC to give a reason for the absence.

Please feel free to contact the Senior School Co coordinator should you wish to further discuss this policy.



# **RUTHERGLEN HIGH SCHOOL ATTENDANCE POLICY**

## **Rationale**

Rutherglen High School encourages students to achieve to the best of their abilities. Therefore it is expected that all students take full advantage of their educational opportunities, including regular attendance, completion of all set work and consistently working to their full potential.

Students of school age (5 - 17 years) resident in Victoria are required to be in full time attendance at a government or registered non-government school unless they are receiving approved home tuition, have shared enrolment with a specialist setting, have received an exemption from the Regional Director or are enrolled in correspondence education.

## **Aims**

- To maximise learning opportunities by ensuring student absenteeism is kept to a minimum.
- To put into place agreed processes for managing student absences within the school.

## **Implementation**

- All enrolled students are expected to attend all scheduled classes.
- Students must have a valid reason for not attending (these are outlined under Approved Absences)
- The official attendance roll is marked every lesson of each day. Class teachers mark their own rolls for each class.
- Students absent from Period 1 will be recorded by the School Attendance Officer who will contact the parents of absent student to verify the location of the student.
- Attendance data will be reviewed by Year Level Coordinators.
- Parents/Guardians of absent students are required to provide authorisation either in writing or by phone, detailing the reason/s or their child's absence.
- Parents/students are expected to advise the school of any extended absence, prior to the absence.
- Students in Years 7 – 10 who have more than 10 days unapproved absence per semester may be unable to satisfy the requirements of the subjects unless the Year Level Coordinator makes a special recommendation to the Principal.
  - Absences with a Medical Certificate, part-day absence approved by First Aid Officer, suspensions, excursions including sport and work placements are approved rather than unapproved absences.
- Students in Years 11 – 12 are required to maintain a 100% attendance rate for each unit of study they undertake. Failure to do this will result in the recording of an N for that Unit unless there is a valid (approved) reason for non-attendance.
  - Absences with a Medical Certificate, part-day absence approved by First Aid Officer, suspensions, excursions including sport and work placements are approved rather than unapproved absences.
  - A parent or guardian of a VCE student who is absent or will be absent for School Assessed Coursework (SAC) must notify the Senior School Coordinator prior to the scheduled SAC.
  - VCAL students are required to complete 100 hours per outcome over the year. The same obligations apply to them as per VCE students.
  - **Once attendance drops below 80% for a semester, VCE/VCAL students will be unable to satisfy the requirements of the subjects/courses even if the absences are generally approved. They will therefore receive an 'N'.**

**Approved Absences include:**

- Absences covered by a medical certificate
- A student being sent home sick from school
- Attendance at a medical appointment, including dentist
- Approved School excursion or sporting event.
- Suspension
- Notification by phone or a signed note by the parent/guardian explaining the reason for the absence (illness, family trauma, etc.) (While this is generally sufficient for students in Years 7-10, it is only sufficient grounds for VCE/VCAL students with low level absenteeism.)
- Family holidays (the School Attendance Officer should be informed well in advance so that work requirement obligations are met through a form completed and signed by teachers.) While this is generally sufficient for students in Years 7-10, it is only sufficient grounds for VCE/VCAL students with low level absenteeism.

**Attendance Protocols:**

- Rutherglen High School has a 24-hour phone number with an answering machine. The number is (02) 60329818.
- When parents know their son or daughter will be absent from school, they should ring and:
  1. Identify themselves as the parent/guardian of the student
  2. Advise the name and form of the student
  3. Advise the reason for the absence and the expected length of the absence. (A follow-up note may be required.)
- Students who leave the school for an approved appointment or activity must sign out and, if they return, sign back in.
- VCE Students must sign the private study roll at the commencement of each private study period.
- Teachers are to monitor attendance and advise Year Level Coordinators of concerns.
- Students are responsible for any missed work and must seek information concerning catch-up requirements.

## **SPECIAL PROVISION**

**Please consult a Senior Level Co-ordinator with any questions you may have concerning the information on Special Provision provided in this section.**

The purpose of Special Provision in student programs is to help students in defined circumstances to complete the VCE in a reasonable time frame. A student is eligible for Special Provision in Student Programs if, at any time, while studying for VCE, he/she is adversely affected in a significant way by:

- Illness (physical or psychological);
- Any factors relating to personal environment;
- Other serious cause;
- An impairment or disability, including learning disabilities.

The school is responsible for determining eligibility and the nature of the provisions provided.

Individual students may need special provisions in their learning program to achieve outcomes, and in assessment to demonstrate their learning achievement. Special provision provides eligible students with the reasonable opportunity to participate in and complete their senior secondary studies.

The provisions are available to both VCE and VCAL students.

Students who are eligible for Special Provision are not exempt from meeting the requirements for satisfactory completion of the VCE, or from being assessed against the outcomes of a study. Neither does Special Provision include the development of alternative courses of study nor standards of achievement that are different from those specified in VCE study designs.

### **FORMS OF SPECIAL PROVISION**

- Student program alterations
- Special Examination Arrangements
- Derived Examination Score

## **SPECIAL EXAMINATION ARRANGEMENTS**

The VCAA recognises that students with a disability/illness may require Special Examination arrangements to enable them to access the examination questions and communicate their response in a timed examination.

All Special Examination Arrangements for a student must be approved by the VCAA upon application from the school. The application must be submitted in Term One.

Students are eligible for Special Examination Arrangements if it can be demonstrated that their capacity to complete the examination is adversely affected by:

- Significant Health Impairment
- Significant Physical Disability
- Hearing Impairment
- Vision Impairment
- Learning Disability
- Severe Language Disorder

Special Examination Arrangements may take the form of:

- Extra reading time
- Extra writing time
- Rest breaks
- Alternative format examination papers
- Permission to use special technological aids
- A reader and/or a scribe
- A clarifier
- Alternative examination venue

## **DERIVED EXAMINATION SCORE**

The Derived Examination Score (DES) is calculated by the VCAA and may be used as the student's examination result where the student has met the eligibility requirements for the provision.

The purpose of a DES is to ensure that a student's final result on an examination reflects as accurately as possible the level of achievement that would be expected based on the learning and achievement he/she has demonstrated in his/her study over the year/semester.

Students are only eligible for a DES for a VCE examination if:

1. They have completed the course of study leading to the examination and have a result for at least on other Graded Assessment in the same study.
2. They experience the onset of an illness or the occurrence of an injury or personal trauma within two weeks before the actual exam.
3. They experience a serious intervening event in the period two days before or on the day of an examination.
4. They provide written evidence that demonstrates that the illness, injury, personal trauma or serious intervening event has affected their performance in the examination or has prevented them from attending the examination.

**A student applying for a DES must do so within seven days of their last exam in the particular examination period. If you feel that you should be granted a DES, please see the Senior School Coordinator as soon as possible.**



# UNITS 1 & 2

## **ACCOUNTING UNITS 1 & 2**

**OVERVIEW:** In this subject students are introduced to establishing a business and the financial management of a business. The student will be able to explain and apply the knowledge and skills necessary to set up a business, record and report data for a business and make sound financial decisions. The study of Accounting will enable students to develop their financial knowledge and skills.

**CAREERS/PATHWAYS:** This subject is recommended for those who may wish to operate their own business in the future or who have a desire to enter a TAFE or university course which has a business focus such as Accounting, Law, Finance, Economics, Management or Commerce.

**NATURE OF WORK AND ASSESSMENT:** The class work comprises completing set exercises, assignments and topic test that demonstrate the student's knowledge and understanding of the rules and concepts of accounting.

THE **VCAA handbook** sets out the following compulsory areas of study.

### **AREA OF STUDY 1 – Unit 1 - The role of accounting**

**Outcome 1:** Describe the resources required to establish and operate a business, and select and use accounting reports and other information to discuss the success or otherwise of the business.

### **AREA OF STUDY 2 – Unit 1 – Recording financial data and reporting accounting information for a service business.**

**Outcome 2:** Identify and record financial data, report and explain accounting information for a service business, and suggest and apply appropriate financial and non – financial indicators to measure business performance.

### **AREA OF STUDY 1- Unit 2 – Accounting for inventory**

**Outcome 1:** Record and report for inventory and discuss the effect of relevant financial and non-financial factors, and ethical considerations, on the outcome of business decisions.

### **AREA OF STUDY 2 – Unit 2 – Accounting for and managing accounts receivable and accounts payable.**

**Outcome 2:** Record and report for accounts receivable and accounts payable, and analyse and discuss the effect of relevant decisions on the performance of the business including the influence of ethical considerations.

### **AREA OF STUDY 3 – Unit 2 – Accounting for and managing non-current assets.**

**Outcome 3:** Record and report for non-current assets and depreciation.

### **OTHER COURSE REQUIREMENTS:**

Students will be required to purchase a textbook. It is strongly advised that students have access to a computer if studying Unit 2.

### **HOMEWORK:**

Students will be required to revise and complete any unfinished class work out of class.

## **AGRICULTURE AND HORTICULTURE**

### **UNITS 1 & 2**

**OVERVIEW:** This subject provides opportunities for students to experience and understand the Agriculture and Horticulture industries. Students complete a variety of practical and theoretical aspects as well as developing skills of running a small enterprise. The subject covers a broad range of systems in terms of biological, social and economic development of Agriculture and Horticulture in Australia. At the completion of these Units, students will gain a more thorough understanding of the operation of enterprises/small businesses, the principles of sustainable Agriculture and the importance of Agricultural/Horticulture in a changing world.

**CAREER PATHWAY:** Agricultural scientists, Farm Manager, Agronomist, Manager in Land Care, Irrigation Services, Wine Maker, Vineyard Manager, Food Technologist, Water Policy Adviser, Business Manager, Horticulturalist, Stock and Station Agent.

#### **UNIT 1 – Change and Opportunity**

##### **Area of study 1 –Food and Fibre Industries**

In this area of study students are introduced to agriculture and horticulture as industries that are valued by Australians for cultural and social reasons, as well as being vital to Australia's economic prosperity. They discuss change as a significant concept in agriculture and horticulture, and recognise how this underpins the importance of creative and innovative practices.

##### **Area of study 2 –Food and Fibre Production**

In this area of study students gain a broad understanding of agricultural and horticultural practices, with a focus on soil management and the selection of suitable plant and animal varieties. Students explore systems and production cycles, best practice for health and safety, and the factors that influence the growth and development of plants and animals. Through practical tasks, students make decisions about testing soils and selecting suitable plants and animals.

#### **UNIT 2 – Growing Plants And Animals**

##### **Area of study 1 – Plant Nutrition, Growth and Reproduction**

In this area of study students focus on plant production in agriculture and/or horticulture. They investigate challenges and issues that affect practices and decisions in plant production, and develop an understanding of plant structure, function, nutrition, growth and reproduction. Practical tasks should focus on aspects of plant propagation and/or growth.

##### **Area of study 2 – Animal Nutrition, Growth and Reproduction**

In this area of study students focus on animal production in agricultural contexts. They investigate challenges and issues that affect practices and decisions in managing animal production. Students study animal nutrition, digestion, growth, development and reproduction, including principles of genetics and selective breeding, and the use of reproductive technologies.

**HOMEWORK:** Students are expected to complete at least two hours of homework per week. Additional time will also be needed to monitor the Enterprise, especially if dealing with Animals.

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## **ART**

### **UNITS 1 & 2**

**OVERVIEW:** This subject caters for students who enjoy and have skills in self expression and creating visual imagery. This can take the form of painting, drawing, photography, printmaking, sculpture, fashion, design, digital media and many more. Students have the opportunity to express themselves in visual terms showing imagination, creativity and innovation. Art acknowledges the value of originality and encourages students to be flexible, think analytically and solve problems.

**CAREERS:** Art provides access to a wide range of TAFE and University courses and is recommended for students who have an interest in Fine Arts, design, illustration, fashion, teaching, advertising, photography, film, theatre and television etc. This subject can also compliment the work done in VCD and Design and Technology.

**NATURE OF WORK:** Students create Practical Folios that explore themes as well as areas of personal interest. Developmental sketches, trials and experiments are an important of this folio. Finished works are generated from these experiments.

In order to develop a greater understanding of Art students will also study artists and styles from Australia and overseas. They will produce written responses to works and research individual artists.

**ICT:** ICT is used extensively in Art, both as a research tool as well as a medium in itself. Students explore rich inspiration to broaden their own folios as well as researching artists through the internet.

Digital photography, the manipulation of images in Photoshop, and film, scanning and internet research are areas that students will use to generate images and present different visual solutions.

The VCAA handbook sets out the following compulsory areas of study.

#### **UNIT 1 & 2 OUTCOMES:**

##### **1. Folio.**

- Exploration of techniques, materials and processes
- Create a broad range of experiments that explore ideas and themes
- Explore issues and areas of personal interest
- Generate folio of exploratory and completed artworks

##### **2. Response to Art.**

- Demonstrate ability to discuss and interpret a variety of artworks
- Learn to interpret the meanings and messages in Art
- Gain an understanding of how an artwork may reflect the artist's interests, experiences and thinking

**EXCURSIONS:** Visit Art galleries in both Melbourne and regional areas. View 'Top Arts' and 'Top Designs' which showcase the best student folios from previous year.

**HOMEWORK:** 2 to 3 hours per week of research, experimenting, and working on final solutions. Additional studio time is available in the Art centre after school.

## **BIOLOGY UNITS**

### **UNITS 1 & 2**

**OVERVIEW:** This subject provides students with the opportunity to study living things that survive in the many different habitats of our biosphere. Biology enables students to understand that despite the diverse ways of meeting the challenges of survival, all living things have many structural and functional characteristics in common.

**CAREERS:** The study of biology prepares students for continuing studies in bioscience and entry into the workforce in a wide range of careers.

Examples include Biochemistry, Biotechnology, Botany, Marine Biology, Environmental Science, Conservation, Science, Ecology, Agriculture, Animal Technician, Food Science and Nutrition, Forensic Science, Forestry, Medicine, Microbiology, Sports Science, and Zoology.

**NATURE OF WORK:** Students will be set chapter questions that will require them to show that they have attained key knowledge. Practical classes will support students to improve their confidence when using scientific equipment and develop key investigative skills. Students will be expected to participate in class discussions and oral presentations. End of unit exams will provide one aspect of the assessment.

**ICT:** Students will use the Internet to research information and new technologies. They will present Power Points on research tasks. The Digital microscope will be used to observe cells and specimens.

#### **AREAS OF STUDY:**

The VCAA handbook sets out the following compulsory areas of study.

#### **UNIT 1: How do living things stay alive?**

##### **OUTCOMES**

- Cells size, structure and function
- Energy transformations, animal adaptations and regulation
- Functioning systems, biodiversity, ecosystems and a practical investigation in relation to the survival of an organism

#### **UNIT 2: How is continuity of life maintained?**

##### **OUTCOMES**

- Genomes, genes and alleles, patterns of inheritance, analysis of pedigree charts and genetic crosses
- DNA, Human Genome project, chromosomes
- Genetic decision making and an investigation in relation to a genetics and/or reproductive science issue

**EXCURSIONS:** Students may be expected to participate in an excursion to a local ecosystem or the Melbourne Zoo.

**HOMEWORK:** At least 2 hours per week for chapter check and review questions, glossary terms, practical reports and test/exam revision.

## **CHEMISTRY UNITS 1 & 2**

**OVERVIEW:** This subject provides students with the opportunity to further develop their knowledge of the Periodic table and its historical development. It will also provide a look at atoms, their structure, how amounts of atoms are measured as well as how atoms bond to each other. This subject also explores the physical and chemical properties of water, reactions that occur in water and various methods of water analysis.

**CAREERS / PATHWAYS:** Chemistry is part of many careers including Agriculture, Biochemistry, Dietetics, Engineering, Environmental studies, Food, Forensic science, Forestry, Horticulture, Medicine, Oceanography, Pharmacy, Sports Science and Winemaking.

**NATURE OF WORK / ASSESSMENT:** Students will be set questions, assignments, practical reports, a research investigation and topic tests that will allow them to demonstrate their knowledge of the concepts that have been taught. They will also be set an exam at the end of each Unit.

**The VCAA website sets out the following areas of study in detail.**

### **UNIT 1 OUTCOMES:**

1. The student should be able to relate the position of elements in the Periodic table to their properties, investigate the structures and properties of metals and ionic compounds, and calculate mole quantities.
2. The student should be able to explain the properties of carbon lattices and molecular substances with reference to their structure and bonding.
3. The student should be able to investigate a question to the development, use and or modifications of a selected material and communicate a response to the question.

### **UNIT 2 OUTCOMES:**

1. The student should be able to relate the properties of water to its structure and bonding, and explain the importance of the properties and reactions of water in selected contexts.
2. The student should be able to measure amounts of dissolved substances in water and analyse water samples for salts, organic compounds and acids and bases.
3. The student should be able to design and undertake a quantitative laboratory investigation related to water quality and draw conclusions based on evidence from collected data.

**OTHER COURSE REQUIREMENTS:** Students may be expected to go on an excursion to a local Tertiary Institution. Students studying this subject will be expected to have a scientific calculator and a text book.

**HOMEWORK:** At least 2 hours per week completing set questions and assessment tasks as well as revising completed work for topic tests and end of unit exams.

## **ENGLISH UNITS 1 & 2**

**OVERVIEW:** This subject focuses on the reading of a range of texts, the development of writing skills and the use of a variety of oral language skills.

**CAREERS:** English is a compulsory pre-requisite for a range of TAFE and University courses.

**NATURE OF WORK:** Students will identify and discuss ideas, themes and issues in set texts, and construct responses. Rutherglen High School has had much success with expository and persuasive writing styles. Students will develop effective communication skills in writing taking into account context, purpose and audience. Students will explore ideas and issues orally giving considered reasons for a point of view and listening actively to the views of others.

**ICT:** In VCE English ICT will focus on word processing and be used for writing essays and researching topics for discussion and orals.

The VCAA handbook sets out the following compulsory areas of study:-

### **UNIT 1 OUTCOMES:**

- 1. Reading and creating texts**
- 2. Analysing and presenting argument**

### **UNIT 2 OUTCOMES:**

- 1. Reading and comparing texts**
- 2. Analysing and presenting argument**

**HOMEWORK:** In VCE English, 3 hours per week of reading texts, completing class work, writing essays, preparing for assessment tasks and revision.

**EXCURSIONS:** In VCE English students may visit a live production of a play or a film or lectures. Also students will be required to purchase individual texts.

## **FOOD STUDIES**

### **UNITS 1 & 2**

#### **COURSE DESCRIPTION:**

**Unit One** (Food Origins) focuses on food from historical and cultural perspectives. Students investigate the origins and roles across the world. They will consider the influence of technology and Globalisation on food patterns.

**Unit Two** (Food Makers) focuses on both small scale (domestic) and commercial food production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meet the needs of consumers.

**CAREERS/PATHWAYS:** This subject is recommended for students who have a desire to enter TAFE or University courses with a food focus such as Hospitality, Food Technology and Dietetics. Food Technology is also very applicable to students who have a passion to work with food.

**NATURE OF WORK/ASSESSMENT:** Students will complete both practical and theoretical work. They will work independently and as a member of a team to produce products as well as research and implement solutions to a design brief. The emphasis is on the development of practical skills complemented by the associated theory. Students will be assessed using a variety of tasks, including production work, tests, short written reports and oral reports

**ICT:** In this subject ICT is used for research and for presentation of written work.

THE VCAA handbook sets out the following compulsory areas of study.

#### **UNIT 1: AREAS OF STUDY**

1. **Foods around the world:** This unit explores the origins and cultural roles of food, from early civilisations through to today's industrialised and global world.
2. **Food in Australia:** This unit focuses on the history and culture of food in Australia.

#### **UNIT 2: AREAS OF STUDY**

1. **Food Industries:** This unit looks at Australia's major food industries, analyses relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.
2. **Food in the home:** This unit looks at comparing and evaluating similar foods prepared in different settings, explains the influences on effective food provision and preparations in the home, and involves designing and creating a food product that illustrates potential adaptation in a commercial context.

**OTHER COURSE REQUIREMENTS:** Students will be required to purchase a textbook. The cost of food used during these units is to be met by the student through subject levies.

**HOMEWORK:** 2 -3 hours per week of research, revision and completing incomplete work.

## **Health & Human Development**

### **Units 1 & 2**

#### **OVERVIEW:**

Unit 1 looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes a view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. With a focus on youth, students will consider their own health as individuals and as a cohort.

Unit 2 investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. Students will also enquire into the Australian healthcare system and extend their capacity to access and analyse health information.

#### **CAREER / PATHWAY:**

This subject is recommended for students who have a desire to enter TAFE or complete a university course in areas such as Childcare, Nursing, Teaching, Coaching, Nutrition, Beauty Therapy, Physiotherapy, and many other allied health areas or working with people related jobs / careers e.g. Aged Care. It is also recommended for those students that have a keen interest in improving their understanding of their own Health and Human Development.

#### **NATURE OF WORK / ASSESSMENT:**

Throughout each unit students will be required to contribute to discussions, complete research tasks, textbook activities, note taking and experience looking after a simulation baby. Assessment tasks for each unit will include a variety of tasks including; case study analysis, data analysis, visual presentations, multimedia presentations, oral presentations, tests and written responses. It will also include exams mid and end of year

### **Unit 1 Outcomes – UNDERSTANDING HEALTH AND WELLBEING**

#### **Area of study 1 – Health perspectives and influences**

This area of study takes abroad, multidimensional approach to health and wellbeing.

#### **Area of study 2 – Health and nutrition**

This area of study explores food and nutrition as foundations for good health and wellbeing.

#### **Area of study 3 – Youth health and wellbeing**

In this area of study students focus on the health and wellbeing of Australia's youth, and conduct independent research into a selected area of interest.

### **Unit 2 Outcomes – MANAGING HEALTH AND DEVELOPMENT**

#### **Area of study 1 – Developmental transitions**

This area of study examines the developmental transitions from youth to adulthood, with a focus on expected changes, significant decisions, and protective factors, including behaviours.

#### **Area of study 2 – Health care in Australia**

This area of study investigates the health system in Australia.

#### **OTHER COURSE REQUIREMENTS:**

Students will be expected to purchase a textbook.

#### **HOMEWORK:**

Students will be expected to complete **at least 2 hours homework / revision / study each week**. This will include reading, revision, completion of class work and some assessment tasks.

## **ANCIENT HISTORY**

### **UNITS 1 & 2**

**OVERVIEW:** History involves inquiry into human action in the past, to make meaning of the past using primary sources as evidence. As historians ask new questions, revise interpretations or discover new sources, fresh understandings come to light. Ancient History investigates individuals and societies (Mesopotamia, Egypt, Greece, Rome and China) across three millennia

**CAREER/PATHWAY:** This study provides students with the opportunity to develop employability skills through their learning activities such as Communication; Planning and organising; Teamwork; Problem solving; Self-management; Initiative and enterprise; Technology; and Learning. It also leads to opportunities in a range of careers, including Journalism and communications, Intelligence work Teaching/Educating, Law, Business Management, International relation, humanitarian work, Intelligence work

**NATURE OF WORK/ASSESSMENT:** Assessment tasks over Units 1 and 2 should include the following: an historical inquiry; an essay; an evaluation of historical sources; short answer questions; and extended responses.

**ICT:** Internet research, multimodal presentations, access to online resources including student forums, podcasts, and to archives for case studies analysis.

#### **Unit 1: Mesopotamia**

The lands between the rivers Tigris and the Euphrates have been described as the 'cradle of civilisation'. The study of Ancient Mesopotamia provides important insights about the growth of cities. Students investigate the creation of city-states and empires. They examine the invention of writing – a pivotal development in human history.

##### **Area of Study 1/Outcome 1: Discovering civilization**

In this area of study students explore how the first cities in Mesopotamia came into existence around 3500 BC. This area of study begins with the invention of agriculture. The introduction of agriculture and the domestication of livestock enabled large numbers of people to live together in a sedentary manner. The social features of these first cities were complex. Students use this concept to investigate life for the Sumerians and Akkadians.

##### **Area of Study 2/Outcome 2: Ancient Empires**

This area of study includes the Babylonians, the Laws of Hammurabi and the study of archaeological sites and evidence. It also involves learning about Hittite aggression, Assyrian warfare and prominent kings during this time.

#### **Unit 2: Ancient Egypt**

Ancient Egypt gave rise to a civilisation that endured for approximately three thousand years. The Nile served as its lifeblood. Kingdoms rose, flourished and fell around the banks of this great river.

##### **Area of Study 1/Outcome 1: Egypt the Double Crown**

In this area of study students explore kingship in Old Kingdom Egypt. Students explore Upper and Lower Egypt and the unification of the two; the prominence of the Nile; the importance the Narmer Palette. It was a time of prosperity, power and the pyramids – it also didn't last.

##### **Area of Study 2/Outcome 2: Middle Kingdom Egypt: Power and Propaganda**

A time of regaining power and re-unification. The pharaoh Mentuhotep II is a focus and his archaeological site of Deir-el Bahri. It was a peaceful time period with trade and literature flourishing. This time period too came to an end with the arrival of the Hyksos

**Homework:** Students are required to complete 2-3 hours of homework /study per week.

#### **Other Course Requirements:**

Students will be required to purchase a textbook.

## LEGAL STUDIES

### UNITS 1 & 2

**OVERVIEW:** VCE Legal Studies examines the institutions and principles which are essential to Australia's legal system. Students develop an understanding of the rule of law, law-makers, key legal institutions, rights protection in Australia, and the justice system.

Unit 1 focuses on different types and sources of law and the existence of a court hierarchy in Victoria. The key concepts of criminal law and civil law are applied to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute.

Unit 2 focuses on the enforcement of criminal law and civil law, the methods and institutions that may be used to determine a criminal case or resolve a civil dispute, and the purposes and types of sanctions and remedies and their effectiveness.

**CAREERS:** Legal studies will benefit those who wish to develop their analytical and critical thinking skills whilst learning very practical general knowledge about the legal system, parliament and the constitution, that affects all Australian citizens. It will be very useful for those who wish to pursue a career in the following areas: politics; justice system roles such as a police officer, lawyer or court registrar; social work; youth and corrective service workers; roles in crime prevention research and policy making; community education; and public service roles such as policy development.

**NATURE OF WORK:** Students develop an ability to identify, collect and process information from a range of sources. There is an emphasis on key skills, particularly those relating to interpretation, analysis, application, research, evaluation, and comparison. A variety of assessment tasks to cater for different learning styles will be set.

**ICT:** In this subject ICT is used for research and for presentation of written work.

**The VCAA handbook sets out the following compulsory areas of study:**

#### **Unit 1 – Guilt and Liability**

Area of Study 1 – Legal Foundations

Area of Study 2 – The presumption of innocence

Area of Study 3 – Legal Liability

#### **Unit 2 – Sanctions, Remedies and Rights**

Area of Study 1 – Criminal sanctions and sentencing

Area of Study 2 – Resolution of civil disputes and remedies

Area of Study 3 – Evaluate the ways in which rights are protected

**EXCURSIONS:** These may include visits to the local Magistrates Court, Supreme Court, State Parliament, and the Victorian Civil and Administrative Tribunal (VCAT).

**HOMEWORK:** Students will be required to revise and complete any unfinished class work.



## **LITERATURE UNITS 1&2**

**OVERVIEW:** This subject enables students to explore the use of language in various kinds of texts and the ways in which readers respond to and interpret them.

**CAREERS:** This subject is recommended for students who have a desire to enter TAFE or university courses such as Arts, Creative Writing, Journalism, Professional Writing and Editing, Public Relations, Personal Assistants.

**NATURE OF WORK:** Students explore the language, themes and ideas in a range of texts and the ways in which literature interprets personal, social and cultural experiences.

**ICT:** Students will use computers to write essays and for research.

The VCAA handbook sets out the following compulsory areas of study:-

### **UNIT 1 OUTCOMES:**

1. Reading Practices
2. Ideas and Concerns in texts

### **UNIT 2 OUTCOMES:**

1. The text, the reader and their contexts
2. Exploring connections between texts

**EXCURSIONS:** It may be appropriate to visit a live production of a play.

**EXPENSES:** Purchase of texts as required.

**HOMEWORK:** 3 hours per week of reading texts, class work preparation and completion, regular revision of notes.

## **GENERAL MATHEMATICS**

### **UNITS 1 & 2**

**OVERVIEW:** This course of study caters for a broad range of students who may either wish to undertake General Maths Units 1 and 2 in Year 11 only, or continue on with Further Maths at the Unit 3 and 4 Level. For each unit, content is selected from three of the six areas of study.

**CAREERS AND PATHWAYS:** This subject is recommended for students wishing to pursue a career in Business Management, Apprenticeships related to Technical Trades such as Mechanical, Building and Construction or those wishing to study the mathematics used in everyday life. Further Maths Unit 3&4 in Year 12 can contribute towards the calculation of an ATAR score for further study.

**NATURE OF WORK AND ASSESSMENT:** Demonstration of achievement will be based on performance from a selection of the following tasks: Assignments, tests, projects, modelling tasks, use of technology (in particular the CAS graphics calculator), Mid Year and Final Year exams.

**The VCAA handbook sets out in detail the following areas of study:**

**UNITS 1 and 2** will cover a selection from at least 4 of the following 6 areas of study.

**Linear relations and equations:** Covers the representation and manipulation of linear relations and equations, including simultaneous equations, and their applications.

**Arithmetic and number:** Covers the mental, by-hand and technology assisted computation with rational numbers, practical arithmetic and financial arithmetic, including estimation, order of magnitude and accuracy.

**Discrete mathematics:** Covers matrices, graphs and networks, and number patterns and recursion, and their use to model practical situations.

**Geometry, measurement and trigonometry:** Covers shape, measurement and trigonometry and their application to solve two and three-dimensional problems.

**Graphs:** Covers continuous models involving linear and non-linear relations and their graphs, inequalities and programming and variation.

**Statistics:** Covers representing, analysing and comparing data distributions and investigating relationships between two numerical variables.

**OTHER COURSE REQUIREMENTS:** Students studying this subject are required to purchase a CAS graphics calculator, (Casio ClassPad) from the school and a text book.

**HOMEWORK/PRIVATE STUDY:** 2 – 3 hours per week of homework and private study is required.

## MATHEMATICAL METHODS UNITS 1 AND 2

**OVERVIEW:** This course of study is designed as preparation for Mathematical Methods Units 3 and 4. It is suitable for students who are seeking employment or entrance to University courses at the completion of Year 12 where Mathematical Methods is a pre-requisite. An integral part of this course involves students using the CAS Graphics Calculator to assist in solving mathematical problems.

### **CAREERS AND PATHWAYS:**

Mathematical Methods is used for employment and tertiary courses such as Mathematics, some Sciences, Engineering, Medicine and Economics.

### **NATURE OF WORK AND ASSESSMENT:**

Demonstration of achievement will be based on performance from a selection of the following tasks: Assignments, tests, projects, modelling tasks, use of technology, mid-year and final-year exams.

**The VCAA website sets out the following areas of study in detail:**

**Unit 1 will cover the following areas of study.**

**Functions and graphs:** Covers the graphical representation of simple algebraic functions and the key features of these graphs.

**Algebra:** Provides further support for students' work in the Functions and Graphs, Calculus and Probability and Statistics areas of study.

**Calculus:** Covers constant and average rates of change and an introduction to instantaneous rate of change which includes graphical and numerical approaches to estimating and approximating these rates of change.

**Probability and Statistics:** Covers the concepts of event, frequency, probability and representation of finite sample spaces and events using various forms.

**Unit 2 will cover the following areas of study.**

**Functions and graphs:** Covers the graphical representation of a single real variable and the key functions of graphs such as axis intercepts, domain, co-domain and range, asymptotic behaviour, periodicity and symmetry.

**Algebra:** Provides further support for students' work in the Functions and Graphs, Calculus and Probability and Statistics areas of study.

**Calculus:** Covers the first principles approach to differentiation, differentiation and anti-differentiation of polynomial functions by rule and related application including analysis of graphs.

**Probability and statistics:** Covers introductory counting principle and techniques and their application to probability and the law of total probability in the case of two events.

**OTHER COURSE REQUIREMENTS:** Students studying this subject are required to purchase a (CAS) graphics calculator, (Casio ClassPad) from the school and a text book.

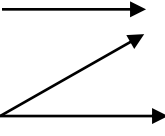
**HOMEWORK/PRIVATE STUDY:** 2 – 3 hours per week minimum of homework, completing set work and study for tests and exams is required.

Where do these subjects lead to?

**Unit 3 & 4 Further Mathematics:** Used for employment and general tertiary entrance.

**Unit 3 & 4 Mathematical Methods:** Used for employment, and tertiary courses such as Mathematics, Science, Medicine, Economics.

Types of unit choices made at Rutherglen are:

Year 11	Leads to	Year 12
VCAL Numeracy		VCAL Numeracy
General Mathematics 1 & 2  Mathematical Methods 1&2		Further Mathematics 3 & 4 <b><u>or</u></b> Mathematical Methods 3 & 4

**We advise students to discuss their course selections for mathematics with their subject teachers.**

**HOMEWORK:** Completion of homework is of great importance in mathematics. It will be expected that all students spend sufficient time out of class on a regular basis completing exercises and assignments, and revising their work. This should average out at between two and three hours per week. Students are also expected to see teachers in their private study.

## **PHYSICAL EDUCATION UNITS 1 & 2**

### **OVERVIEW:**

VCE Physical Education examines the biomechanical and skill acquisition principles that can be applied when analysing and improving movement skills used in physical activity and sport. It also examines how the major body and energy systems work together to enable movements to occur, and explain fatigue factors and suitable recovery strategies.

### **CAREER/PATHWAY:**

This subject is recommended for students who have the desire to enter TAFE or complete a University course in areas such as Teaching, Coaching, Personal Training, Biomechanics, Physiotherapy, Chiropractic and many other allied health jobs/careers. It is also recommended for those students that have a keen interest in improving their understanding of how their bodies work and perhaps wish to further their own sporting endeavours.

### **NATURE OF WORK/ASSESSMENT:**

Throughout the unit students will be required to contribute to discussions, complete research tasks, textbook activities, note-taking and participate in practical sessions. Assessment tasks for this unit are selected (by the teacher) from a practical laboratory report, case study analysis, data analysis, reflective diary/folio of participation in practical activities, visual presentation, multimedia presentation, oral presentation, a physical simulation or model, test and written response. It will also include an exam at the end of each semester.

### **UNIT 1 OUTCOMES – THE HUMAN BODY IN MOTION**

#### **Area of study 1 – How does the musculoskeletal system work to produce movement?**

Systems of the human body and how they translate into movement.

#### **Area of study 2 – How does the cardiorespiratory system function at rest and during physical activity?**

The study of the cardiovascular and respiratory systems function and the limiting conditions of each system.

### **UNIT 2 OUTCOMES – PHYSICAL ACTIVITY, SPORT AND SOCIETY**

#### **Area of study 1 – Relationships between physical activity, sport, health and society**

Focusses on the role of physical activity, sport and society in developing and promoting healthy lifestyles and participation in physical activity across the lifespan.

#### **Area of study 2 – Contemporary issues associated with physical activity**

Focusses on a range of contemporary issues associated with physical activity and/or sport at the local, national and global level.

### **HOMEWORK:**

Students will be expected to complete at least 2 hours homework each week. This will include reading, revision, completion of class work and some assessment tasks.

## PHYSICS

### UNITS 1 & 2

**OVERVIEW:** Physics is a science subject that allows the student to explore the physical world. It is taught through a contextual approach to ensure students appreciate the relevance of physics to their everyday experiences of the physical, technological and social environments. Students learn about physics through experiments, research, application problems, use of technology and discussion.

**CAREERS AND PATHWAYS:** Units 1 and 2 of the Physics study provide Students with the opportunity to engage in a range of learning activities. In addition to demonstrating their understanding and mastery of the content and skills specific to the study, students may also develop employability skills through their learning activities. The nationally agreed employability skills are: Communication, Planning and organising, Teamwork, and Problem solving, Self-management, Initiative and enterprise, Technology and Learning.

#### AREAS OF STUDY:

##### Unit 1: What ideas explain the physical world?

1. How can thermal effects be explained?
  - Thermodynamics principles
  - Thermodynamics and climate science
  - Issues related to thermodynamics
2. How do electric circuits work?
  - Concepts used to model electricity
  - Circuit electricity
  - Using electricity
3. What is matter and how is it formed?
  - Origins of atoms
  - Particles in the nucleus
  - Energy from the atom

##### Unit 2: What do experiments reveal about the real world?

1. How can motion be described and explained?
  - Concepts used to model motion
  - Forces and motion
  - Energy and motion
2. Option
  - Twelve options are available for study. Each option is based on a different observation of the physical world. See study design for details  
<http://www.vcaa.vic.edu.au/Documents/vce/physics/PhysicsSD-2016.pdf>

**NATURE OF WORK AND ASSESSMENT:** Assessment tasks for this unit to ensure students have demonstrated achievement of the outcomes are:

- short reports, oral, poster or multimedia presentations
- preparation of web pages, response to media articles
- practical work, including written reports
- Short answer / extended response assignments
- Written tests

**HOMEWORK:** Students are expected to complete two to three hours of homework per week. This includes assessed and non assessed coursework such as completing set exercises, chapter review questions and revision for each area of study.

## **PRODUCT DESIGN AND TECHNOLOGY**

### **UNITS 1 & 2**

**OVERVIEW:** This study is designed to enable students to understand the design process and product development. Students are encouraged to develop thinking and practical skills to enable creative problem solving. They will work through the design process to develop a design folio based on a design brief, develop research and analytical skills that will enable them to design and produce quality items. Students work with a variety of materials such as wood, metal, plastics, glass and textiles and learn to use a range of tools, equipment and machinery in a safe, competent manner.

#### **UNIT 1 OUTCOMES:**

Materials Processes and Design

1. On completion of the unit the students should be able to describe the methods used by designers to design products. They will then apply similar processes to develop their own design folio.
2. On completion of the unit the student should be able to use and evaluate materials, tools, equipment and processes to make a product related to Outcome 1.

#### **Areas of Study**

1. Sustainable Product redevelopment.
2. Producing and evaluating a redeveloped product.

#### **UNIT 2 OUTCOMES**

Parameters of Design

1. On completion of the unit the student should be able to individually and as a member of a team, Identify design problems and issues, develop a design brief, undertake appropriate research, develop design options and compile a design folio.
2. On completion of the unit the student should be able to use and evaluate material, equipment and process to make a product related to outcome 1. Students will be required to work tools both individually and as a member of a team.

#### **AREAS OF STUDY**

1. Designing as a team
2. Producing and evaluating a collaboratively designed product

#### **ASSESSMENT**

Units 1&2 - School Assessed Coursework

#### **EXCURSIONS AND OTHER EXPENSES**

Excursion to Melbourne to view "Top Designs" and Ikea Furniture. Approximate cost \$45.00. Students will be required to meet the cost of materials used in completing practical tasks.

## PSYCHOLOGY UNITS 1 & 2

**OVERVIEW:** Psychology is a broad discipline that incorporates both the scientific study of human behaviour through biological, psychological and social perspectives and the systematic application of this knowledge to personal and social circumstances in everyday life. VCE Psychology enables students to explore how people think, feel and behave through the use of biopsychosocial approach. As a scientific model, this approach considers biological, psychological and social factors and their complex interactions in the understanding of psychological phenomena. The study explores the connection between the brain and behaviour by focusing on several key interrelated aspects of the discipline: the interplay between genetics and environment, individual differences and group dynamics, sensory perception and awareness, memory and learning, and mental health. Students examine classical and contemporary research and the use of imaging technologies, models and theories to understand how knowledge in psychology has evolved and continues to evolve in response to new evidence and discoveries.

**CAREER PATHWAYS:** The study of Psychology leads to opportunities in a range of careers that involve working with children, adults, families and communities in a variety of settings. These include academic and research institutions, management and human resources, and government, corporate and private enterprises. Fields of applied psychology include educational, environmental, forensic, health, sport and organisational psychology. Specialist fields of psychology include counselling and clinical contexts, as well as neuropsychology, social psychology and developmental psychology.

**NATURE OF WORK/ASSESSMENT:** Assessment tasks are designed to ensure students have demonstrated achievement of the outcomes and may include: structured questions, research investigations and evaluations, an annotated folio of practical activities, media responses, multimedia presentations, essays and exams. The VCAA handbook sets out the following compulsory areas of study.

### Units 1– 2: Key science skills

The development of a set of key science skills is a core component of the study of VCE Psychology and applies across Units 1 to 2 in all areas of study. The key science skills are: Develop aims and questions, formulate hypotheses and make predictions; Plan and undertake investigations; Comply with safety and ethical guidelines; Conduct investigations to collect and record data; Analyse and evaluate data, methods and scientific models; Draw evidence-based conclusions and Communicate and explain scientific ideas.

### UNIT 1 OUTCOMES:

#### 1. How does the brain function?

Advances in brain research methods have led to new ways of understanding the relationship between the mind, brain and behaviour. In this area of study students examine how our understanding of brain structure and function has changed over time and how the brain enables us to interact with the external world around us.

#### 2. What influences psychological development?

The psychological development of an individual involves complex interactions between biological, psychological and social factors. In this area of study students explore how these factors influence different aspects of a person's psychological development

#### 3. Student-directed research investigation

In this area of study students apply and extend their knowledge and skills developed in Areas of Study 1 and/or 2 to investigate a question related to brain function and/or psychological development.

### UNIT 2 OUTCOMES:

#### 1. What influences a person's perception of the world?

Human perception of internal and external stimuli is influenced by a variety of biological, psychological and social factors. In this area of study students explore two aspects of human perception – vision and taste – and analyse the relationship between sensation and perception of stimuli.

#### 2. How are people influenced to behave in particular ways?

A person's social cognition and behaviour influence the way they view themselves and the way they relate to others.

#### 3. Student-directed practical investigation

Students design and conduct a practical investigation related to external influences on behaviour.

**HOMEWORK:** 2 – 3 hours per week of readings, structured questions and revision.



## **VISUAL COMMUNICATION AND DESIGN**

### **UNITS 1 & 2**

**OVERVIEW:** This subject provides students with the opportunity to learn and develop skills in design and creating visual solutions. The fields of architecture, advertising and marketing, multimedia, engineering, fashion, product design are presented to the students as a focus for creative visual design. Drawing, photography, market research, designing, computer graphics are skills that are enhanced.

**CAREERS:** This subject is recommended for students who have a desire to enter TAFE or University design courses such as Graphic Design, Architecture, Landscape Design, Photography, Advertising, Event Promotion, Fashion, Furniture, Cartography, Engineering and Design.

**NATURE OF WORK:** Students will be set assignment work that will require them to show that they have attained key knowledge and developed key skills through individual design solutions. They will develop their work using the Design Process and with the needs and influence of a client and intended audience. Drawing, both instrumental and freehand form a vital part of the generation of design ideas. The significant part of the course is the practical application of skills. Research and theory is necessary to the understanding of these processes and systems.

**ICT:** Photoshop®, InDesign® and Google Sketch-up® are the main programs that students will learn and use in the generation of their images. Digital photography, scanning, Web research are essential components of generating imagery and visual solutions.

The VCAA handbook sets out the following compulsory areas of study.

#### **UNIT 1 : Introduction to visual communication and design**

##### **OUTCOMES:**

1. Create drawings for different purposes using a range of drawing methods, media and materials.
2. Select and apply design elements and design principles to create visual communications that satisfy stated purposes.
3. Describe how a visual communication in a design field has been influenced by past and contemporary practices, and by social and cultural factors.

#### **UNIT 2 : Applications of visual communication within design fields**

##### **OUTCOMES:**

1. Create presentation drawings that incorporate relevant technical drawing conventions and effectively communicate information and ideas for a selected design field.
2. Manipulate type and images to create visual communications suitable for print and screen-based presentations, taking into account copyright.
3. Apply stages of the design process to create a visual communication appropriate to a given brief.

**EXCURSIONS:** Students will travel to Melbourne for the 'Top Designs' exhibition as well as visiting other galleries and/or exhibitions.

**HOMEWORK:** 2 – 3 hours per week of research, drawing and working on design options and solutions.

# UNITS 3 & 4

## **ACCOUNTING: UNIT 3 & 4**

### **Overview:**

Unit 3 focuses on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Accounting procedures are developed in each area of study. In Unit 4 unit provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process.

### **Career/Pathways:**

This subject is recommended for those who may wish to operate their own business in the future or have a desire to enter TAFE or university course which has a small business focus such as Accounting, Law, Economics, Management or Commerce.

### **Nature of Work and Assessment:**

Class work will include bookwork, regular tests involving recording and reporting and case studies involving preparation of reports using ICT.

**The VCAA handbook sets out the following compulsory areas of study:**

#### **AREA OF STUDY 1 – Unit 3 – Recording and analysing financial data**

**Outcome 1:** Record financial data using a double entry system; explain the role of the General Journal, General Ledger and inventory cards in the recording process; and describe, discuss and analyse various aspects of the accounting system, including ethical considerations.

#### **AREA OF STUDY 2 – Unit 3 – Preparing and interpreting accounting reports**

**Outcome 2:** Record transactions and prepare, interpret and analyse accounting reports for a trading business.

#### **AREA OF STUDY 1- Unit 4 – Extension of recording and reporting**

**Outcome 1:** Record financial data and balance day adjustments using a double entry system, report accounting information using an accrual-based system and evaluate the effect of balance day adjustments and alternative methods of depreciation on accounting reports.

#### **AREA OF STUDY 2 – Unit 4 – Budgeting and decision-making**

**Outcome 2:** Prepare budgeted accounting reports and variance reports for a trading business using financial and other relevant information, and model, analyse and discuss the effect of alternative strategies on the performance of a business.

Unit 3 School-assessed Coursework: 17 per cent

Unit 4 School-assessed Coursework: 17 per cent

Mid-year examination: 33 per cent

End-of-year examination: 33 per cent.

### **Other course requirements:**

Students will be required to purchase a text book.

## **AGRICULTURE AND HORTICULTURE**

### **UNITS 3&4**

**OVERVIEW:** This subject focuses on a range of technologies that are currently used by commercial Agricultural and Horticultural businesses and reviews areas where change and innovation are occurring. Students will also study the management of agricultural and/or horticultural systems within the context of ecological sustainability. It looks at issues associated with land, plant and animal management.

**CAREER/PATHWAY:** Agricultural Scientists, Farm Manager, Agronomist, Manager in Landcare, Irrigation Services, Wine Maker, Vineyard Manager, Food Technologist, Water Policy Adviser, Business Management, Horticulturist, Stock and Station Agent.

**NATURE OF WORK/ASSESSMENT:** Throughout the Unit students will be required to contribute to discussions, complete research tasks, textbook activities, note taking and prepare for the end of year examination. Assessment tasks for this unit are selected by the teacher.

#### **UNIT 3 – Securing The Future**

##### **Area of study 1 – Innovations And Solutions**

In this area of study students focus on the dynamic and innovative nature of Australia's food and fibre production industries. They reflect on the rate of change, the rise of new challenges, and the sector's ever-increasing engagement with innovation and technology. Students inquire into the broad role of innovation and technology in food and fibre production, and consider the impacts of new and emerging tools and applications, as well as innovative research projects. A visit to the Howlong Nursery forms part of this outcome.

##### **Area of study 2 - Risks and resilience**

In this area of study students focus on biosecurity, the protection of agricultural and horticultural industries against pests, diseases and weeds, and measures to combat the serious threat posed by biological resistances. Students develop their understanding of specific pests, diseases and weeds that threaten Victorian agriculture and horticulture. Emphasis is placed on principles of integrated pest and weed management.

#### **UNIT 4 – Sustainable Food and Fibre Production**

##### **Area of study 1 – Sustainable Land Management**

In this area of study students examine sustainable land management, including property management, with a focus on the prevention and mitigation of environmental degradation and the impacts of climate change. Students investigate appropriate and sustainable strategies, adaptations and modifications, evaluating associated safety and risk factors. Comparisons are made between natural and managed ecosystems, with inquiry into the significance of biodiversity for sustainable food and fibre production.

##### **Area of study 2 – Sustainable Business Practice**

In this area of study students examine business challenges and opportunities across the food and fibre supply chain, with a focus on sustainability. Students consider sustainability as a multi-dimensional influence on the decisions of agricultural and/or horticultural producers. They consider the role of strategic business planning and the effective use of marketing and communications tools. Students research quality assurance programs and government regulation relating to sustainable food and fibre industries.

**HOMEWORK:** Students will be expected to complete at least 3 hours homework each week. This will include reading, revision, completion of class work, running a small business and some assessment tasks.

## **ART**

### **UNITS 3 & 4**

**OVERVIEW:** This subject caters for students who enjoy and have skills in self expression and creating visual imagery. This can take the form of painting, drawing, photography, printmaking, sculpture, fashion, design, digital media and many more. Students have the opportunity to express themselves in visual terms showing imagination, creativity and innovation. Art acknowledges the value of originality and encourages students to be flexible, think analytically and solve problems.

**CAREERS:** Art provides access to a wide range of TAFE and University courses and is recommended for students who have an interest in Fine Arts, design, illustration, fashion, teaching, advertising, photography, film, theatre and television etc. This subject compliments the work done in VCD and Design and Technology.

**NATURE OF WORK:** Students create Practical folios that explore themes as well as areas of personal interest. Developmental sketches, trials and experiments are an important part of this folio. Finished works are generated from these experiments.

In order to develop a greater understanding of Art students will study Artists and styles from Australia and overseas. They will produce written responses to works and research individual artists. Contemporary Art, art from other cultures and times and Issues in Art are also studied.

**ICT:** ICT is used extensively in Art both as a research tool as well as a medium in itself. Students explore rich inspiration to broaden their own folios as well as researching Artists through the internet.

Digital photography and manipulation of images in Photoshop, scanning and internet research are areas that students will use to generate images and present different visual solutions.

THE VCAA handbook sets out the following compulsory areas of study.

#### **UNIT 3 & 4 OUTCOMES:**

##### **1. Folio.**

- Exploration of techniques, materials and processes

- Create a broad range of experiments that explore ideas and themes

- Explore issues and areas of personal interest

- Generate a body of experimental and exploratory work and at least one finished artwork for Unit 3

- Generate a body of experimental and exploratory work and at least one finished artwork for Unit 4

##### **2. Response to Art.**

- Demonstrate ability to discuss and interpret a variety of artworks

- Interpret the meanings and messages in Art

- Gain an understanding of how an artwork may reflect the artist's interests, experiences and thinking

**ASSESSMENT:** School Assessed Task (Body of Work) – 50%

School Assessed Coursework Unit 3 – 10%, Unit 4 – 10%, Final Exam – 30%.

**EXCURSIONS:** Visit Art galleries in both Melbourne and regional areas. View 'Top Arts' and 'Top Designs' which showcase the best student folios from previous year.

**HOMEWORK:** 3 to 4 hours per week of research, experimenting, and working on final solutions. Additional studio time is available in the Art centre after school.

## **BIOLOGY**

### **UNITS 3 & 4**

**OVERVIEW :** Biology is the study of living things and their interactions with the environment. In Unit 3 students investigate the workings of the cell from several perspectives, including the structure, regulation and rate of biochemical pathways. In Unit 4 students consider the continual change and challenges to which life on Earth has been, and continues to be subjected to.

**CAREERS:** VCE Biology provides for continuing study pathways within the discipline and can lead to a range of careers. Branches of biology include botany, genetics, immunology, microbiology, pharmacology and zoology. In addition, biology is applied in many fields of human endeavour including bioethics, biotechnology, dentistry, ecology, education, food science, forestry, health care, horticulture, medicine, optometry, physiotherapy and veterinary science. Biologists work in cross-science, geology, medical research and sports science.

**NATURE OF WORK:** Throughout the year students will be required to contribute to discussions and complete research tasks, textbook activities, note taking, practical tasks and written responses. The student level of achievement will be determined by School-assessed Coursework selected by the teacher and the exam.

Unit 3 School-assessed Coursework: 20%

Unit 4 School-assessed Coursework: 30%

#### **AREAS OF STUDY:**

The VCAA handbook sets out the following compulsory areas of study.

#### **Unit 3: How do cells maintain life?**

##### **Area of study 1: What is the role of proteins and nucleic acids in maintain life?**

Students will analyse the relationship between nucleic acids and proteins, and evaluate how tools and techniques can be used and applied in the manipulation of DNA.

##### **Area of study 2: How are biochemical pathways regulated?**

Students will analyse the structure and regulation of biochemical pathways in photosynthesis and cellular respiration, and evaluate how biotechnology can be used to solve problems related to the regulations of biochemical pathways.

#### **Unit 4: How does life change and respond to challenges?**

##### **Area of study 1: How do organisms respond to pathogens?**

Students will analyse the immune response to specific antigens, compare the different ways that immunity may be acquired and evaluate challenges and strategies in the treatment of disease.

##### **Area of study 2: How are species related over time?**

Students will analyse the evidence for genetic changes in populations and changes in species over time, analyse the evidence for relatedness between species, and evaluate the evidence for human change over time.

##### **Area of study 3: How is scientific inquiry used to investigate cellular processes and/or biological change?**

Students will design and conduct a scientific investigation related to cellular processes and/or how life changes and responds to challenges.

**HOMEWORK:** At least 3 hours per week for reading, chapter questions, glossary terms, practical reports, completion of class work, revision and completing past exams.

## CHEMISTRY

### UNITS 3 & 4

**OVERVIEW:** This subject enables students to explore key processes related to the efficient production and use of energy and materials. It also allows students to investigate how carbon based compounds are important components of body tissue and materials used in society.

**CAREERS/PATHWAYS:** Chemistry is applied in many fields of endeavour including agriculture, bushfire research, dentistry, dietetics, education, engineering, environmental sciences, forensic science, forestry, horticulture, medicine, metallurgy meteorology, pharmacy, sports science, toxicology, veterinary science and viticulture.

**NATURE OF WORK/ASSESSMENT:** Students will be set questions, assignments, and topic tests that will allow them to demonstrate their knowledge of the concepts that have been taught. They will also be set SACs (in most cases these are Lab reports), the results of which will contribute 40% towards their study score. Unit 3 being 16% and Unit 4, 24%. They will also have an end of year (2 ½ hrs) exam whose result will contribute 60% towards their study score.

#### UNIT 3 OUTCOMES:

1. On completion of this unit the student should be able to compare fuels quantitatively with reference to combustion products and energy outputs, apply knowledge of the electrochemical series to design, construct and test galvanic cells, and evaluate energy resources based on energy efficiency, renewability and environmental impact.
2. On completion of this unit the student should be able to apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised, and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

#### UNIT 4 OUTCOMES:

1. On completion of this unit the student should be able to compare the general structures and reactions of the major organic families of compounds, deduce structures of organic compounds using instrumental analysis data, and design reaction pathways for the synthesis of organic molecules.
2. On completion of this unit the student should be able to distinguish between the chemical structures of key food molecules, analyse the chemical reactions involved in the metabolism of the major components of food including the role of enzymes, and calculate the energy content of food using calorimetry.
3. On completion of this unit the student should be able to design and undertake a practical investigation related to energy and/or food and present methodologies, findings and conclusions in a scientific poster.

**OTHER COURSE REQUIREMENTS:** Students may be expected to go on an excursion to one or two Tertiary Institutions to use their Laboratory facilities.

**HOMEWORK:** At least 2 - 3 hours per week completing set questions and assessment tasks as well as revising completed work for end of unit exams.

## ENGLISH

### UNITS 3 & 4

**OVERVIEW:** Students read and respond both orally and in writing to a range of texts. Students analyse how the authors of texts create meaning and the different ways in which texts can be interpreted. They develop competence in creating written texts by exploring ideas suggested by their reading within the chosen context, and the ability to explain choices they have made as authors.

The VCAA handbook sets out the following compulsory areas of study:

#### UNITS 3 OUTCOMES:

##### **Area of Study 1 – Reading and Creating Texts.**

Students analyse texts and prepare analytical and creative responses to them.

##### **Area of Study 2 – Analysing argument:**

Students analyse and compare the arguments and language in texts that debate a topical issue.

#### UNIT 4 OUTCOMES:

##### **Area of Study 1 – Reading and Comparing Texts.**

Students explore the connections between two texts, producing a written analysis comparing said texts.

##### **Area of Study 2 – Presenting argument.**

Students develop a point of view on an issue and deliver their viewpoint orally, to persuade their audience to their point of view.

#### **End of year examination (October)**

##### **Description**

All outcomes and the key knowledge and skills that underpin the outcomes in Units 3 and 4 are examinable. The examination will be set by a panel appointed by the VCAA.

##### **Reading and Creating Texts**

Students will be required to write a response to one of two texts selected from English/ESL Text List 1 published annually by the VCAA for Outcome 1.

##### **Comparing Texts**

Students will be required to write for a nominated audience and purpose drawing on ideas suggested by their selected Context drawing directly from at least one text selected from English/ESL Text List published annually by the VCAA for Outcome 2.

##### **Analysing Argument**

Students will be required to analyse the use of language in unseen persuasive text/s.



## **FOOD STUDIES**

### **UNITS 3 & 4**

#### **COURSE DESCRIPTION:**

Unit three investigates the many roles and everyday influences of food.

Unit four examines debates about global and Australian food systems.

**CAREERS / PATHWAYS:** This subject is recommended for students who have a desire to enter TAFE or University courses with a food focus such as Hospitality, Food Technology and Dietetics. Food & Technology is also very applicable to students who have a passion to work with food.

**NATURE OF WORK / ASSESSMENT:** Students will complete both practical and theoretical work. They will work independently and as a member of a team to produce products as well as research.

School assessed coursework for Unit 3 will contribute 30% to the final assessment. It consists of two equal outcomes (50% each).

School assessed coursework for Unit 4 will also contribute 30% to the final assessment and consists of two outcomes (outcome 1 – 60% and outcome 2 – 40%).

The 1 ½ hour end of year examination contributes 40% to the final assessment.

**ICT:** In this subject ICT is used for research and for presentation of written work as well as completion of outcomes.

THE VCAA handbook sets out the following compulsory areas of study.

#### **UNIT 3: Food in daily life**

##### **AREAS OF STUDY**

1. **The science of food:** On completion of this unit the student should be able to explain the processes of eating and digesting food and absorption of macronutrients, explain causes and effects of food allergies, food intolerances and food contamination, analyse food selection models, and apply principles of nutrition and food science in the creation of food products.
2. **Food choice, health and wellbeing:** On completion of this unit the student should be able to explain and analyse factors affecting food access and choice, analyse the influences that shape an individual's food values, beliefs and behaviours, and apply practical skills to create a range of healthy meals for children and families.

#### **UNIT 4: Food issues, challenges and futures**

##### **AREAS OF STUDY**

1. **Environment and ethics:** On completion of this unit the student should be able to explain a range of food systems issues, respond to selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.
2. **Navigating food information:** On completion of this unit the student should be able to explain a variety of food information contexts, analyse the formation of food beliefs, evaluate a selected food trend, fad or diet and create food products that meet the Australian Dietary Guidelines.

**OTHER COURSE REQUIREMENTS:** Students will be required to purchase a textbook. The cost of food used during these units is to be met by the student through subject levies.

**HOMEWORK:** Students will be expected to complete at least 3 hours homework each week. This will include reading, completion of class work and revision activities.

## HEALTH AND HUMAN DEVELOPMENT

### UNITS 3 & 4

#### COURSE DESCRIPTION:

**Unit 3** looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). They use this knowledge as background to their analysis and evaluation of variations in the health status of Australians. Students will also focus on health promotion and improvements in population health over time. Students will look at various public health approaches with an emphasis on the Australian health system.

**Unit 4** examines health and wellbeing, and human development in a global context. Students investigate the health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Students will study global actions which are used to improve health and wellbeing and human development. Students also investigate the role of non-government organisations and Australia's overseas aid program.

**CAREERS / PATHWAYS:** This subject is recommended for students who have the desire to enter TAFE or complete a University course in areas such as Childcare, Nursing, Teaching, Nutrition, Health Promotion, Physiotherapy, Speech Therapy and many other allied health or working with people related jobs / careers. It is also recommended for those students that have a keen interest in improving their understanding of Health, Human Development and local and global health issues.

#### NATURE OF WORK / ASSESSMENT:

School assessed coursework for Unit 3 will contribute 25% to the final assessment. It consists of two outcomes. School assessed coursework for Unit 4 will also contribute 25% to the final assessment and also consists of two outcomes. The end-of-year examination contributes 50% to the final assessment.

**ICT:** Students will have the ability to stay in contact with the teacher on a regular basis by using their school email and web based programs such as EDMODO. Students will use ICT to research content and watch various videos relating to the content.

THE VCAA handbook sets out the following compulsory areas of study.

#### UNIT 3: AREAS OF STUDY – Australia's health in globalised world.

1. **Understand Health and Wellbeing-** On completion of this unit the student should be able to explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status.
2. **Promoting Health and Wellbeing** – On completion of this unit the student should be able to explain changes to public health approaches, analyse improvements in population health over time and evaluate health promotion strategies.

#### UNIT 4: AREAS OF STUDY – Health and human development in a global context.

1. **Health and wellbeing in a global context** - On completion of this unit the student should be able to analyse similarities and differences in health status and burden of disease globally and the factors that contribute to differences in health and wellbeing.
2. **Health and sustainable development goals** – On completion of this unit the student should be able to analyse relationships between the SDGs and their role in the promotion of health and human development, and evaluate the effectiveness of global aid programs.

**OTHER COURSE REQUIREMENTS:** Students will be required to purchase a textbook.

**HOMEWORK:** Students will be expected to complete at least 3 hours homework each week. This will include reading, completion of class work and revision activities.

## **ANCIENT HISTORY**

### **UNITS 3 & 4**

**OVERVIEW:** In Ancient History students investigate the features of Ancient Egypt and Ancient Roman societies. Life in these times was shaped by complex social, political and economic factors. Trade, warfare and the exchange of ideas between societies influenced the way people lived. These societies experienced crises which caused massive disruption. Individuals acted in ways that held profound consequences. They consider the different perspectives of people who lived during these times. They evaluate how the features of the ancient society changed, and the roles of key individuals. Students develop their understanding of primary sources and historical inquiry.

**CAREER/PATHWAY:** This study provides students with the opportunity to develop employability skills through their learning activities such as Communication; Planning and organising; Teamwork; Problem solving; Self-management; Initiative and enterprise; Technology; and Learning. It also leads to opportunities in a range of careers, including Journalism and communications, Intelligence work Teaching/Educating, Law, Business Management, International relation, humanitarian work, Intelligence work

**NATURE OF WORK/ASSESSMENT:** Assessment tasks over Units 3 and 4 include the following: an historical inquiry, evaluation of historical sources, extended responses and an essay.

**ICT:** Internet research, access to online resources including Google Classroom, textbooks, readings documentaries, historians' works, podcasts, and past exams.

#### **Unit 3: Ancient Egypt**

##### **Area of Study 1/Outcome 1: Living in an Ancient Society – Egypt (1550–1069 BCE)**

Students investigate the features of life during the New Kingdom Egypt. They investigate the social, political and economic features of Thebes to 1069 BCE. They examine causes and consequences of warfare and its effect on the social, political and economic life of New Kingdom Egypt.

##### **Area of Study 2/Outcome 2: People in Power, Societies in Crisis – Egypt – The Amarna Period (1391–1292 BCE)**

Students investigate the tensions of the Amarna Period in New Kingdom Egypt. Including Akhenaten and his worship of Aten and his wife, Nefertiti. This created tension which was only resolved during the reign of Tutankhamun. Students analyse the involvement of Amenhotep III, Akhenaten, Nefertiti and Tutankhamun during this time.

#### **Unit 4: Ancient Rome**

##### **Area of Study 1/Outcome 1: Living in an Ancient Society – Rome (c.753–146 BCE)**

Students investigate the features and the early development of Rome. They investigate the social, political and economic features of Rome. They examine the causes and consequences of the conflict between Rome and Carthage.

##### **Area of Study 2/Outcome 2: People in Power, Societies in Crisis – Rome – The fall of the Republic (133–23 BCE)**

Students investigate how the interests and actions of individuals led to the demise of the Republic, beginning with Tiberius Gracchus and later Gaius Gracchus. Students analyse the involvement of Cornelius Sulla, Pompey Julius Caesar and Octavian/Augustus during the fall of the Republic.

**Homework:** Students are required to complete 2-3 hours of homework /study per week.

**Other Course Requirements:** Students will be required to purchase 1-2 textbooks.

## **LEGAL STUDIES**

### **UNITS 3 & 4**

**OVERVIEW:** VCE Legal Studies investigates the ways in which the law and the legal system relate to and serve individuals and the community. Students examine the processes of law-making, dispute resolution and the administration of justice in Australia.

**CAREERS:** Legal studies will benefit those who wish to develop their analytical and critical thinking skills whilst learning very practical general knowledge about the legal system, parliament and the constitution, that affects all Australian citizens. It will be very useful for those who wish to pursue a career in the following areas: politics; justice system roles such as a police officer, lawyer or court registrar; social work; youth and corrective service workers; roles in crime prevention research and policy making; community education; and public service roles such as policy development.

**ASSESSMENT:** The student's level of achievement for Units 3 and 4 will be determined by School-assessed Coursework (50%) and an end-of-year examination (50%).

#### **UNIT 3 – Rights and Justice**

1. The Victorian criminal justice system
2. The Victorian civil justice system

#### **UNIT 4 – People and the Law**

1. The People and the Australian Constitution
2. The People, the Parliament and the Courts

**EXCURSIONS:** These may include visits to the local Magistrates Court, Supreme Court, State Parliament, and the Victorian Civil and Administrative Tribunal (VCAT).

**HOMEWORK:** This will include 3-4 hours per week.

## LITERATURE

### UNITS 3 & 4

**OVERVIEW:** This subject enables students to explore the use of language in various kinds of texts and the ways in which readers respond to and interpret them.

**CAREERS:** This subject is recommended for students who have a desire to enter TAFE or university courses such as Arts, Creative Writing, Journalism, Professional Writing and Editing, Public Relations, Personal Assistants.

**NATURE OF WORK:** Students will analyse how meaning changes when the form of the text changes. They will be able to analyse and interpret the views and values of a text in terms of the ideas, conventions and beliefs that the text appears to explore, endorse, challenge or leave unquestioned. Students will be able to evaluate alternative views of a text and make comparisons with their own interpretation.

**ICT:** Students will use computers to write essays and for research.

The VCAA handbook sets out the following compulsory areas of study.

#### UNIT 3 OUTCOMES

1. Adaptations and transformation
2. Creative responses to texts

#### UNIT 4 OUTCOMES

1. Literary perspectives
2. Close analysis

**EXCURSIONS:** It may be appropriate to visit a live production of a play.

**EXPENSES:** Purchase of texts as required

**HOMEWORK:** 5 hours per week of reading and re-reading texts, preparation and completion of class work, regular revision of notes.

## FURTHER MATHEMATICS UNITS 3 & 4

**OVERVIEW:** A general course of mathematics which is a recognised Level 3 and 4 Mathematics subject as well as a prerequisite subject to certain University Entrance requirements. Further Mathematics consists of a Core area of study to be completed in Unit 3 and an Applications area of study to be completed in Unit 4. Further Mathematics must be taken as a complete Unit 3/4 sequence.

**CAREERS AND PATHWAYS:** This subject is recommended for students wishing to pursue a career in Psychology, Business Management or those wishing to study the mathematics used in everyday life. Further Maths Unit 3&4 in Yr 12 can contribute towards the calculation of an ATAR score for further study.

**NATURE OF WORK AND ASSESSMENT:** The student's level of achievement for Units 3 and 4 will be determined by school-assessed course work and two end-of-year examinations. School assessed coursework for Unit 3 will contribute 20 per cent and Unit 4 will contribute 14 per cent to the final assessment. Unit 3 and 4 end-of-year examinations will contribute 66 per cent to the final assessment.

**School assessed coursework will consist of :**

<b>Unit 3</b>	Application Task	40 marks towards SAC
	Analysis Task	20 marks towards SAC
<b>Unit 4</b>	Analysis Task	20 marks towards SAC
	Analysis Task 2	20 marks towards SAC

Each analysis task will focus on a separate applications module and will consist of:

- an assignment
- Or a short and focused investigation
- Or a set of application questions
- Or item response analysis of multiple choice questions.

**The VCAA website sets out the following areas of study in detail:**

### **COURSE OUTLINE:**

#### **Unit 3 and 4**

**Core Unit:** Data Analysis and Recursion and Financial Modelling.

**Applications: Two of the following four modules to be studied:**

- Matrices
- Networks and Decision Mathematics
- Geometry and Measurement
- Graphs and Relations

**OTHER COURSE REQUIREMENTS:** Students studying this subject are required to purchase a CAS graphics calculator, (Casio ClassPad) from the school and a text book.

**HOMEWORK/PRIVATE STUDY:** 2 – 3 hours per week of homework and private study is required.

## **MATHEMATICAL METHODS**

### **UNITS 3 AND 4**

**OVERVIEW:** Mathematical Methods Units 3 and 4 is designed for employment and for entrance to University courses where Mathematics is a pre-requisite. Mathematical Methods is considered the mainstream Unit 3 and 4 Mathematics subject. It is a fully prescribed course. The students must have access to the use of Computer Algebra Systems (CAS) calculator to solve complex problems.

**CAREERS AND PATHWAYS:** It is one of the two mathematical subjects required for specialised courses such as Engineering, Medicine, some Sciences and Economics at University.

#### **NATURE OF WORK AND ASSESSMENT:**

##### **Unit 3 and 4**

Functions and Graphs

Calculus – differentiation and integration

Algebra – polynomials; exponentials and logarithms; trigonometry

Probability

##### **ASSESSMENT:**

The student's level of achievement for Units 3 and 4 will be determined by school assessed course work and two end-of-year examinations. School assessed coursework for Unit 3 will contribute 17 per cent and Unit 4 will contribute 17 per cent to the final assessment. Unit 3 and 4 end-of-year examinations will contribute 66 per cent to the final assessment.

##### **Unit 3**

The school assessed coursework in this unit will consist of an Application task.

This will be a function and calculus based mathematical investigation of a practical or theoretical context.

The application task will be of 4 to 6 hours duration over a period of 1 to 2 weeks.

##### **Unit 4**

The school assessed coursework in this unit will consist of 2 modelling or problem solving tasks. One of these modelling or problem solving tasks must be related to the Probability and Statistics area of study.

The modelling or problem solving tasks are each to be of 2 to 3 hours duration over a period of one week.

**OTHER COURSE REQUIREMENTS:** Students studying this subject are required to purchase a CAS graphics calculator, (Casio ClassPad) from the school, or elsewhere and a Text Book.

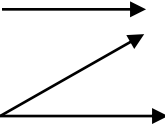
**HOMEWORK/PRIVATE STUDY:** At least 3 hours per week of homework and private study is required.

Where do these subjects lead to?

**Unit 3 & 4 Further Mathematics:** Used for employment and general tertiary entrance.

**Unit 3 & 4 Mathematical Methods:** Used for employment, and tertiary courses such as Mathematics, Science, Medicine, Economics.

Types of unit choices made at Rutherglen are:

Year 11	Leads to	Year 12
VCAL Numeracy		VCAL Numeracy
General Mathematics 1 & 2  Mathematical Methods 1&2		Further Mathematics 3 & 4 <u>or</u> Mathematical Methods 3 & 4

**We advise students to discuss their course selections for mathematics with their subject teachers.**

**HOMEWORK:** Completion of homework is of great importance in mathematics. It will be expected that all students spend sufficient time out of class on a regular basis completing exercises and assignments, and revising their work. This should average out at between two and three hours per week. Students are also expected to see teachers in their private study.



## **PHYSICAL EDUCATION UNITS 3 & 4**

### **OVERVIEW:**

VCE Physical Education examines the biomechanical and skill acquisition principles that can be applied when analysing and improving movement skills used in physical activity and sport. It also examines how the major body and energy systems work together to enable movements to occur, and explain fatigue factors and suitable recovery strategies.

### **CAREER/PATHWAY:**

This subject is recommended for students who have the desire to enter TAFE or complete a University course in areas such as Teaching, Coaching, Personal Training, Biomechanics, Sport Science, Physiotherapy, Chiropractic and many other allied health jobs/careers. It is also recommended for those students that have a keen interest in improving their understanding of how their bodies work and perhaps wish to further their own sporting endeavours.

### **NATURE OF WORK/ASSESSMENT:**

Throughout the unit students will be required to contribute to discussions, complete research tasks, textbook activities, note-taking and participate in practical sessions. The level of achievement will be determined by School assessed Coursework and the end of the examination. (50% School assessed Coursework and 50% end of year examination).

**ICT:** Students can use PE related websites and VCCA to access relevant course material.

## **UNIT 3 OUTCOMES – MOVEMENT SKILLS AND ENERGY FOR PHYSICAL ACTIVITY**

### **Area of study 1 – How are movement skills improved.**

Focusses on the biomechanical and skill acquisition principles that can be applied when analysing and improving movement skills used in physical activity and sport.

### **Area of study 2 - How does the body produce energy**

Explores the various systems and mechanics associated with the production of energy required for human movement.

## **UNIT 4 OUTCOMES – TRAINING TO IMPROVE PERFORMANCE**

### **Area of study 1 – What are the foundations of an effective training program.**

Focusses on the information required to form the foundation of an effective training program.

### **Area of study 2 – How is training implemented effectively to improve fitness**

Focusses on the implementation and evaluation of training principles and methods from a practical and theoretical perspective.

**HOMEWORK:** Students will be expected to complete at least 3 hours homework each week. This will include reading, revision, completion of class work and some assessment tasks.

## **PHYSICS**

### **UNIT 3 & 4**

**OVERVIEW:** Physics is a natural science based on observations, experiments, measurements and mathematical analysis with the purpose of finding quantitative explanations for phenomena occurring from the subatomic scale through to the planets, stellar systems and galaxies in the Universe. While much scientific understanding in physics has stood the test of time, many other areas continue to evolve. In undertaking this study, students develop their understanding of the roles of careful and systematic experimentation and modelling in the development of theories and laws. They undertake practical activities and apply physics principles to explain and quantify both natural and constructed phenomena.

**ENTRY:** There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Students entering Unit 3 without Units 1 and/or 2 may be required to undertake additional preparation as prescribed by their teacher. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education. All VCE studies are benchmarked against comparable national and international curriculum.

#### **Areas of study:**

##### **Unit 3: How do fields explain motion and electricity?**

Areas of Study 1 – How do things move without contact?

- Fields of interaction
- Effects of fields
- Application of field concepts

Area of Study 2 - How are fields used to move electrical energy?

- Generation of electricity
- Transmission of electricity

Area of Study 3 - How fast can things go?

- Newton's laws of motion
- Einstein's theory of special relativity

##### **Unit 4: How can two contradictory models explain both light and matter?**

Area of Study 1 - How can waves explain the theory of light?

- Properties of mechanical waves
- Light as a wave

Area of Study 2 – How are light and matter similar?

- Behaviour of matter
- Matter as particles or waves
- Similarities between light and matter

Area of Study 3 – Practical matter

- 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 Unit 3 and 4 and is undertaken by the student through practical work.

#### **ASSESSMENT:**

**UNIT 3** – School Assessed Coursework 21%

**UNIT 4** – School Assessed Coursework 19%

End of Year Exam 60% of final assessment score.

## **PRODUCT DESIGN AND TECHNOLOGY: UNITS 3 & 4**

**OVERVIEW:** This study is designed to enable students to: Develop an understanding of design and product development, identify design problems and develop solutions through the design and production processes. Students will understand the relationship between the properties of materials and their selection and use as part of the design process. It will enable them to acquire, extend and apply a range of practical skills related to design, safe use of tools, equipment and machines and develop an understanding of the process used in manipulation of material. They will develop sequential planning, organisational and efficient work skills and practices, an understanding of different manufacturing methods and processes applied in a range of settings and develop skills in evaluation of products and processes using specified criteria.

### **OUTCOMES UNIT 3 – PRODUCT DEVELOPMENT**

1. Explain the role of a designer and how products are designed and produced to meet the needs of a client.
2. Explain how products are designed and produced within an industrial/commercial setting.
3. Develop a folio that documents the procedure and decision making process in addressing the requirements of a design brief. Commence production of the designed product.

### **AREAS OF STUDY**

1. The designer, client and user in product development.
2. Product development in industry.
3. Designing for others.

**EXCURSIONS AND OTHER EXPENSES:** Students will be required to attend an excursion to Melbourne to view the “Top Designs” exhibition. Approximate cost - \$45.00.

Cost of materials utilised in the completion of production tasks will need to be met by students.

### **OUTCOMES UNIT 4 – PRODUCT EVALUATION AND MARKETING**

1. Analyse similar product types through a comparison of innovative features, aesthetic appeal, function and user needs. Economic, social and environmental benefits and costs will also be identified.
2. Competently and safely apply a range of production skills and processes to implement the production plan, make the product designed in Unit 3, Outcome 3, and manage time and resources efficiently.
3. Evaluate the outcomes of the design and production activities and promote the product’s design features to the client and/or end user.

### **AREAS OF STUDY**

1. Product analysis and comparison
2. Product manufacture
3. Product evaluation and promotion

### **ASSESSMENT:**

School Assessed Coursework - 20%, School Assessed task (Folio & Product) - 50%

End of Year Examination-30%

**HOMEWORK:** Students will be expected to complete an additional 2 - 3 hours per week outside of class time, in areas of design, research and practical work.

**EXCURSIONS AND OTHER EXPENSES:** Cost of materials utilised in the completion of production tasks will need to be met by students.

## PSYCHOLOGY UNITS 3 & 4

### OVERVIEW

Psychology is a broad discipline that incorporates both the scientific study of human behaviour and the systematic application of this knowledge to personal and social circumstances in everyday life. VCE Psychology enables students to explore how people think, feel and behave through a biopsychosocial approach.

### CAREERS

The study of Psychology leads to opportunities in a range of careers that involve working with children, adults, families and communities in a variety of settings. These include academic and research institutions, management and human resources, government, corporate and private enterprises. Fields of applied psychology include educational, environment, forensic, health, sport and organizational psychology. Specialist fields of psychology include counseling and clinical contexts, as well as neuropsychology, social psychology and developmental psychology.

### NATURE OF WORK

A variety of assessment tasks will be used including: a folio of annotated learning activities, a report of a research investigation, data analysis, evaluation of research, visual presentation, media analysis/response, response to questions, and a test. The level of achievement for Units 3-4 is determined through school-assessed coursework (40%) and an end-of-year examination (60%).

### Units 3– 4: Key Science skills

The development of a set of key science skills is a core component of the study of VCE Psychology and applies across Units 3 to 4 in all areas of study. The key science skills are: Develop aims and questions, formulate hypotheses and make predictions; Plan and undertake investigations; Comply with safety and ethical guidelines; Conduct investigations to collect and record data; Analyse and evaluate data, methods and scientific models; Draw evidence-based conclusions and communicate and explain scientific ideas.

### UNIT 3 OUTCOMES

1. **Nervous System and Psychological Functioning** - Explain how the structure and function of the human nervous system enables a person to interact with the external world and analyse the different ways in which stress can affect nervous system functioning.
2. **Learning and Memory** - Apply biological and psychological explanations for how new information can be learnt and stored in memory, and provide biological, psychological and social explanations of a person's inability to remember information.

### UNIT 4 OUTCOMES

1. **Consciousness and Sleep** - Explain consciousness as a continuum, compare theories about the purpose and nature of sleep, and elaborate on the effects of sleep disruption on a person's functioning.
2. **Mental Wellbeing** - Explain the concepts of mental health and mental illness including in influences of risk and protective factors, apply a biopsychosocial approach to explain the development and management of specific phobia, and explain the psychological basis of strategies that contribute to mental wellbeing.
3. **Practical Investigation** - Design and undertake a practical investigation related to mental processes and psychological functioning, and present methodologies, findings and conclusions in a scientific poster.

**HOMEWORK:** This will include 3-4 hours per week of readings, structured questions and revision.

## **VISUAL COMMUNICATION AND DESIGN**

### **UNITS 3 & 4**

**OVERVIEW:** This subject provides students with the opportunity to produce sophisticated design solutions, drawing on the skills developed in Unit 1 & 2. The fields of architecture, advertising and marketing, multimedia, engineering, fashion, product design are presented to the students as a focus for creative visual design. Drawing, photography, market research, designing, computer graphics skills are show-cased in their final folios.

**CAREERS:** This subject is recommended for students who have a desire to enter TAFE or University design courses such as Graphic Design, Architecture, Landscape Design, Photography, Advertising, Event Promotion, Fashion, Furniture, Cartography, Engineering and Design.

**NATURE OF WORK:** The course requires students to spend the majority of their time working through the design process to generate final Design solutions. All the experimenting and decision making that goes into the final work needs to be shown and annotated in a support folio. The majority of work is practical in nature and uses hand drawing skills along with computer generated work. The work is presented as final solutions. Research and study of the design industry and design products requires students to prepare written responses. This subject compliments work done in Art.

**ICT:** Photoshop®, InDesign® and Google Sketch-up® are the main programs that students will learn and use in the generation of their images. Digital photography, scanning, Web research are essential components of generating imagery and visual solutions.

#### **UNIT 3: - Visual Communication design Practices.**

##### **OUTCOMES:**

1. Create visual communications for specific contexts, purposes and audiences that are informed by their analysis of existing visual communications, in three design fields.
2. Discuss the practices of a contemporary designer from each of the design fields and explain factors that influence these practices.
3. Apply design thinking skills in preparing a brief, with two communication needs for a client, undertaking research and generating a range of ideas relevant to the brief.

#### **UNIT 4 – Visual Communication design development, evaluation and presentation.**

##### **OUTCOMES:**

1. Develop distinctly different concepts for each communication need and devise a pitch to present concepts to an audience, evaluating the extent to which these concepts meet the requirements of the brief.
2. Produce final visual communication presentation for each communication need that satisfies the requirements of the brief.

**SAC** unit 3 outcome 1 and 2 [20%] unit 4 outcome 3 [5%]                      total **25%**

**SAT** unit 3 outcome 3 / unit 4 outcome 1 & 2    **40%**

End of year Exam 1½ hours, both theory and practical activities                      **35%**

**EXCURSIONS:** Students will travel to Melbourne for the 'Top Designs' exhibition [ a showcase of last years top VCD students' work ] as well as visiting some other galleries.

**HOMEWORK:** 3-4 hours per week of research, drawing and working on design options and solutions. The Graphics room and computers are available after school for additional studio time.

VCAL

&

VET

## **VCAL LITERACY**

**OVERVIEW:** The purpose of this course is to enable students to develop the skills and knowledge necessary to read and write simple or short texts. Texts deal mainly with personal and familiar topics but may include some unfamiliar aspects. At this level and often with support, students use the writing process with an awareness of the purpose and audience of the text. In reading, students are able to identify the main point of the text, some key details and express an opinion about the text. The Literacy VCAL course is offered at Foundation and Intermediate level.

### **LEARNING OUTCOMES:**

#### **Writing:**

1. Writing for Self Expression
2. Writing for Practical Purposes
3. Writing for Knowledge
4. Writing for Public Debate

#### **Reading:**

1. Reading for Self Expression
2. Reading for Practical Purposes
3. Reading for Knowledge
4. Reading for Public Debate

#### **Oral Communication:**

1. Oral Communication for Practical Purposes
2. Oral Communication for Knowledge
3. Oral Communication for Exploring Issues

### **ASSESSMENT:**

Assessments for tasks are criteria based. The learning outcome is achieved when students demonstrate competence at a level appropriate to their VCAL level. Assessment methods used may include written text, teacher observation and oral response.

### **HOMEWORK AND PRIVATE STUDY**

2 – 3 hours per week of homework, completing set work and study for tests is required. In particular, students are expected to catch up on set work missed due to work placements.

## **VCAL NUMERACY FOUNDATION**

**OVERVIEW:** VCAL Numeracy studies are designed to develop the everyday numeracy skills needed to function in society. In particular design, measurement using graphical information, money, time and travel.

**CAREERS AND PATHWAYS:** The curriculum is based on developing the student's skills to facilitate the practical application of maths at home, work and in the community. It is aimed particularly (but not exclusively) for students seeking employment through apprenticeships. It is **not** suitable as a mathematics subject for use as an ATAR score for entrance to University.

### **NATURE OF WORK**

The following areas of study are conducted across the whole year.

Numeracy for Practical Purposes – Design

Numeracy for Practical Purposes – Measurement

Numeracy for Personal Organisation – Money and Time

Numeracy for Personal Organisation – Location

Numeracy for Interpreting Society – Data

Numeracy for Interpreting Society – Numerical Information.

### **ASSESSMENT**

Assessment is undertaken as an ongoing process that integrates the student's knowledge and skills with their practical application over a period of time. Evidence is collected through teacher observations, the written records of students work, topic tests and through the collection of assignments, posters, diagrams and models created by students.

**ICT:** Use of computers to conduct research, Excel Spreadsheet and Word.

### **OTHER COURSE REQUIREMENTS:**

Students are required to have a general scientific calculator. They are **not** required to have the CASIO Class Pad graphics calculator.

### **HOMEWORK AND PRIVATE STUDY:**

2 – 3 hours per week of homework, completing set work is required. In particular students are expected to catch up on set work missed due to work placements.



## **VCAL NUMERACY INTERMEDIATE**

**OVERVIEW:** VCAL Numeracy studies are designed to develop the everyday numeracy skills needed to function in society. In particular design, measurement using graphical information, money, time and travel.

**CAREERS AND PATHWAYS:** The curriculum is based on developing the student's skills to facilitate the practical application of maths at home, work and in the community. It is aimed particularly (but not exclusively) for students seeking employment through apprenticeships. It is **not** suitable as a mathematics subject for use as an ATAR score for entrance to University.

### **NATURE OF WORK AND ASSESSMENT:**

The following areas of study are conducted across the whole year.

Numeracy for Practical Purposes – Design  
Numeracy for Practical Purposes – Measurement  
Numeracy for Personal Organisation – Money and Time  
Numeracy for Personal Organisation – Location  
Numeracy for Interpreting Society – Data  
Numeracy for Interpreting Society – Numerical Information.  
Numeracy for Knowledge – Formulae  
Numeracy for Knowledge – Problem Solving

Assessment is undertaken as an ongoing process which integrates the student's knowledge and skills with their practical application over a period of time. Evidence is collected through teacher observations, the written records of students work, topic tests and through the collection of assignments, posters, diagrams and models created by students.

**ICT:** Use of computers to conduct research, Excel Spreadsheet and Word.

**OTHER COURSE REQUIREMENTS:** Students are required to have a general scientific calculator. They are **not** required to have the CASIO Class Pad graphics calculator.

**HOMEWORK AND PRIVATE STUDY:** 2 – 3 hours per week of homework, completing set work is required. In particular students are expected to catch up on set work missed due to work placements.

## **VCAL PERSONAL DEVELOPMENT SKILLS**

### **OVERVIEW:**

VCAL Personal Development Skills units are focussed on the development of self through the development of personal organisation and planning skills, knowledge, practical skills, problem solving and interpersonal skills through participation in experiences of a practical nature.

### **CAREERS AND PATHWAYS:**

The curriculum is based on developing the student's skills applicable to relevant personal, social, health and well being, education and team work goals. It is not a suitable subject to use as an ATAR score for entrance to University.

### **NATURE OF WORK AND ASSESSMENT:**

Students participate in learning experiences to develop skills in the areas of;

- The development of self
- Social responsibility
- Building community
- Civic and Civil responsibility
- Improved self confidence and self esteem

### **ASSESSMENT:**

The award of satisfactory achievement for a unit is based on evidence that the student has demonstrated achievement of the learning outcomes specified for the unit. A range of assessment methods can be used and they can include a portfolio of student work, check list, evidence of participation in project, award or oral reports.

### **HOMEWORK/PRIVATE STUDY:**

2-3 hours per week completing set work, practical projects and written components is required. In particular students are expected to catch up on set work missed due to work placements.

## CERTIFICATE II VET. ENGINEERING.

### UNIT 1, 2, 3 & 4 VCE

**OVERVIEW.** Student's completing this course will gain a certificate 2 in engineering. This program is at a specified level within the Australian Qualifications Framework. It is recognized by the State Training board. Students must complete the year 10 metal work program before being selected by interview to continue engineering in year 11 and 12.

**# Students undertaking this subject in Year 12 will sit the VET exam which will give them a VCE study score for the subject.**

**NATURE OF THE WORK:** Students will complete the set TAFE modules that cover the theory aspect of cert.2 engineering as well as developing practical skills. Students will learn basic operating procedures for the metal lathe centre drill, the geared head mil drill and the turret head milling machine. The use of measuring instruments such as Vernier callipers and micrometers will be learnt as students will generally work to measurement tolerances of 0.1 of a millimetre on finished tasks.

Set out in the table is the program students must complete to gain the Cert II in Engineering.

Year level	Course	TAFE Unit	
10	Metal (2 semesters)	MEM13014A MEM 18.1 MEM 18.2	Apply principles of OH&S in a work environment Use hand tools Use power tools
11 & 12	VET Engineering at RHS	VU22329 VU22330 VU22331 VU22332 VU22336 MEMPE006A VU22333 VU22334	Report on a range of sectors in manufacturing engineering and related industries. Select and interpret drawings and prepare three dimensional (3D) sketches and drawings. Perform basic machining processes. Apply basic fabrication techniques. Perform metal fabrication operations. Undertake a basic engineering project. Perform intermediate engineering computations. Produce basic engineering components and products using fabrication and machining operations.

**UOC'S:** (unit of competency) will be assessed by GOTAFE instructors and the VET Engineering classroom teacher.

# VCE VET Hospitality

## CERTIFICATE III Catering Operations

### Year 11

**OVERVIEW:** This subject provides students with the opportunity to gain their Certificate II in Hospitality in partnership with a Registered Training Organisation. The students will learn and develop skills in the areas of :

CODE	UNITS OF COMPETENCE
BSBWOR203	Work effectively with others
SITHCCC002	Prepare and Present simple dishes
SITHIND002	Source and use information on the Hospitality Industry
SITXFSA001	Use hygienic practices for food safety
SITXINV002	Maintain the quality of perishable items
SITXWHS001	Participate in safe work practices
SITHCCC001	Use food preparation equipment
SITHIND003	Use hospitality skills effectively
SITXCCS003	Interact with customers
SITXCOM002	Show social and cultural sensitivity
SITHKOP001	Clean kitchen premises and equipment

**CAREERS/PATHWAYS:** This subject is recommended for students who have a desire to enter into apprenticeships, TAFE or a part time job as a food and beverage attendant, bar/bottle shop attendant, front office/receptionist, catering assistant, kitchen hand, cook's assistant or short order cook. Also very applicable to students who have a passion to work with food.

**NATURE OF WORK AND ASSESSMENT:** Students must complete 80 hours of structured work placement in the Hospitality area. Students must contribute to a minimum of 3 functions performed by the school's restaurant "The Vine" (they will contribute to the required 80 hours) Assessment tasks are in the form of written tasks, poster, PowerPoint presentation and a Portfolio with 6 major outcomes.

**ICT:** In this subject ICT is used for research and for presentation of written work including PowerPoint presentation. It is also through Didasko (TAE program) to complete worksheets and Tests

### WHAT CREDIT WILL I RECEIVE TOWARDS MY VCE OR VCAL

#### VCE

You will be eligible for a credit of up to five VCE VET units towards your VCE: up to three units at Units 1 and 2 levels and a Units 3 and 4 sequences for each qualification in this program. A Study Score is available for each Units 3 and 4, which can contribute directly to your ATAR – either as one of your best four studies ('the primary four') or as your fifth or sixth study.

#### VCAL

The VCE VET Hospitality program (either partial or full completion) may contribute at the Foundation, Intermediate or Senior levels.

### EXCURSIONS/OTHER COURSE REQUIREMENTS:

Students will 'Fine Dine' at the Commercial Club.

The cost of food used during these units is to be met by the student through subject levies. Students will be required to access modules online using Didasko (TAFE program).

**HOMEWORK:** Work placement of 80 hours and work that has not been completed in class eg: written assessment, reading and research.

**VCE VET HOSPITALITY**  
**CERTIFICATE III Catering Operations**  
**YEAR 12**

**OVERVIEW:** This subject provides students with the opportunity to gain their Certificate III in Catering Operations in partnership with a Registered Training Organisation. The students will learn and develop skills in the areas of:

<b>CODE</b>	<b>UNITS OF COMPETENCE</b>
SITHFAB004	Prepare and serve no-alcoholic beverages
SITHFAB005	Prepare and serve espresso coffee
SITHFAB007	Serve food and beverage
SITHFAB016	Provide advice on food
SITXFIN001	Process financial transaction

**CAREERS/PATHWAYS:** This subject is recommended for students who have a desire to enter into apprenticeships, TAFE or a part time job as a food and beverage attendant, bar/bottle shop attendant, front office/receptionist, catering assistant, kitchen hand, cook's assistant or short order cook. It is also very applicable to students who have a passion to work with food.

**NATURE OF WORK AND ASSESSMENT:** Students must complete 120 hours of structured work placement in the Hospitality industry. Students must contribute to a minimum of 3 functions performed by the school's restaurant "The Vine" (they will contribute to the required 120 hours) Assessment tasks are in the form of written tasks, poster, PowerPoint presentation and a Portfolio with 6 major outcomes.

**ICT:** In this subject ICT is used for research and for presentation of written work including PowerPoint presentation. It is also used through Didasko (TAFE program) to complete worksheets and Tests.

**WHAT CREDIT WILL I RECEIVE TOWARDS MY VCE OR VCAL:**

**VCE:**

You will be eligible for a credit of up to five VCE VET units towards your VCE: up to three units at Units 1 and 2 levels and a Units 3 and 4 sequences for each qualification in this program.

A Study Score is available for each Units 3 and 4, which can contribute directly to your ATAR – either as one of your best four studies ('the primary four') or as your fifth or sixth study.

**VCAL:**

The VCE VET Hospitality program (either partial or full completion) may contribute at the Foundation, Intermediate or Senior levels.

**EXCURSIONS/OTHER COURSE REQUIREMENTS:**

Students will 'Fine Dine' at the Commercial Club

The cost of food used during these units is to be met by the student through subject levies.

Students will be required to access modules online using Didasko (TAFE program).

**HOMEWORK:** Work placement of 120 hours and work that has not been completed in class eg: written assessment, reading and research.

## **VCE VET MUSIC INDUSTRY CERTIFICATE II IN MUSIC INDUSTRY**

### **OVERVIEW:**

This qualification is for those students who have an interest in music and are keen to develop skills as a musician or producer with the aim to perform, use music technology and be involved with live music events. The Certificate II in Music Industry is generally a one-year program that provides credit at VCE level for Units 1 and 2. It can also serve as a pathway to Certificate III in Music Industry in Year 12.

The qualification aims to:

- Provide participants with the knowledge, skills, and competency that will enhance their employment prospects in the music and creative arts industries
- Enable participants to gain a recognised credential and to make an informed choice of vocation or career path.

### **CAREERS:**

The music industry contains a variety of occupations including performers, composers, private tutors, recording technicians and music business managers. This qualification may prepare individuals to perform a range of tasks in the music industry by developing practical skills and fundamental knowledge.

### **NATURE OF WORK:**

Students complete the following eight units:

BSBWHS201 Contribute to health and safety of self and others  
CUAIND201 Develop and apply creative arts industry knowledge  
BSBWOR203 Work effectively with others  
CAUMCP201 Incorporate technology into music making  
CUAMPF201 Play or sing simple musical pieces  
CAUMPF203 Develop ensemble skills for playing or singing music  
CAUMLT201 Develop and apply musical ideas and listening skills  
CAUMPF204 Play or sing from simple written notation

### **ICT:**

Through both core and elective units, students will develop skills with various aspects of music technology, instruments and software.

### **OUTCOMES/ CREDIT TOWARD VCE:**

By completing this nationally recognised qualification, students also receive credit at VCE Unit 1 and 2 level. It can also serve as a pathway to Certificate III in Music Industry in Year 12.

### **HOMEWORK:**

Students are expected to complete regular, effective practice on their instrument. This combined with other course work will require at least 2 – 3 hours per week.

**VCE VET MUSIC INDUSTRY**  
**CERTIFICATE III IN MUSIC INDUSTRY (PERFORMANCE)**

**OVERVIEW:**

This program is designed for students who have previously completed the Certificate II in Music Industry and are transitioning into the Certificate III in Music Industry with a Performance specialisation in the second year of a two-year program as shown:

- Certificate CUA20615 Certificate II in Music Industry in the first year; and
- Certificate CUA30915 Certificate III in Music Industry (Performance) in the second year program.

The Units of Competency in this course include developing improvisational skills, applying knowledge of genre to music making and performing music as part of a group or as a soloist. Scored assessment consists of three coursework tasks worth 50% of the overall study score and an end of year performance examination worth 50% of the overall study scores.

**CAREERS:**

The music industry contains a variety of occupations including performers, composers, private tutors, recording technicians and music business managers. This qualification may prepare individuals to perform a range of tasks in the music industry by developing practical skills and fundamental knowledge.

**NATURE OF WORK:**

Students complete the following seven units:

CUAMLT302 Apply knowledge of style and genre to music industry practice

CUAIND303 Work effectively in the music industry

CUACMP301 Implement copyright arrangements

CUAMPF301 Develop technical skills in performance

CUAMPF302 Prepare for performances

CUAMPF305 Develop improvisation skills

CUAMPF402 Develop and maintain stagecraft skills

Choose one of the following:

CUAMPF404 Perform music as part of a group

CUAMPF406 Perform music as a soloist

**ICT:**

Through both core and elective units, students will develop skills with various aspects of music technology, instruments and software.

**OUTCOMES/CREDIT TOWARD VCE:**

The Certificate III in Music Industry (Performance) program is a nationally recognised credential that allows for credit at VCE Unit 3 and 4 level and the opportunity to receive a VCE study score.

**HOMEWORK:**

Students are expected to complete regular, effective practice on their instrument. This combined with other course work will require at least 2 – 3 hours per week.