

# **Ballarat High School Year 10-12 Course Descriptions**



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# WELCOME TO HIGH FACTS

At Ballarat High School, we believe in doing all we can to meet the individual needs of all our students. That means being able to provide quality pathways for a diverse range of learners. Students are able to choose from a broad range of curriculum programs and are supported by high quality teaching, and an extensive extracurricular program.

In Years 10, 11 and 12, a wide choice of subjects are offered each semester. The School has the resources to offer a wide choice of subjects in VCE, Vocational Education and Training (VET), and the Victorian Certificate of Applied Learning (VCAL). Year 10 students are able to access VCE and VET subjects.

Students receive individual guidance in selecting their subjects for Years 9 to 12 through our comprehensive Managed Individual Pathways (MIPS) staff, through course counselling with their Learning Mentor, and their team leader. We encourage students and parents to access our staff as part of the course counselling process to ensure they choose the right pathway for them.

The program and subject choices which students make are critical to their enjoyment of study and their success which in turn leads to pathways to higher education, training or employment. It's important that students choose subjects which are tailored to their needs and offer the best pathway to success.

When students are making their subject choices, I offer the following advice:

- Consider selecting subjects you are good at, interested in and enjoy
- Select subjects you have the ability to do
- Think about what you want to do when you leave school and how different subjects can help you get there
- If you wish to gain an ATAR or entry into a course with particular prerequisites, choose your subjects carefully
- Consider your overall subject selection to see if you have a good balance
- Talk to a range of people to help you make your choices
- Do not select subjects based on what your friends are doing
- Do not select subjects based on who you think will be teaching them.

Please consider the information in this guide carefully and seek the expert assistance of our staff where necessary. We look forward to working with students and parents on this exciting journey.



Sharon Eppingstall - Assistant Principal 10-12

# **KEY DATES**

# Year 9 $\rightarrow$ 10

Thursday 22nd July	Parent Information Night
Thursday 22nd July	EXPO - Faculty Information evening
Friday 23rd July	Online course selections open
Week 5	Year 9 Subject Information Sessions in TLC
твс	VET Cluster Online Applications Close
Thursday 19th & Friday 20th August	Year 9 Course Confirmation Parent Interviews
Friday 20th August	Online course selection closes

# Year 10 $\rightarrow$ 11

Thursday 22nd July	Parent Information Night
Thursday 22nd July	EXPO - Faculty Information evening
In Learning Mentor Weeks 4 & 5	Year 10 Course Counselling Faculty Presentations
Friday 23rd July	Online course selections open
Wednesday 28th July	Panel Presentations (LM - P4)
Thursday 19th & Friday 20th August	Course Confirmation Parent Interviews for Year 10 Students
твс	VET Cluster Online Applications Close
Friday 20th August	Online course selection closes

# **MIPS**



Andrew Wallace



**Ally Dovaston** 

The Managed Individual Pathways (MIPs) program helps all students, aged 15 and over, move from compulsory schooling into further education, training and employment. The MIPs office is located in the library in the Sheehan wing and is open 8:30am – 4:30pm daily, and students can visit the office during recess or lunch to book appointments.

Our MIPs staff consisting of **Andrew Wallace** and **Ally Dovaston** assist with career counselling, pathway planning, course counselling, subject selection, university and TAFE applications (VTAC & SEAS), apprenticeships and traineeships, school work experience, taster programs, casual employment, scholarships, GAP year and student exchange programs, enhancement studies, career testing, and alternate pathway options. The MIPs department holds all relevant resources required for pathway planning and maintains an excellent website that can also be utilised <u>https://www.ballarathsmips.com/</u>.

# COURSE SELECTION ADVICE FOR YEAR 10 STUDENTS

The Year 10 Curriculum consists of subjects arranged in 5 period weekly blocks. You must do English, Maths and a Science subject in Year 10. Otherwise, you are advised to select subjects from a range of learning areas that reflect your interests and strengths.

## **Compulsory subjects - Whole Year**

**English** - you must consult with your English teacher before choosing the English subject best suited to you. Year 10 students must select a Year 10 English subject. Year 10 students cannot select any VCE English.

**Maths** - you must consult with your Mathematics teacher before choosing the level of mathematics best suited to you.

## **Compulsory subjects - One semester**

**Science** - Year 10 students must do one semester of Science. *It is important to note that Psychology does not count as a Science subject.* 

Subjects which will run for two semesters

- Languages (Japanese and German)
- Any VET or VCE subjects

## **VCE/VET Guidelines**

You may choose to undertake a <u>VCE subject</u> or <u>VET program</u>.

- If a student chooses any Unit 1 & 2 study in Year 10 they must complete the *Application to Study VCE Units 1 and 2* (decision will be made on assessment of attitude, motivation and current Year 9 results). This form will need to be signed by theTeam Leader, student and a parent/guardian.
- There will be a list of recommended Unit 1 & 2 subjects on the "Application to Study a VCE Subject" form.
- Students cannot select more than one Unit 1 & 2 subject in Year 10 (but they can select one Unit 1 & 2 subject and a first year VET).
- An exception to the above is Year 9 students who have completed Advanced Maths. They can complete VCE maths and one other VCE subject.

## Attendance criteria for selecting a Unit 1 & 2 subject

- Students whose attendance is 85% or above are eligible to select one unit 1 & 2 subjects.
- Students whose attendance is 95% or above are eligible to select two unit 1 & 2 subjects.

# Those who are under the above percentages due to exceptional circumstances can apply to the VCE Coordinator or Assistant Principal (Years 10-12).

VET Guidelines

- If a student selects a VET subject they need to be aware they will miss some classes and be highly organised to catch up on missed classes.
- Students who enrol in a VET subject which is run off-campus, costs incurred travelling to and from the place of study are at the student's own expense

Students can choose a Unit 1 & 2 subject as well as a VET.

VCAL Guidelines

- Year 9 students cannot select VCAL for 2022. This is only an option for students moving from Year 10 into Year 11.
- If a student does plan to study VCAL in Year 11, their performance in Year 10 (including attendance) will determine if they are selected.
- At the end of year 10 all students who wish to study VCAL will be required to attend an Interview with VCAL staff and Team Leaders.
- Students considering VCAL in Year 11 can choose to undertake the Personal Development Skills elective in Year 10. This can provide credit towards VCAL units.

# COURSE SELECTION ADVICE FOR YEAR 11 & 12 STUDENTS

The following factors should be taken into account when choosing your course:

## 1. VCE or VCAL?

The first decision you have to make is whether to enrol in VCE (Victorian Certificate of Education) or VCAL (Victorian Certificate of Applied Learning).

## 2. VET?

Do you want or need to do a VET (Vocational Education and Training) subject? All VCAL students need to do a VET subject to meet their VCAL requirements. VET subjects can also be chosen as part of a VCE certificate.

## 3. Which VCE English?

it is important that you choose the English subject right for you. To learn more about choosing the right English click here: VCE English Information

## 4. Which VCE Maths?

It is important that you choose the Maths subject right for you. To learn more about choosing the right Maths click here: VCE Maths Information

## 5. The importance of keeping your options open

If you are uncertain about your preferred pathway, it is important to pick a range of subjects which leave a variety of options open for future study or employment.

## 6. The relevance of a subject to a career and tertiary selection

Some tertiary courses require that students have studied certain subjects (prerequisites) whilst others are recommended.

## 7. The importance of choosing subjects you enjoy

Choose subjects that you have enjoyed or succeeded in previously: Experience has shown that if a student does not enjoy or succeed in a subject at Year 10 level, success at Year 11 is very doubtful. If you are unsure about your ability to meet the requirements of a subject, you should speak to your teacher, Learning Mentor or Team Leader. DO NOT select certain subjects because you have been told they score better on the ATAR.

# VCE

The Victorian Certificate of Education (VCE) is the certificate that the majority of students in Victoria receive on satisfactory completion of their secondary education. The VCE provides diverse pathways to further study or training at university or TAFE and to employment.

### VCE eligibility: how do I achieve my VCE?

Students must take a course over at least two years. Some students decide to take the VCE over three years. Most students will complete a total of 22 units (12 in Year 11 and 10 in Year 12) in a variety of studies.

You must study FOUR units of English.

To obtain your VCE you must satisfactorily complete a minimum of 16 Units including:

- Three units of English (these could be any three English Units including English, Literature or Language), with an "S" at unit 3 and 4 level;
- Four other unit 3/4 sequences (6 units);
- The 16 units may include Vocational Education and Training units.

For satisfactory completion (an "S") of a Unit, you must have satisfactory achievement of each of the outcomes for that Unit. Outcomes contain key knowledge and skills of the Unit. They are assessed using School Assessed Assessment (SAC); these are assessment tasks completed over the course of a unit, usually in class time. The class teacher then makes the decision of satisfactory (S) completion.

If any Outcome for a Unit is not achieved, the student receives an "N" (Not Satisfactory) for the Unit. This allows a student to be awarded an S for the Unit but does not change the original score for the task. Students have the opportunity to redeem a failed unit, and this process is outlined in the Ballarat High School VCE Handbook.

To achieve an "ATAR" (Australian Tertiary Admissions Rank) calculated for tertiary admission at the end of Year 12 students must have satisfactorily completed a VCE Certificate including Units 3 & 4 of English and at least 3 other sequences of Units 3 & 4. 10% of any 5<sup>th</sup> and/or 6<sup>th</sup> sequence of Units 3 & 4 will be added into your ATAR.

Unit 1 & 2 results are not used for selection to tertiary institutions. In completing additional VCE units, a student has the opportunity to maximise their ATAR required for University admission.

**CONTACT:** Jenni Nicholls

# VCAL

Changes to VCAL:

We are supporting all students in their course selections for 2022 and are providing the following advice and information to students considering a VCAL pathway.

If students are studying VCAL in 2022 they will transfer into the VCE Vocational Specialisation with credit for completed VCAL subjects in 2023. In 2023, students will continue to study Senior VCAL subjects in the new certificate as part of the implementation process. At the end of 2023, these students will be awarded the VCE Vocational Specialisation if they meet the requirements.

The Victorian Certificate of Applied Learning (VCAL) is a practical work related certificate which provides pathways into training, apprenticeships and work. Like the VCE it is a recognised and accredited senior school qualification.

If you choose to do the VCAL, you will gain practical experience and employability skills, as well as the skills you will need to go on to further training in the workplace or at TAFE. These skills include reading, writing and maths skills as well as the personal skills that are important for life and work. While a VET unit is optional in the VCE, it is compulsory in a VCAL program.

If you start VCAL and decide that you need a VCE instead, you can transfer between the two certificates. Any VCE studies successfully completed as part of the VCAL program will count towards the VCE. In fact, it is possible to complete Year 12 with both VCE and VCAL.

A certificate and Statement of Results are issued to students who successfully complete their VCAL.

The VCAL's flexibility enables students to undertake a study program that suits their interests and learning needs. There are **four compulsory strands**:

## Literacy and Numeracy Skills

Your VCAL program must include literacy and numeracy subjects. These can be selected from VCAL literacy skills and VCAL numeracy skills units and/or VCE English and Mathematics units

## Industry Specific Skills

Your VCAL program must include industry specific units from Vocational Education and Training (VET) programs. The range of VET options is extensive and includes automotive, engineering, building and construction, hospitality and retail, multimedia, IT, agriculture, horticulture, and hair and beauty.

## Work Related Skills

Work Related Skills covers the following:

- The integrating of complex work related skills with prior knowledge and experiences about work.
- Enhancing skills through work related activities.
- Development of critical thinking skills that apply to problem solving situations in the work context.
- The application of increasingly complex transferable skills to work related contexts.

In order to develop employability skills, students are required to go out each Friday on a structured Work Placement.

### **Personal Development Skills**

The purpose of this area is to focus on the development of organisation and planning skills, knowledge, practical skills, problem solving and interpersonal skills through participation in experiences of a practical nature. In the Foundation units the students learn about relationships and skills for working in groups. In the Senior units, students are expected to show competent leadership and decision–making skills which relate to their group work.

VCE CONTACT	VCAL CONTACT	VET CONTACT
Jenni Nicholls	Mark Verberne	Ally Dovaston

### **CONTACT:** Mark Verberne

# VET

## What is VET?

Vocational Education and Training (VET) Programs offer students nationally recognised vocational certificates, which are endorsed for recognition in both the Victorian Certificate of Education (VCE) and the Victorian Certificate of Applied Learning (VCAL) from the Victorian Curriculum and Assessment Authority (VCAA). VET programs:

- Increases post-school opportunities;
- Provides the opportunity to trial a career;
- Helps students explore possible areas of interest which promote further study and work choices;
- Allows a student to develop strong links with industry and local community employers, i.e. students may be offered part-time/casual work;
- Improves employment prospects;
- Helps students gain knowledge of employers' expectations and real working conditions;
- Develops students' capacity for cooperation, teamwork and leadership skills development;
- Assists in transition from school to work

## Who can do VET?

VET Programs are available to Year 10, 11 and 12 students. Preference will be given to suitable Year 11 applicants, due to all Programs being undertaken over a two-year period.

## Why choose a VET?

As part of VCE or VCAL studies students can gain an additional qualification by selecting to study a VET Program. Studying a VET qualification will develop skills and give students exposure to industry as well as experience in the workplace, prior to completing secondary school.

VET is a mix of practical and theory assessments that are targeted to industry, complimenting VCE or VCAL. VET enables students to gradually gain the skills needed to reach these levels or provides an alternative pathway into University for students completing VCAL.

## Where are VET courses held?

VET courses are currently held at Ballarat High School, FedUni TAFE, Australian Catholic University, Mt Clear College, Loreto College and other venues yet to be confirmed. **Students travel to the course of their choice at their own expense.** 

## How much does it cost?

VET programs are fee paying programs and students will be expected to contribute to the cost of these programs.

## How long does it take to complete a VET course?

Most VET programs are organised in a four unit structure similar to VCE subjects.

Most VET programs are two year courses, however, programs will only continue to be offered by the school if there are sufficient numbers of students and the cost of delivering the program is at a level acceptable to both parents and the school.

## How do I apply to do a VET?

- □ Attend the BHS Subject Selection Evening
- Discuss your choice with your parent and Learning Mentor
- Complete the Expression of Interest Form for VET 2022
- Apply on-line for your VET course at <u>www.highlandsllen.org</u>
- Course Counselling Interview
- □ Submit this completed form to Ally at MIPS

## **VET Offerings**

VET programs offered on site at Ballarat High School exclusively to our students include:

Automotive
Sport & recreation
Music

BHS is also part of the Highlands LLEN VET Cluster a partnership between the Highlands Local Learning and Employment Network, twenty secondary schools and various Registered Training Organisations (RTO) within the Highlands Region. Through the VET Cluster we can access VET programs in:

- Agriculture
- Allied Health Assistance
- Animal Studies
- Animal Studies (specialist)
- Automotive
- Building & Construction Carpentry
- Community Services
- Dance
- Early Childhood Education and Care
- Electrotechnology
- Engineering
- Equine

- Furniture Making
- Information, Digital Media & Technology
- Kitchen Operations
- Landscaping
- Music Industry (Audio Focus/ Sound Production)
- Music Industry (Performance)
- Plumbing
- Retail Cosmetics
- Salon Assistant
- Creative Industries/Screen and Media

## Highlands LLEN VET subjects

VET subjects offered are *both* on and off site at other schools and training organisations that are open to students from other schools and will generally take place from 1:30pm until 5:30pm. Times vary depending on the course. Some courses run whole day classes at various times throughout the year as well as catch up classes. Some courses have classes during the holidays. Students will be responsible for travelling to and from their course.

The Highlands LLEN offered a wide variety of courses which can be found on their website.

For specific information about your VET course, students must consult the Highlands LLEN Cluster Program Booklet 2020 located at <u>www.highlandsllen.org/programs</u> This booklet contains information about costs, location and contribution to VCAL and VCE.

**CONTACT:** Ally Dovaston

# CONTACTS

# Subject Selection Contacts - Years 9-12

Assistant Principal 10-12 - Sharon Eppingstall VCE Leading Teacher – Jenni Nicholls VCAL - Mark Verberne VET - Ally Dovaston MIPS – Andrew Wallace & Ally Dovaston Year 11 Learning Leaders - William Leversha & Karen Lee Year 10 Learning Leaders - Fraser Murray & Kristy Gatens Year 9 Core Teachers

### **Curriculum Contacts**

Curriculum Leading Teacher – Melissa Pompe

**Heads of Faculty** 

Arts – Kaitlyn Fry English – Patrick Stewart HAPE – Faith Scholten Humanities – Nathan Thomas Languages – Simon Coles Maths – Jaz Plinius-Wiese Performing Arts – Damien Woods Science – Elizabeth Kent Technology – Fiona Finnegan

# YEAR 10 APPLIED LEARNING

LEARNING AREA	YEAR 10	YEAR 11	YEAR 12
APPLIED	Personal Development Skills 1	VCAL Intermediate	VCAL Senior
LEARNING	Personal Development Skills 2	VCAL Intermediate	VCAL Senior

Successful completion of Year 10 Personal Development Skills 1 & 2 gives students a direct credit toward future VCAL certificates. These units give students an introduction into the skills required for applied learning as well as a headstart to a future certificate. The skills developed in this subject are transferable to VET/VCE/VCAL & other student pathways.

We are supporting all students in their course selections for 2022 and are providing the following advice and information to students considering a VCAL pathway.

If students are studying VCAL in 2022 they will transfer into the VCE Vocational Specialisation with credit for completed VCAL subjects in 2023. In 2023, students will continue to study Senior VCAL subjects in the new certificate as part of the implementation process. At the end of 2023, these students will be awarded the VCE Vocational Specialisation if they meet the requirements.

# Personal Development Skills 1

#### **Course Outline**

The purpose of this unit is to focus 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.

The focus of Personal Development Skills 1 includes;

- Personal development
- Health and wellbeing
- Education
- Career pathways

#### Assessment

- All evidence of project work will be presented in an A3 visual portfolio
- Individual & Group projects
- Off campus applied learning tasks

#### CONTACT: Mark Verberne

# Personal Development Skills 2

#### **Course Outline**

The purpose of this unit is to focus on the development of knowledge, skills and attributes through participation in experiences of a practical nature within the community.

The focus of Personal Development Skills 2 includes:

- Community engagement
- Social awareness
- · Civic and civil responsibility
- Active citizenship

#### Assessment

- All evidence of project work will be presented in an A3 visual portfolio
- Individual & Group projects
- Off campus applied learning tasks

CONTACT: Mark Verberne

# YEAR 10 ARTS

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Art 2D	Art	Art
	Art: Drawing/ 3D Sculpture	Studio Art: Drawing, 3D Sculpture, Painting	Studio Art: Drawing, 3D Sculpture, Painting
ARTS	Photography	Studio Art: Photography	Studio Art: Photography
	Media (Video Making)	Media Studies	Media Studies
	Visual Communication Design	Visual Communication Design	Visual Communication Design

# Art: Drawing/ 3D Sculpture

### **Course Outline**

This unit will involve students drawing ideas and making 3D artworks, using construction techniques with ceramics and various other materials (plaster, papier mache, wire, plastics). Through observation, drawing and experimentation students will develop their own ideas in response to different creative topics. Students will research and discuss how other artists, past and present, have developed ideas and used materials in their sculptures.

### Assessment

- Finished artworks
- Visual Diary of ideas and the design process.
- Artist research project and artwork analysis.

#### CONTACT: Kaitlyn Fry

# <u>Art 2D</u>

### **Course Outline**

This unit will introduce students to creating 2D artworks including; painting, drawing, printmaking and multimedia tasks. Students will also research various artists' work practices and specific art periods and styles.

#### Assessment

- A folio of work using various mediums such as painting, drawing, printmaking and multimedia will be produced.
- Research assignment
- Art analysis of specific artists
- Investigations into the design process will be required in the visual diary

#### CONTACT: Kaitlyn Fry

# **Photography**

#### **Course Outline**

This unit will introduce students to the basics of black and white photography, digital photography and computer manipulation. Students will be required to maintain a workbook of ideas and processes and present a research assignment.

Each topic will require students to learn about photography by planning and taking photos and then processing, printing and presenting their images. Topics include:

- Camera basics, including manual SLR camera use, exposure, lighting effects, lenses.
- The art of photography, including composition, camera angle, depth of field, lighting techniques, exposure and exploring subject matter, genres (styles) of photography
- Digital image development: using Photoshop to create interesting effects with your images
- Analysis of photographic artworks

#### Assessment

- Photography folio
- Visual diary of ideas and the design process
- Visual Analysis

#### CONTACT: Kaitlyn Fry

# Video-Making

### **Course Outline**

The course covers both theory and practical work. Students are taught to plan shot sequences (storyboard), film (shot composition) and edit the final master tape (editing occurs on Ballarat High's editing suite).

Eventually the class divides into four groups to produce a major project. These groups may produce an interview, a documentary, a pop clip, dance clip, comedy sketch or dramatic sketch, depending on class interests and abilities.

The course offers an excellent understanding of how television and film works by 'doing it'.

Students will be taken through a range of activities and topics including:

- Camera work and shot composition.
- Storyboards planning shot sequences cf. "live" TV studio approach
- One camera approach
- Editing
- Possible excursion to see television production

#### Assessment

- Two assignments
- Exam
- Participation in practical work and theory

CONTACT: Kaitlyn Fry

# **Visual Communication Design**

#### **Course Outline**

Visual Communication Design focuses on the design, drawing and presentation techniques which are used in a variety of design industries such as: graphic design, product design, architecture, landscape architecture, illustration, engineering, drafting, computer aided design, packaging design, web design and game design.

#### Assessment

- 1. Develop an understanding of the ways in which creative professionals generate ideas and develop them into high quality presentations.
- 2. Describe and understand visual presentations and the design process.
- 3. Learn to generate imagery using a variety of methods including:
  - Freehand illustration (drawing)
  - Technical (Engineering) Drawing Orthogonal and Isometric
  - Adobe Photoshop photo manipulation
  - Adobe Illustrator digital illustration
  - Rhino 3 Dimensional computer modelling and rendering

CONTACT: Kaitlyn Fry

# YEAR 10 ENGLISH

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Foundation English	VCAL Literacy	VCAL Literacy
	English	English	English
ENGLISH	Literature & Communication	Literature	Literature
	English Language & Communication	English Language	English Language

# Year 10 English

### **Course Outline & Assessment**

Year 10 English seeks to extend the skills students have gained in Years 7 to 9 and provide an introduction to a range of knowledge and skills required to undertake VCE English.

Year 10 students undertake 5 major units of work over the year:

1. **English Language** – the students complete a short unit on some features of the English Language, giving them an insight into this area of study.

2. **Analysing Persuasive Language** – students study a range of media texts, persuasive language techniques and analyse how authors seek to persuade us.

3. **Novel Study** – "The Dead I Know" by Scot Gardner – students engage in a variety of analytical tasks examining themes, characters and how the author constructs meaning. They then complete an analytical response to the text. The focus is on developing essay writing skills.

4. **Comparative Analysis** – The students study two different texts and complete a range of analytical and creative responses to them. They examine common themes in different texts and respond to it in a comparative essay.

5. **Using Persuasive Language** – students study a range of persuasive techniques used in different texts and craft and deliver their own oral presentation.

# Literature & Communication

#### **Course Outline**

Year 10 Literature & Communication is a full year subject that seeks to provide an introduction to a range of knowledge and skills required to undertake either VCE English and/or VCE Literature.

**Poetry**: Students read a variety of poetry and explore poetic techniques and styles.

**Thematic study**: Students will study texts based on a theme and produce a variety of creative texts **Persuasion**: students study a range of media texts, persuasive language techniques and analyse how authors seek to persuade us.

**Novel study:** students engage in a variety of analytical tasks examining themes, characters and how the author constructs meaning and complete an analytical response to the text. The focus is on developing essay writing skills.

**Shakespeare - Play & film**: Students will identify similarities and differences between different texts and examine how literary texts can be adapted to suit different audiences.

**The Craft of Writing:** Students will examine how writers write and use the writing process to produce their own writing in a variety of styles and genres.

#### Assessment

- Poetry Analysis
- Creative Response to Text
- Language Analysis & Research Presentation
- Text Analysis Essay
- Comparative Essay
- Writing Folio
- Exam

#### CONTACT: Patrick Stewart

# Foundation English

#### **Course Outline**

The VCE Foundation English course offered at Year 10 is designed for students who may require a more vocationally oriented approach to English because they aim to enter the workforce or undertake the VCAL Certificate in Years 11 & 12. It is also aimed at students who need additional time and assistance to strengthen and refine their literacy skills.

The course integrates speaking, listening, reading, viewing and writing across all areas of study to enhance students' knowledge about the structures and functions of written and oral language. The course allows students to improve their skills in comprehending and responding to a variety of texts, and to enhance their communication skills.

#### Assessment

The Foundation English course is designed around one compulsory area of study, Essentials of English. The teacher will then choose from the five optional areas of study: Communication and the workplace; Technology and communication; The study of texts; The analysis and construction of argument; Information literacy.

CONTACT: Patrick Stewart

# **English Language & Communication**

#### **Course Outline**

The new Year 10 English Language unit is a full-year elective which provides students with an introduction to the fundamental knowledge, concepts, metalanguage and analytical skills that form the basis of VCE English Language. The four topics covered throughout the course include:

**The History of the English Language:** Students study the origins of the English language and the ways in which it has evolved from its earliest historical form in the fifth century to the language we use today.

**Introductory Linguistics:** Students study how the English language is structured and organised with respect to the five subsystems of the English language: phonetics and phonology, morphology and lexicology, syntax, semantics, and discourse.

Language features and language in use: Students apply their knowledge of introductory linguistics and analyse the ways in which language is used by individuals and groups and how it reflects our thinking, attitudes and values.

**Analysis of written and spoken texts:** Students will analyse and describe the structures and features of a range of specific written and spoken texts and how they differ according to their level of formality.

#### Assessment

Students will be assessed on each of the above topics and will sit an examination which covers all content at the conclusion of the semester. Students are assessed as follows:

Essay

- History of the English Language:
- Introductory linguistics:
- Language features:
- Written and spoken texts:
- All topics:

Test Folio Analytical commentary Examination

#### CONTACT: Patrick Stewart

# YEAR 10 HAPE

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Health and the Community	Health and Human Development	Health and Human Development
HAPE	Health for the Individual		
	Year 10 PE: Sports Performance	Physical Education	Physical Education
	Year 10 PE: Active Lifestyles		
	Year 10 Outdoor Education *Students can only complete one Outdoor Education subject in year 10	Outdoor & Environmental Studies *Recommend to be completed in Year 10	Outdoor & Environmental Studies *Recommended to be completed in Year 11
		VCE/VET Certificate III in Sport & Recreation *Completed in year 10	VCE/VET Certificate III in Sport & Recreation *Completed in year 11
		VET Certificate III in Sport and Recreation is run through the Specialist Sport program. Students must complete a school application form and sit an interview to be accepted into the program at year 10.	
		Application forms are avail	lable from the PE office.

It is government policy that all students participate in physical activity every week in Year 10. Students are encouraged to choose a minimum of one Physical Education subject each semester to fulfil this requirement.

# Year 10 PE - Active Lifestyles

### **Course Outline**

PE-Active Lifestyles aims to cater for those students who are willing to physically push themselves and further their knowledge about different training methods. Students will enhance their overall general fitness and wellbeing through three periods of theoretical content and a double period of practical participation.

#### Theoretical topics covered

- Training for healthy lifestyles- principles and methods
- Designing an exercise program
- Body's response to exercise- energy systems
- Supplement programs- ergogenic aids

#### Practical topics covered

 Activities to improve speed, strength, balance, endurance, coordination and flexibility while increasing confidence and having fun

#### Assessment

- Assignments and investigations
- Topic test
- End of semester exam

#### **CONTACT: Ashley Baker**

# Year 10 PE - Sports Performance

#### **Course Outline**

PE- Sports Performance studies how the healthy body works during exercise, and how sport and physical activity promote health for the whole body. Students will use ICT to develop an understanding of enhancements in the sport and recreation area. This is a practical and theoretical subject.

#### Theoretical topics covered

- Anatomy- muscular, skeletal and cardiorespiratory system
- Physiology- responses to exercise and energy systems
- Biomechanics- technological advancements
- Sports coaching
- **Practical topics covered** 
  - Coaching/ Peer teaching
  - Responses to exercises
  - Sport activities

#### Assessment

- Assignments and investigations
- Topic test
- End of semester exam

#### **CONTACT: Patrick Lynch**

# Year 10 Outdoor Education

### **Course Outline**

In year 10 Outdoor Education students are introduced to outdoor environments. They will study a range of activities and develop knowledge and skills in a variety of natural settings.

#### Topics:

- Indigenous culture
- Australia before humans
- Climate change
- Native and introduced flora and fauna
- Effects of technology on outdoor experiences
- What makes outdoor environments healthy?

#### Practical activities:

- Water, soil and air quality testing
- Trangia cooking
- Camp preparation
- Waubra wind farm
- Base camp and adventure activities at Narmbool- 2 nights

### Assessment

- Tests
- Journal and camp reflections
- Presentations
- Healthy environments report
- Exam

Contact: Michael Sordello

# Health and the Community

### **Course Outline**

Students in Health and the Community will focus on the emotional, physical and social health of adolescents. This unit aims to address issues and provide practical skills that can be used in everyday lives.

#### Topics covered include:

- Body Image
- Nutrition
- Homelessness
- Being Physically Active

#### Assessment

- Assignments and investigations
- Topic test
- End of semester exam

#### **CONTACT: Faith Scholten**

# Health and the Individual

#### **Course Outline**

Using adolescent health issues as a base, students will develop their knowledge and understanding of prevention, harm minimisation and support services.

#### **Topics covered include:**

- Mental health
- Relationships and sexuality
- Drugs

#### Assessment

- Assignments and investigations
- Topic test
- End of semester exam

#### **CONTACT:** Faith Scholten

# YEAR 10 HUMANITIES

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Business Studies	Business Management	Business Management
HUMANITIES		Accounting	Accounting
	Law	Legal Studies	Legal Studies
	Our World - Past & Present	History 20th Century	History Revolutions
	World War II History		
	Philosophy	Philosophy	Philosophy

# **Business Studies**

## **Course Outline**

This subject is an introduction to VCE Business Management, Economics and Accounting. Students will study personal finance (budgeting, saving and credit); investment options (property, shares and superannuation); small business management, incorporating business planning, marketing, location and structure, focusing on local businesses; and small business record keeping as an introduction to accounting, including the balance sheet and the cash journal. Students will also look at the Basic Economic Questions, how markets work and explore a current economic issue in Australia.

#### Topics:

- Personal Finance
- Accounting
- Business Management
- Economics

#### Assessment

Managing personal finances, creating a business plan, accounting assessment task, an economic test and an end of semester examination

### CONTACT: Nathan Thomas

# <u>Law</u>

### **Course Outline**

Law is an introduction to VCE Legal Studies. Students study the structure of parliament, law making, the distinction between criminal and civil law, and the impact of law on society and law reform. They investigate the concepts of being a global citizen focusing on human rights. There will be a visit to the Ballarat Magistrates Court.

### Topics

- The government and you
- The law and you
- Human Rights & Global Citizenship

#### Assessment

- Political parties presentation
- Court visit report
- Police poster
- Human rights/ global citizenship report
- Semester examination

#### CONTACT: Nathan Thomas

# **Our World – Past & Present**

#### **Course Outline**

In Our World – Past & Present students study both Geography and History. Students examine Australian History post 1945 covering such topics as Australia during the Cold War and the Indigenous civil rights movement. They will look at resource use in Australia as well as a range of environmental issues. Students will then choose an inquiry related to one of these topics and research their area of interest.

#### Assessment

- Class tasks
- Research assignments
- Semester examination

#### CONTACT: Nathan Thomas

# World War II History

#### **Course Outline**

Australia's involvement in the Second World War influenced the way in which Australians thought about the role their country played in world politics. It changed the emphasis of our allegiance from Britain to the United States of America.

In WWII, for the first time, conflict actually reached our shores, with the bombing of Darwin and Broome, and midget subs entering Sydney Harbour. Our POWs were brutalised, starved and became slaves to the Japanese and those at home agonised over the fate of their loved ones. Together the Allies defeated Hitler's bold plans for a superior race and world domination. The dropping of atomic bombs on two Japanese cities both ended the war and heralded the nuclear age.

#### Assessment

- Class tasks
- Assignments
- Presentations
- Exam

#### CONTACT: Nathan Thomas

# **Philosophy**

### **Course Outline**

Philosophy is about thinking clearly in the search to find answers to the really big questions. Have you ever wondered where the universe comes from? Whether there is a god? Whether a machine might think? Why there is evil in the world? If so, you have begun to think philosophically. Philosophy has challenged the best minds that have ever existed but that does not mean you have to be one of the all–time great thinkers to take part – all that is needed is a sense of wonder or curiosity.

Topics covered include:

- Metaphysics/ Introduction to Philosophy themes and thinkers. What's out there?
- Study of Existence the nature of being and the world.
- Philosophy of religion A study of diverse religious traditions; the purpose and nature of religion today.
- Philosophical reasoning Where do we start? Philosophy is not only about ideas; it's also about arguments. Learn the basic skills of philosophical argument and debate fact, opinion and interpretation, logical argument and critical thinking.
- Political philosophy What actions are permissible? Political philosophy is the study of government and the relationship of individuals and communities to the state. It includes questions about justice, the good, law, property, and the rights and obligations of the citizen.
- Ethics What should I do? Ethics and moral philosophy is associated with notions of right and wrong and how people ought to act. A range of ethical issues will be studied.
- Aesthetics Why is this art? What can life be like? Aesthetics deals with beauty, art, enjoyment, sensory– emotional values, perception, and matters of taste and sentiment.

#### Assessment

A range of assessment strategies will be used: oral presentations/reflection, class discussion/dialogue, multi– media presentation, research report, short answer responses, extended essays, group work, exam.

#### CONTACT: Nathan Thomas

# YEAR 10 LANGUAGES

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Japanese	Japanese	Japanese
LANGUAGES	German	German	German

# <u>German</u>

Prerequisite: Satisfactory completion of year 9 German.

Year 10 German continues to build skills in grammar and fluency, focusing on practical language skills for everyday communications. Students continue to gain an understanding of what it is like to use the language in real–life situations, complemented by exposure to authentic texts such as films, stories and interviews.

Topics are particularly relevant to social settings and integrate speaking and listening, reading and writing. The biennial exchange with our sister school in Germany, reciprocated by their exchange to BHS, provides further opportunities for in-depth language use with native German speakers, and further promotes cross-cultural communication and understanding. Friendships developed through these three-week exchanges are often long-lasting and lead to significant travel opportunities and ongoing cultural exchange.

Completion of year 10 German will allow students to proceed to VCE German, which has the added advantage of an ATAR increase (for Units 3-4) of around 10% scaled up.

Contact: Anja Tusek

# <u>Japanese</u>

Prerequisite: Satisfactory completion of year 9 Japanese.

Year 10 Japanese continues to build skills in grammar and fluency, focusing on practical language skills for everyday communications. Students continue to gain an understanding of what it is like to use the language in real–life situations, complemented by exposure to authentic texts such as films, stories and interviews.

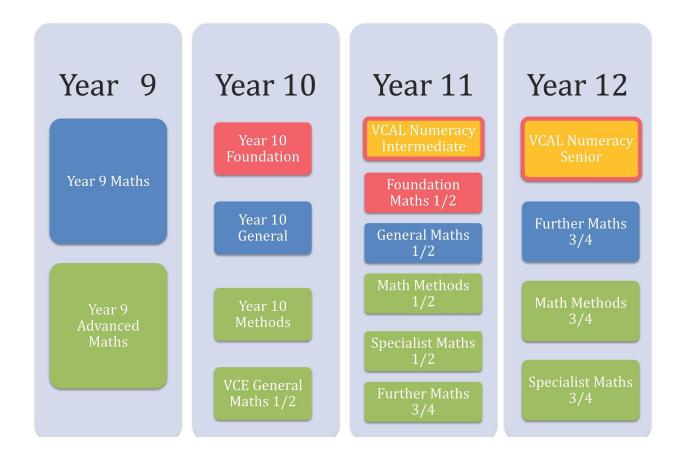
Topics are particularly relevant to social settings and integrate speaking and listening, reading and writing. The biennial exchange with our sister school in Japan, reciprocated by their exchange to BHS, provides further opportunities for in-depth language use with native Japanese speakers, and further promotes cross-cultural communication and understanding. Friendships developed through these three-week exchanges are often long-lasting and lead to significant travel opportunities and ongoing cultural exchange.

Completion of year 10 Japanese will allow students to proceed to VCE Japanese, which has the added advantage of an ATAR increase (for Units 3-4) of around 10% scaled up.

#### Contact: Simon Coles

# YEAR 10 MATHS

Mathematics pathways at Ballarat High School:



### **CONTACT: Jaz Plinius-Wiese**

# Year 10 Foundation Mathematics

This subject is intended for students who have found Maths in Year 9 difficult and wish to build their foundational skill within Maths. It does not provide enough background for students to complete Year 11 General Mathematics. but students can move into Year 11 Foundation Maths as a Unit 1 & 2 subject, with the intent of also doing Year 12 Foundation Maths in 2023.

### Year 10 Foundation Maths

↓ leads onto studies in...

## Foundation Maths Unit 1 & 2

### Or

VCAL Numeracy Year 11

# Year 10 General Mathematics

This subject is the standard Victorian Curriculum Mathematics course. It is the subject that satisfies the requirements for all the VCE Mathematics courses available in Year 11 and 12. Students who wish to study a Year 12 Mathematics course need to enrol in either Year 10 General Mathematics or VCE General Mathematics.

Please note: It is advised that if students want to continue into Year 11/12 Methods or Specialist, they should instead choose Year 10 Math Methods

# Year 10 Math Methods

This subject is intended for students who have achieved very high results in Mathematics in Year 9 and wish to study Methods and Specialist Mathematics in their VCE. It provides enough background for students to complete Year 11 Math Methods and Specialist.

#### Please note: This subject runs for the whole year.

#### Pathways for these two subjects:

#### Year 10 General Maths and Year 10 Math Methods

↓ leads onto studies in...

#### Year 11 General Maths

(for students who have satisfactorily completed Year 10 General Maths)

#### Year 11 Math Methods 1/2

(for students who have demonstrated outstanding levels at Year 10 General Maths or Year 10 Math Methods. It is preferred that students complete 10 Methods for this pathway.)

#### Year 11 Specialist Maths 1/2

(for students who have demonstrated outstanding levels at Year 10 Maths Methods)

#### Year 12 Further Maths 3/4

(for students who have satisfactorily completed Year 11 General Maths)

#### Year 12 Math Methods 3/4

(for students who have satisfactorily completed Year 11 Math Methods)

#### Year 12 Specialist Maths 3/4

(for students who have satisfactorily completed Year 11 Specialist Maths)

# YEAR 10 PERFORMING ARTS

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Drama	Drama	Drama
	Theatre Studies	Theatre Studies	Theatre Studies
PERFORMING ARTS	Music Classroom	Music Performance:	Music Performance:
	Music Performance	Solo	Solo
	VET Certificate III Music Performance	VET Certificate III Music Performance	VET Certificate IV Music Performance

# **Music Classroom**

### **Course Outline**

This subject is intended for those students who wish to further develop their listening, creative and performing skills. Students will have the use of a fully equipped practical room consisting of drum kits, PA's, electric guitars, bass guitars and keyboards.

Students will develop skills through activities such as:

- Compositions
- Playing in class practical activities
- Studying basic music theory and writing
- Studying various music styles
- Music technology

### Assessment

Performance – any group performance will be assessed. Unit Tasks – includes listening, creative work and all work undertaken throughout the semester.

#### CONTACT: Damien Woods

### Music Performance

### **Course Outline**

• Students can do Music Performance through to Year 12. Almost any instrument can be studied (although the standard expected at Year 12 is quite high).

• Students doing Year 10 Music Performance should, therefore, be interested in pursuing Music through to Year 11 or 12 as well as furthering their skills in Year 10

• Students should be able to play an instrument at a reasonable standard – this would require a minimum of 2–3 years of study.

• As students must present a solo performance, they are strongly encouraged to have a teacher for their instrument. If students are not being taught at school, private lessons may be required.

• Examples include voice, guitar, electric bass, drum–kit, piano, brass and woodwind. Many of these are offered at school.

### Assessment

Practical: there are two areas of work: solo and group listening: development of aural skills Creativity: creating original music through improvisation, arranging music, and melody writing Performance: ensemble and solo performance to an audience Unit tasks: students will keep a workbook or folio of all classroom activities including the set theory work

### CONTACT: Damien Woods



### **Course Outline**

This is a practical performance based subject wherein students refine and extend their understanding of role, character, relationships and situation. They extend the use of voice and movement to sustain belief in character. They maintain focus and manipulate space and time, language, ideas and dramatic action. They experiment with mood/atmosphere, use devices such as contrast, juxtaposition and dramatic symbol as well as modify production elements to suit different audiences. Students continue to engage with diverse performance styles and ways of presenting drama, this includes seeing a live theatre performance for analysis.

The course is designed to develop life skills of communication, co–operation, leadership, use of initiative, self–confidence and self–discipline.

### Assessment

- Successful completion is based on: contributions to workshops, rehearsals and performances.
- Practical Workshop: Students must attend and participate in all practical classes.
- Performance: Students will present works to an audience
- Performance analysis of live theatre. It is expected that students will see at least one piece of theatre.

### **CONTACT: Jess Quick**

## **Theatre Studies**

### **Course Outline**

This is a practical subject wherein students will learn about various production roles and how they give shape to performance work. Students will gain skills in the design of: costume, lighting, set, props, sound, hair and make-up as well as examine how acting and direction are applied to interpret scripts. As they make and respond to Theatre, students explore meaning and interpretation, forms and elements and how Theatre can influence and challenge. They evaluate actors' and designers' success in expressing the directors' intentions in performances they view *and* present as well as identify characteristics of theatre styles.

The course is designed to develop skills related to both performance and technical aspects of theatre.

### Assessment

- Successful completion is based on: contributions to workshops, rehearsals and performances.
- Practical Workshop: Students must attend and participate in all practical classes.
- Assessment is based on a number of practical tasks and documentation via a workbook.
- Performance analysis of live theatre. It is expected that students will see at least one piece of theatre.

### **CONTACT: Jess Quick**

### **Certificate III in Music Performance**

### Description

In this subject, students will extend their music skills which will enhance their employment prospects within the Music Industry. Students who complete this program will obtain the expertise to compose and record their own music, work in a group and solo, improvisation, work at a music event, explore career options and understand copyright. The course runs for two years.

#### **Career Opportunities**

On completion of this course, you will have the opportunity to pursue an occupation in such areas as musician, music teacher, singer, songwriter or jingle writer, stage producer, music technician, stage manager, director or music editor, broadcaster, and disk jockey.

### **CONTACT: Damien Woods**

# YEAR 10 SCIENCE

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
	Biology	Biology	Biology
SCIENCE	Earth and space science	Environmental Science	Environmental Science (not offered in 2022)
	Chemistry	Chemistry	Chemistry
	Physics	Physics	Physics
		Psychology	Psychology

All students entering Year 10 must complete at least one semester of science. Students can complete more than one semester of science but should not choose the same subject twice. If Unit 1 & 2 of Psychology is undertaken at year 10, a semester of science is still required.



### **Course Outline**

Biology is the study of living things. It is the science which examines the way in which individual organisms function, how they are structured, and how they co–exist with other life on Earth. In addition, this subject introduces students to more in–depth analysis of biological issues, which affect them and their environment. This unit provides a sound basis for biological studies at higher levels.

#### Topics include:

- Structure of cells
- Genetics
- Inheritance
- Evolution

#### Assessment

- Practical work and reports
- Topic tests
- End of semester exam
- Reports and assignments

### **Chemistry**

### **Course outline**

Chemistry is the science that asks questions about materials, the differences between them, how they react with one another, and how heat or other forms of energy affect them. What is water made of? What happens when hydrogen burns? How are plastics made? All these questions are of interest to chemists. This unit is an introduction to chemical theory and techniques, as well as providing an insight into the study of Chemistry at higher levels.

### **Topics studied include:**

- Matter
- Formation of Compounds
- Writing of Chemical Equations
- Precipitation Reactions
- Atomic StructureChemical Change
- Acids and Bases
- Rate of Reactions

### Assessment

- Topic tests
- End of semester exam
- Lab reports

- Assignments and investigations
- Research project

### CONTACT: Elizabeth Kent

### Earth and space science

### **Course Outline**

This unit is an investigation of global systems and how humans impact on the environment. Scientists are working on solutions to the current issues of renewable energy resources and sustainability with some remarkable results, but further research is needed before all the problems are solved.

### Topics include:

- Climate change
- Biodiversity and the effects of human activity
- Global systems and cycles
- The greenhouse effect and global warming
- Cosmology & stars
- The universe

### Assessment

Wherever possible, topics will be introduced and developed by practical exercises and experiments. Assessment includes:

- Practical work and reports
- Investigations
- Topic tests
- End of semester exam
- Research investigations
- Reports and assignments

### **Physics**

### **Course Outline**

This subject introduces you to the study of Physics, its practical uses and some of the social issues it raises. Physics doesn't just happen in laboratories. It is all around you, in the school, home, farms and factories. It takes place deep inside the Earth and far out in space. You will find physics everywhere. **Topics include:** 

- Motion: speed, velocity and acceleration.
- Forces: speeding up and slowing down, gravity and weight, reaction forces.
- Energy: potential and kinetic energy, energy changes.
- Electro-magnetic radiation: production, uses and properties.
- Electricity: charges, currents, voltage, resistance and circuits.

### Assessment

Topics are covered through theory and practical work, research and investigations. Assessment includes:

- Topic tests
- End of semester exam
- Investigations
- Practical reports
- Research project

# YEAR 10 TECHNOLOGY

LEARNING AREA	YEAR 10	(Units 1 & 2)	(Units 3 & 4)
TECHNOLOGY	Product Design & Technology: Metal	VET Certificate II in Automotive (Light Vehicle Mechanics)	VET Certificate II in Automotive (Light Vehicle Mechanics)
	10 STEM	Systems Engineering Units 1 & 2	Systems Engineering Units 3 & 4 (not offered in 2022)
	Product Design & Technology: Wood	Product Design & Technology: Wood (not offered in 2022)	Product Design & Technology: Wood (not offered in 2022)
	Home Economics: Advanced Foods	VCE Food Studies	VCE Food Studies
	Home Economics: Food by Design		
	Home Economics: Food for Life		
	Textiles/Fashion Design & Production	Product Design & Technology: Textiles/Fashion Design	Product Design & Technology: Textiles/Fashion Design
	Digital Technologies - Programming & Data Analytics	Computing - Programming & Data Analytics	Information Technology - Software Development
			Information Technology- Data Analytics

## 10 Stem

### Course outline

Students learning focus will be on real world problem solving in the STEM disciplines. Students will develop their creative and critical thinking skills through the application of computer modelling, 3D printing, laser cutting, coding and electronics. They will develop both technical and Nontechnical skills with the aim to become self-directed learners. There is a strong emphasis on working collaboratively and linking with industry and Federation University.

### Assessment

- Folio Based
- Exam

### **CONTACT: Steve White**

## **Design and Technology: Metal**

### **Course Outline**

In Metal, students run through a program of skill building exercises to further enhance their metal–working techniques.

Topics covered include:

- Safe use of tools and equipment
- Steel fabrication
- Working from plans
- Pattern making
- Welding and design

### Assessment

- Skill building exercises
- Exam

CONTACT: Peter Every

## **Design and Technology: Wood**

### Course Outline

In Wood, students run through a program of skill building exercises to further enhance their wood–working techniques.

Topics covered include:

- Safe use of tools and equipment
- Product design
- Working from plans
- Pattern making
- Manufacturing

### Assessment

- Design brief
- Exam

CONTACT: Justin Bell

# Home Economics: Advanced Foods

### **Course Outline**

Students undertaking this course will be expected to develop advanced abilities in preparation, cooking and service of foods for formal functions. This course provides a broad grounding for students wishing to enter careers in catering, and can assist VCE Food Studies and also for those wishing to enter careers in catering.

Theory application includes nutrition, special dietary requirements, menu planning, time management, meal service, budgeting, sensory tasting & sustainability.

Areas of practical study will include:

- Garnishes and hors-d'oeuvres
- Fish, meat and poultry dishes
- Desserts

- Soups and entrees
- Vegetable preparation
- Cookery processes

### Assessment

- Design Plan Assessment
- Practical Assessment
- Written exam

**CONTACT:** Fiona Finnegan

## Home Economics: Food by Design

### **Course Outline**

This unit uses the technology process of investigate, design, produce and evaluate to introduce Year 10 students to concepts that are important in enabling them to build their food skills. Using the daily meal plan of breakfast, lunch and dinner, practical sessions will include interesting and challenging ways to prepare and cook suitable foods, developing important skills they will keep for life. The activities undertaken during this unit will extend students' knowledge, experiences, skills and understanding of many foods related topics. This will also help develop students' skills in solving problems, time management and decision making. This unit provides a broad grounding for students pathways in VCE Food Studies or VET Certificate II in Kitchen Operations (Ballarat Cluster).

### Assessment

- Design Tasks
- Worksheets
- Written exam

**CONTACT:** Fiona Finnegan

### Home Economics: Food for Life

### **Course Outline**

The primary focus of this unit is food and nutrition, incorporating the technology process for assessment. Topics such as 'nutrition', 'nutrition for adolescents', 'culinary terminology', 'factors influencing food choice', sustainability and 'meal planning' are incorporated into the unit.

Practical activities include muffin and pizza variations, souvlaki, apple custard tarts and lemon chicken with a bok choy stir fry just to name a few. The activities undertaken during this unit will not only extend students' knowledge, experiences, and skills but also provide an understanding of many food and nutrition related topics relevant to our society today. This unit will also help develop students' skills in solving problems, time management, decision making and understanding how to make good food choices. This unit provides a broad grounding for pathways for VCE Food Studies or VET Certificate II in Kitchen Operations (Ballarat Cluster).

### Assessment follows the Technology Process:

- Design Tasks
- Worksheets
- Written exam

**CONTACT:** Fiona Finnegan

# **Textiles/Fashion Design & Production**

### **Course Outline**

This course could be taken as a stand alone unit which would benefit students entering Graphics, Studio Arts, Textiles, Wood or Metal at VCE units 1, 2, 3 & 4. It is designed to extend student understanding of the design process. Students will undertake a series of exercises designed to build confidence and understanding of:

- CAD and freehand approaches to the design process.
- Folio development to promote and present design ideas.
- Effective planning and management of production activities.

### Assessment

### 1. Computer design

- Scanning processes
- Research & development techniques
- · Computer composite mood boards and client profiles
- · Layouts, presentation justifications, production plans & evaluation plans

### 2. Design and development

- The design elements and principles
- The product design process.
- Design briefs
- Development of evaluation criteria
- Research techniques
- Fashion illustration techniques
- Design development techniques
- Presentation techniques

#### 3. Textiles/fashion production

- Students will investigate traditional and new materials to determine appropriate qualities and processes
- Students will be introduced to a range of traditional and new techniques and processes which could be
- incorporated into production work
- Students will assess product design according appropriate to purpose and function
- · Students will undertake production activities related to their given work brief
- Student will investigate and apply the most appropriate quality finishes related to their product
- Production planning
- · Evaluation of final product and production activities

#### **CONTACT:** Fran Deutscher

# **Digital Technologies - Programming & Data Analytics**

### **Course Outline**

In Digital Technologies, students are actively engaged in the processes of analysing problems and opportunities, designing, developing and evaluating digital solutions, and creating and sharing information that meets a range of current and future needs. Students learn to safely and ethically exploit the capacity of information systems to create digital solutions. This course will have a dual focus on data analytics and programming. With data analytics students will use a range of software applications (such as databases, spreadsheets and other data systems) to analyse, visualise and model salient aspects of data. The programming aspect of the course will aim to develop specific coding skills as well as developing standard thinking routines used to develop problem solutions or algorithms. Throughout the course students will be encouraged to evaluate their solutions and information systems in terms of risk, sustainability and potential for innovation. Hardware and software concepts/issues will also be covered in the course.

### Assessment

- Networking, Hardware and Data Structure Test
- Folio of Application Tasks: Spreadsheets, Databases and other data repositories
- Website Project: Collaborative Google Site Evaluation of Risks and Sustainability Issues
- Folio of Programming Modules
- Semester Examination

### CONTACT: David Harradine

# **VCE ARTS**

### <u>Art</u>

ART is designed to introduce students to 'life' as a practising Artist. Each student will learn how to work through the Artistic process – working through or continuing with a specific theme, mediums or techniques to suit each individual student's needs. Students will explore ideas and demonstrate effective working methods as well as explore a range of technical skills. Students will develop skills in a variety of materials and techniques including painting, drawing, printmaking and mixed media. Students will also be trained to respond to art in an articulate and informed manner.

### **UNIT 1 – ARTWORKS, EXPERIENCE AND MEANING**

This unit focuses on artworks as objects and examines how structural qualities such as art elements, materials and techniques communicate meaning. Students examine the experiences and personal influences on various artists, and develop their own points of view about the meanings and messages of the studied artworks. In their own practical work, students explore the characteristics and qualities of materials and develop technical skills as well as exploring areas of personal interest to generate their own artworks. Students maintain a folio of experimentation and visual responses to set tasks and are encouraged to explore a variety of styles in their own artmaking.

### **UNIT 2 – ARTWORKS AND CONTEMPORARY CULTURE**

In this unit students become aware that artworks can be created as forms of cultural expression for specific contexts, and discuss the differing roles and purposes of art in these contexts. Students identify ways in which art expresses and reflects culture as well as the different ways contemporary artists communicate ideas. In their practical work, students continue to explore techniques and develop personal and creative responses in their art making. They explore the effects on their own artwork of cultural contexts and social attitudes to art.

#### **UNIT 3- ARTWORKS, IDEAS AND VALUES**

Students work on their own practical folio across both units 3 and 4, producing at least one finished artwork in Unit 3. Students work as if they are a practising artist; developing their own ideas, letting them evolve, reflecting and evaluating and then resolving ideas into finished artworks.

In Unit 3, students study artists to look for specific meanings and messages within the artworks being studied, make comparisons and judgements about the artworks and students are encouraged to interpret their own meanings and messages from within the artworks studied.

#### **UNIT 4- ARTWORKS, IDEAS AND VIEWPOINTS**

In Unit 4, students continue to work on their own practical folio, refining and resolving their ideas into an additional final artwork.

In Unit 4, students study art issues such as street art and public art and form their own opinion on these issues based on their research. Students explore the way that art can change the way that people think, while also reflecting societal issues and ideas.

### **CONTACT: Kaitlyn Fry**

## **Studio Arts**

Studio Arts is designed to provide students with the opportunity to specialise in a particular art form because of special interest or career aspiration or to prepare for further Art based studies at a tertiary level. Studio Arts has been divided into 2 major separate Art practices. These will run as separate courses as outlined below:

- Studio Arts: Photography Unit 1 and 2 / Unit 3 and 4
- Studio Arts: Painting, Drawing and 3D Unit 1 and 2 / Unit 3 and 4

### Therefore, you can ONLY select to do -

Units 1 & 2 Photography <u>OR</u> Units 1 & 2 Painting, Drawing and 3D Units 3 & 4 Photography <u>OR</u> Units 3 & 4 Painting, Drawing and 3D

Students who wish to study art forms such as painting, drawing and ceramics *as well as* photography must therefore choose 'Studio Art: Photography' and 'Art'.

Careful consideration will need to be given when deciding the choice of which Studio Arts course a student will undertake. It is recommended that you follow through with your choice of Art form from Unit 1 & 2 into Units 3 & 4, giving you the advantage of very well developed skills and ideas for Units 3 & 4, where more independent study is required. In Studio Arts, art forms could include Painting, Drawing, Printmaking, Sculpture, Ceramics and related processes such as airbrushing, collage and mixed media.

### **UNIT 1 – STUDIO INSPIRATION AND TECHNIQUES**

The focus is mainly on methods of developing and documenting ideas and inspirations. Students will also develop skills in using various art materials and techniques. By experimenting with a variety of art materials, students can decide which art form/s they are interested in so they can develop their skills further in future. This will be achieved by responding to different topics, such as portraits, landscapes and still life, in a variety of ways, and recording their findings in a WORKBOOK. These workbook experiments will then lead to some finished artworks which will form a FOLIO. Students are required to study current and past artists, their inspirations, subject matter, techniques and materials, and to submit this as written research.

### **UNIT 2 – STUDIO EXPLORATION AND CONCEPTS**

The focus of this unit is to explore the process of designing and making a finished artwork, from initial inspiration and trialling, through to completed artwork. Students will explore how art elements affect the communication of ideas within an artwork. Students will study how established artists communicate ideas and meaning within their artwork.

### **UNIT 3 – STUDIO PRACTICES AND PROCESSES**

The focus of this unit is to develop ideas and specific art techniques that will be used to create a folio of finished artworks in Unit 4. Students will select their own theme for this exploration, write a plan for how they will develop their ideas and art skills, and then follow through with this plan, presenting all this exploration work in a folio. Students will study how established artists develop ideas, use specific materials and techniques and develop their own unique style of art.

### UNIT 4 – STUDIO PRACTICE AND ART INDUSTRY CONTEXTS

**The focus of this** Unit is to create a Folio of finished artworks based on the ideas and trials developed in Unit 3. The aim is to refine skills and imagery to complete artworks which demonstrate a high level of skill. Students will also study the art industry, including all aspects involved in the exhibition of artworks in a professional Art Gallery.

**CONTACT: Kaitlyn Fry** 

# Studio Arts: Photography

The art form studied in this course is photography and its related processes. Students will be able to explore their interests in Digital SLR photography, image processing and printing techniques– including some black and white film photography and darkroom techniques.

### **UNIT 1 – STUDIO INSPIRATION AND TECHNIQUES**

The focus is mainly on methods of developing and documenting ideas and inspirations. Students will also develop skills in using various art materials and techniques. This will be achieved by responding to different topics, such as portraits, landscapes and still life, in a variety of ways, and recording their findings in a workbook. These workbook experiments will then lead to some finished artworks which will form a folio.

### **UNIT 2 – STUDIO EXPLORATION AND CONCEPTS**

The focus of this unit is to explore the process of designing and making a finished artwork, from initial inspiration and trialling, through to completed artwork. Students will explore how art elements affect the communication of ideas within an artwork. Students will study how established artists communicate ideas and meaning within their artwork.

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**CONTACT: Kaitlyn Fry** 

# <u>Media</u>

Students take an analytical and creative approach to studying aspects of the media, ranging from film, television, radio, internet and print. They will have the opportunity to explore texts from different eras as well as creating their own media products.

### **UNIT 1 – MEDIA FORMS, REPRESENTATIONS AND AUSTRALIAN STORIES**

In this unit you will learn about how images are presented, related and ordered. Also the codes and conventions involved in creating images will be explored. The equipment used to produce images will be examined and used by you to create a media product.

### **UNIT 2 – NARRATIVE ACROSS MEDIA FORMS**

You will discover how the TV News is constructed and how newspapers are produced, and gain experience in developing your own product.

### **UNIT 3 – MEDIA NARRATIVES AND PRE-PRODUCTION**

You will study two films and learn how to analyse the various components. You will devise a project of your own and design a plan for it. While doing this you will gain the appropriate technical expertise to complete your project in Unit 4.

### UNIT 4 - MEDIA PRODUCTION AND ISSUES IN THE MEDIA

You will complete your project and examine the influence of the media on society.

### **CONTACT: Jamie Greenwood**

### **Visual Communication Design**

Visual Communication focuses on the development of design skills and can be of benefit to students with an interest in any design field. Graphic, Industrial, Product, Architectural, Interior, Landscape, Fashion, Web and are some examples. Students work through practical projects to develop drawing, illustration and presentation skills, including the use of digital techniques and processes. They also study the vocabulary and grammar of visual communication, which includes an understanding of, and application of drawing and drawing convention, design elements, and principles and function of design in communication.

### **UNIT 1 – INTRODUCTION TO VISUAL COMMUNICATION DESIGN**

Students focus on the development of essential drawing skills, the use of the design elements and principles through design projects and explore the historical and cultural factors which impact on design.

### UNIT 2 – APPLICATIONS OF VISUAL COMMUNICATION DESIGN

Students study Technical Drawing, Typography and undertake a series of advanced design projects. **UNIT 3 – DESIGN THINKING AND PRACTICE** 

Students analyse the professional practice of existing designers from a variety of fields and use this learning to inform and refine their own design process. Students establish a plan for their major design task in unit 4.

### **UNIT 4 – DESIGN DEVELOPMENT AND PRESENTATION**

Students engage in a highly developed design process from initial brainstorming through to final presentation. They then pitch their designs to the class.

### **CONTACT: Jack Marshall**

# **VCE ENGLISH**

### Year 10 students are unable to select VCE English subjects.

## **English**

English is concerned with enhancing a student's communication skills through the modes of reading, writing and speaking.

**UNIT 1:** In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts and create their own texts to position audiences.

**UNIT 2:** In this unit, students compare the presentation of ideas, issues and themes in texts. They analyse arguments presented and the use of persuasive language in texts and create their own texts intended to position audiences.

**UNIT 3:** In this unit, students read and respond to texts analytically and creatively. They analyse arguments and the use of persuasive language in texts.

**UNIT 4:** In this unit, students compare the presentation of ideas, issues and themes in texts. They create an oral presentation intended to position audiences about an issue currently debated in the media.

### English Language

This study aims to combine learning about the nature of language in human thought and communication with learning how to use English more effectively and creatively. It is informed by the discipline of linguistics and integrates a systematic exploration of the nature of the English Language. Students develop skills in the description and analysis of a diverse range of spoken and written English texts.

**UNIT 1 & 2:** Language and communication and Language change: The use of language is an essential aspect of human behaviour, the means by which individuals relate to each other and to their own particular communities. Unit One is concerned with the nature and functions of language and the way language is organised so that it provides its users with the means by which they can make sense of their experience and have contact with others. Unit 2 looks at the inevitability and the continual process of change. The unit explores the development of English in its many forms.

**UNITS 3 & 4:** Language variation and social purpose and Language variation and identity: these units can be studied without having studied Units One and Two. They involve extensive study of how people use language and what can be learnt about people and their background from the way they use language, how they write and how they speak. There is scope to examine film and television, the print media, advertising, letters, speeches, extracts from literature, indeed any area where language, in whatever form, is used.

### **Literature**

The study of Literature is based on the enjoyment and appreciation of reading that comes from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations of texts and the views others hold. The subject requires a strong commitment to the set reading and covers a range of forms including film, novels, plays, short stories and poetry. The study of literature encourages independent and critical thinking in students' analytical and creative responses to texts, which will assist students in the workforce and in future academic study.

### **UNIT 1 - Approaches to Literature**

This unit focuses on how literature represents human experience and is designed to allow students to develop practices that deepen their understanding of a text. Narrative, characterisation, structure and language of literary texts are all explored.

### **UNIT 2 - Context & Connections**

The focus of this unit is on students' critical and creative responses to texts. Students explore the contexts and forms of literary works and how these affect their meanings and ideas.

### **UNIT 3 - Form & Transformation**

This unit focuses on the ways writers construct their work and how meaning is created for and by the reader. Students consider how the form of text (such as poetry, prose, drama, nonprint or combinations of these) affects meaning, the ways texts represent views and values and the social, historical and cultural contexts of literary works.

### **UNIT 4 - Interpreting Texts**

This unit focuses on students' creative and critical responses to texts. Students consider the context of their responses as well as the concerns, the style of the language and the point of view in their re-created or adapted work. Students develop an interpretation of a text and learn to shape their insights into a clear, substantiated response.

### **CONTACT: Patrick Stewart**

# **VCE HAPE**

### Health & Human Development

### UNIT 1: UNDERSTANDING HEALTH AND WELLBEING

This unit looks at health and wellbeing as a concept with varied and evolving perspectives and definitions. It takes the view that health and wellbeing are subject to a wide range of contexts and interpretations, with different meanings for different people. As a foundation to the understanding of health, students should investigate the World Health Organization's (WHO) definition and also explore other interpretations. With a focus on youth, students consider their own health as individuals and as a cohort.

Area of Study 1 - Health perspectives and influences Area of Study 2 - Health and nutrition Area of Study 3 - Youth health and wellbeing

### UNIT 2: MANAGING HEALTH AND DEVELOPMENT

This unit investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations that are part of the progression from youth to adulthood. This unit promotes the application of health literacy skills through an examination of adulthood as a time of increasing independence and responsibility, involving the establishment of long-term relationships, possible considerations of parenthood and management of health-related milestones and changes. Students make inquiries into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies.

Area of Study 1 - Developmental transitions Area of Study 2 - Health care in Australia

### UNIT 3: AUSTRALIA'S HEALTH IN A GLOBALISED WORLD

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). They focus on health promotion and improvements in population health over time. Students look at various public health approaches and the interdependence of different models as they research health improvements and evaluate successful programs.

Area of Study 1- Understanding health and wellbeing Area of Study 2 - Promoting health and wellbeing

### UNIT 4: HEALTH AND HUMAN DEVELOPMENT IN A GLOBAL CONTEXT

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development. They look at global action to improve health and wellbeing and human development, focusing on the United Nations' (UNs') Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO).

Area of Study 1- Health and wellbeing in a global context Area of Study 2 - Health and the Sustainable Development CONTACT: Mark Verberne, Heather Kearle, Steph Kallio

# **Outdoor Education and Environmental Studies**

It is recommended that students who wish to undertake OES, complete it in Year 10 and Year 11 to minimise the impact on Year 12 studies.

### UNIT 1: EXPLORING OUTDOOR EXPERIENCES

Students will examine motivations for and responses to nature and outdoor experiences. They investigate a range of contemporary uses and meanings of the term 'nature', and examine a variety of different types of outdoor environments. Students are introduced to a cultural perspective on the ways humans relate to nature. Camp: Anglesea \$250 (Approx)

#### Area of study 1

Motivations for outdoor experiences Area of study 2 Influences on outdoor experiences

### **UNIT 2: DISCOVERING OUTDOOR ENVIRONMENTS**

Students are introduced to a variety of outdoor environments from a number of perspectives. They develop appropriate practical skills for safe and sustainable participation in outdoor experiences.

### Area of study 1

Investigating outdoor environments

#### Area of study 2

Impacts on outdoor environments Camp: Rubicon \$300 (Approx)

### **UNIT 3: RELATIONSHIPS WITH OUTDOOR ENVIRONMENTS**

Students explore how Australians have understood and interacted with outdoor environments over time. Students examine the unique nature of Australian outdoor environments and investigate a range of human relationships with outdoor environments, from various Indigenous cultural experiences, through to the influence of a number of major events and issues subsequent to European settlement. They also study the social, cultural, economic and political factors that influence these relationships between humans and the environment.

#### Area of study 1

Historical relationships with outdoor environments

#### Area of study 2

Relationships with Australian environments since 1990 Camp: Grampians rock climbing trip \$200 (Approx)

#### **UNIT 4: SUSTAINABLE OUTDOOR RELATIONSHIPS**

Students explore the contemporary state of environments in Australia and the importance of natural environments for individuals and society. They examine the nature of sustainability and evaluate the health of outdoor environments. Students also focus on the sustainability of environments in order to support the future needs of ecosystems, individuals and society, and the skills needed to be an environmentally responsible citizen.

#### Area of study 1

Healthy outdoor environments

#### Area of study 2

Sustainable outdoor environments Camp: Falls Creek Snow trip \$700-\$800 (Approx)

#### **CONTACT: Michael Sordello**

## **Physical Education**

### **UNIT 1: HUMAN BODY IN MOTION**

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

Area of Study 1 - How does the musculoskeletal system work to produce movement? Area of Study 2 - How does the cardiorespiratory system function at rest and during physical activity?

### UNIT 2: PHYSICAL ACTIVITY, SPORT AND SOCIETY

This unit develops students' understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people's lives in different population groups. Through a series of practical activities, students experience and explore different types of physical activity promoted in their own and different population groups. They gain an appreciation of the level of physical activity required for health benefits. Students investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence and facilitate participation in regular physical activity.

Area of Study 1 - What are the relationships between physical activity, sport, health and society? Area of Study 2 - What are the contemporary issues associated with physical activity and sport

### UNIT 3: MOVEMENT SKILLS AND ENERGY FOR PHYSICAL ACTIVITY

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

Area of Study 1 - How are movement skills improved?

Area of Study 2 - How does the body produce energy?

### **UNIT 4: TRAINING TO IMPROVE PERFORMANCE**

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/ or coach to gain, apply and evaluate knowledge and understanding of training.

Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program. Area of Study 1 - What are the foundations of an effective training program? Area of Study 2 - How is training implemented effectively to improve fitness?

### **Contacts: Michael Sordello and Jill Muir**

# **VCE HUMANITIES**

### **Accounting**

### **UNIT 1 - ROLE OF ACCOUNTING IN BUSINESS**

In this unit students explore the various reasons why people establish their own business, ownership structures and factors that relate to the success of failure of a business. Students then look at the role accounting and the significant role accounting has in the success of failure of a business. Students also look at ways to record and report accounting information, including both manual and ICT methods.

### **UNIT 2 - ACCOUNTING AND DECISION-MAKING FOR TRADING BUSINESSES**

In this unit, students record, analyse and evaluate business performance related to inventory, accounts receivable, accounts payable and non-current assets. Students study and discuss the possible effects of financial and non-financial information in regards to inventory, including ethical considerations. Students also study strategies for recording and reporting transactions in relation to accounts receivable and accounts payable and must consider the ethical considerations involved in managing accounts.

### **UNIT 3 - FINANCIAL ACCOUNTING FOR A TRADING BUSINESS**

In this area of study students develop an understanding of the accounting processes for non-current assets and the issues that can arise when determining a valuation for a non-current asset. Students calculate and apply depreciation using the straight-line method and undertake recording and reporting of depreciation.

### **UNIT 4 - RECORDING, REPORTING, BUDGETING AND DECISION MAKING**

In this unit students further develop their understanding of accounting for a trading business owned by a sole proprietor and the role of accounting as an information system. Students use the double entry system of recording financial data, and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Both manual methods and ICT are used to record and report.

# **Business Management**

VCE Business Management examines the way businesses manage resources to achieve their objectives. Students develop an understanding of the challenges, complexity and rewards that come from managing a business.

### UNIT 1 – PLANNING A BUSINESS

This unit provides an opportunity for students to explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

### **UNIT 2 – ESTABLISHING A BUSINESS**

Students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping.

### UNIT 3 - MANAGING A BUSINESS

In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these.

### **UNIT 4 – TRANSFORMING A BUSINESS**

In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance.

## History – Twentieth Century

This unit allows students to examine some of the world's major political, economic and cultural events in the twentieth century.

### UNIT 1: TWENTIETH CENTURY HISTORY (1900-1945)

1900 to 1945 in Europe can be considered an exciting time because of the many social, political and economic changes that occurred. Many of these changes led to conflicts between individuals and nations. Through a study of Europe in 1914 at the beginning of and during World War 1 and the rise of Hitler and Germany during World War 2 students can come to understand the issues and events, which have shaped the modern world. Students study the conflicts during World War 1, the changes to German society in the 1930's, the influence of propaganda and the issues of the Holocaust complicity.

### Areas of Study:

· Crisis and conflict · Social life · Cultural expression

### UNIT 2: TWENTIETH CENTURY HISTORY (1945-2000)

This unit allows students the opportunity to investigate major themes and principal events of post war history: the Cold War, the Vietnam War, the emergence of social movements such as the Black Civil Rights movement and peace movements, the collapse of the Soviet bloc, the end of apartheid and the development of organisations such as the European Union and the North American Free Trade Agreement (NAFTA).

### Areas of Study:

· Ideas and political power · Movements of the people · Issues for the millennium

### History – Revolutions

Revolutions have always tried to destroy regimes that do not represent the interests of its people. They quickly try to build new societies or governments but in so doing cause destruction and construction, dispossession and liberation. As processes of dramatically accelerated social change, revolutions have a profound impact on the country in which they occur, as well as important international repercussions. Students will examine a number of issues related to revolutions. What was the cause of the revolution and what led to a loss of confidence in the previous government? With the collapse of the old order what revolutionary ideas or movements will replace it? What roles do individuals play in change? What difficulties were faced in changing society?

Units 3 & 4 – Students will study two out of the following four- the Russian and the Chinese Revolution.

### Areas of Study:

- Causes of Revolution
- Consequences of Revolution

## **Philosophy**

### **UNIT 1 – EXISTENCE, KNOWLEDGE AND REASONING**

What is knowledge? Do we have free will? What does it mean for something to be good? What is justice? These are some of the fundamental questions which have engaged students of philosophical enquiry over millennia, and they are just as relevant today. This Unit begins the journey to explore the philosophical concepts and processes behind such questions.

#### Areas of Study

- Metaphysics Self and Identity, Mind and Body.
- · Epistemology the nature and sources of knowledge, rationalism and empiricism
- Introduction to philosophical reasoning

### **UNIT 2 – QUESTIONS OF VALUE**

This area of study explores practical philosophical issues relevant to living in the contemporary world.

#### Areas of Study

- Ethics & moral philosophy meta-ethics, normative ethics and applied ethics
- Further problems in value theory a negotiated area of study
- · Techniques of philosophical reasoning

### **UNIT 3 – MINDS, BODIES AND PERSONS**

This unit considers basic questions regarding the mind and the self through two key questions: Are human beings more than their bodies? Is there a basis for the belief that an individual remains the same person over time?

### Areas of Study

- Minds and Bodies: Armstrong, Descartes, Plato
- Personal Identity: Conze, Hume, Locke and Santidev.

### UNIT 4 – THE GOOD LIFE

This unit explores ideas concerning the nature of the good life as developed by ancient and modern philosophers, and encourages students to compare these ideas with the notions of the good life in traditions with which they may be familiar. We will look at the answers that different philosophical traditions give to the question, 'Is there a purpose, or meaning to life?'

#### Areas of Study

- Ancient Greek conceptions of the good life: Socrates, Plato, Aristotle
- · Living the good life in the 21st century: Nietzsche, Singer

### **Legal Studies**

VCE Legal Studies is an introduction to the study of Australian law. It looks at how law affects us in our everyday lives and what our rights and responsibilities are. We study both criminal and civil law and how cases are presented in court.

### UNIT 1 – GUILT AND LIABILITY

This unit focuses on the importance of criminal and civil law in protecting the rights of individuals. Students study the foundations of criminal and civil law, the presumption of innocence, civil liability and will be required to apply these concepts to case studies.

### **UNIT 2 – SANCTIONS, REMEDIES AND RIGHTS**

This unit focuses on what occurs once an individual's rights have been infringed. Students are required to study at least two criminal and two civil cases, in depth, and make judgements about sanctions and remedies. Students will also study a number of ways in which rights are protected in Australia and compare this to one other country.

### **UNIT 3 – RIGHTS AND JUSTICE**

This unit explores both the Victorian criminal justice system and the Victorian Civil justice system. Students discuss the principles of justice, fairness, equality and access and the key concepts of each justice system.

### UNIT 4 – THE PEOPLE AND THE LAW

In this unit, students take a closer look at the relationship between the people and the Australian Constitution. Students will discuss the significance of High Court cases and the role of the courts and parliament in creating and interpreting the law.

# **VCE LANGUAGES**

### <u>German</u>

German is the most widely spoken language in Europe. It is spoken by 100 million native speakers in Germany, Austria, Switzerland and bordering areas. Another 20 million native speakers of German live in countries in and outside Europe. German has always had a strong standing as a language for science and technology. Every seventh publication in the world is in German. Economists predict that German will soon be one of the major trading languages in the world. It is already a leading trading language in the European community. Germany is Australia's fourth largest trading partner. Also German forms part of the Australian cultural heritage. It is marked as a priority language in the national Languages Policy. There is a notable community interest in reviving the knowledge of German.

#### Unit 1

In Unit 1, students study topics related to everyday life. This may include family, sport and health, or school. They demonstrate their increased understanding of German through assessments such as listening tests, an interview and reading comprehension.

### Unit 2

In the second semester of Year 11, students study German cities, the environment or fairy tales. They continue to develop their ability to communicate in German in both spoken and written forms. Possible assessments include a journal entry, an interview or a formal letter.

#### Unit 3

In Unit 3, students begin their detailed study. In School Assessed Coursework they write a 250 word personal or imaginative piece. They also analyse and use information from spoken texts and complete a 3 to 4 minute role play.

### Unit 4

In this unit, students are preparing for the end of year oral and written exams. School Assessed Coursework includes a 3 to 4 minute interview and a 250–300 word persuasive, informative or evaluative piece.

### CONTACT: Dani Bjelanovic

### <u>Japanese</u>

Japanese is spoken by over 120 million people and Japan is one of Australia's largest trading partners. Japanese language and cultural sensitivity is vital for a growing number of employers. Learning a foreign language, and particularly an Asian language, can give a student an advantage ahead of other applicants seeking employment, not only for their ability to communicate in another language, but for their proven capability to learn one. Australians' interest in Japanese cuisine, lifestyle and culture (such as martial arts, sports and flower arranging) is growing rapidly, and so learning this language provides opportunities to expand a student's interest.

### Unit 1

Students develop an understanding of the language and culture of Japanese speaking communities. They consolidate and extend vocabulary and grammar knowledge and language skills through interviews or conversations, listening to authentic texts, and creating written presentations.

### Unit 2

This unit focuses on analysing visual, spoken and written texts as well as learning about significant figures that have contributed to Japanese culture or society. Outcomes focus on interpreting and differentiating between general and specific meaning.

### Unit 3

In this unit students investigate the way Japanese speakers interpret and express ideas, negotiate and persuade. Students consider the influence of language and culture in shaping meaning. Assessment takes the form of negotiation role plays, interpreting information and expressing ideas through personal writing.

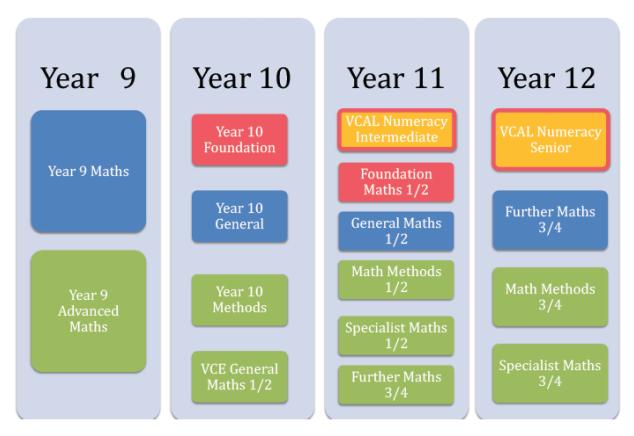
### Unit 4

In the final unit students research and present information on an aspect of Japanese culture or life. Students research specific content, language and information related to the area of study, and also analyse and present information extracted from a variety of texts. The final assessment involves students writing evaluative or persuasive texts, followed by end of year exams.

### **CONTACT: Simon Coles**

# **VCE MATHS**

### **CONTACT: Jaz Plinius-Wiese**



Mathematics is a study of function and pattern in number, logic, space and structure, and of randomness, chance, variability and uncertainty in data and events. It provides a symbolic communication that is powerful, logical, concise and unambiguous and a means by which people can understand and manage the environment.

There are four mathematics subjects offered at VCE Units 1 and 2 level:

- Foundation Mathematics 1 & 2
- General Mathematics 1 & 2
- Mathematical Methods 1 & 2
- Specialist Mathematics 1 & 2

There are three Mathematics subjects offered at the VCE Units 3 and 4 level:

- Further Mathematics 3 & 4
- Mathematical Methods 3 & 4
- Specialist Mathematics 3 & 4

Please note: Foundation Mathematics 3/4 (Year 12) is set to be introduced into the Maths study design in 2023. This should be an available pathway for the Year 10 students of 2021.

## **Units 1 & 2 Foundation Mathematics**

In Foundation Mathematics there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study. It is recommended for students who may still require VCE maths but have not coped with Year 10 General Mathematics.

### Areas of Study:

- Space, Shape and Design
- Patterns and Number
- Data
- Measurement

### **Units 1 & 2 General Mathematics**

General Mathematics is designed to prepare students for Further Mathematics 3 & 4; however it can also be taken by students who only wish to study two units of mathematics in their VCE.

Students intending to study Specialist Mathematics in Year 11 and 12 are strongly advised to select VCE General Mathematics in Year 10.

### Areas of Study:

- Statistics
- Networks
- Financial Arithmetic
- Matrices
- Measurement
- Trigonometry

### **Units 1 & 2 Mathematical Methods**

Mathematical Methods 1 & 2 is designed as a preparation for Mathematical Methods 3 & 4. Students will develop CAS technology skills and apply these to solve mathematical applications. There is a strong emphasis in the course on Graphing and Algebra.

#### Areas of Study:

- Functions and Graphs
- Algebra
- Calculus
- Probability

## **Units 1 & 2 Specialist Mathematics**

Specialist Mathematics 1 & 2 is designed as a preparation for Specialist Mathematics 3 & 4. Students will be introduced to topics like complex numbers, vectors and conics which will be developed further the following year. intending to study Specialist Mathematics 3/4 in Year 12 must concurrently study Mathematical Methods 3/4. These students must study Mathematical Methods 1/2 in Year 11 and it is highly recommended they concurrently study Specialist Maths 1/2.

### Areas of Study:

- Algebra and structure
- Arithmetic and number
- Geometry, measurement and trigonometry
- Graphs of non-linear relations
- Statistics

### **Units 3 & 4 Further Mathematics**

This is the main mathematical course studied for Year 12. Further Mathematics 3 & 4 has a prescribed core of Data Analysis and Recursion & Financial Modelling plus two modules selected from:

### Areas of Study:

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

### Units 3 & 4 Mathematical Methods

Mathematical Methods Units 3 and 4 are completely prescribed and extend the introductory study of simple elementary functions of a single real variable, to include combinations of these following areas of study:

#### Areas of Study:

- Functions & Graphs
- Algebra
- Calculus
- Probability & Statistics

## **Units 3 & 4 Specialist Mathematics**

This subject is an extension of many of the topics covered in Specialist Maths 1 & 2 and must be studied concurrently with Methods 3 & 4.

### Areas of Study:

- Vectors
- Complex Numbers
- Circular Functions
- Differentiation
- Integration
- Kinematics
- Differential Equations
- Dynamics

Please note: Students intending to study Specialist Mathematics 3/4 in Year 12 must concurrently study Mathematical Methods 3/4. These students must study Mathematical Methods 1/2 in Year 11 and it is highly recommended they concurrently study Specialist Maths 1/2.

# **VCE PERFORMING ARTS**

### Music Performance (Solo Performance)

This subject is for instrumentalists / singers who would like to continue developing on their instrument as part of their school study. These students can pursue an enormous range of options from bagpipes, electric bass and violin to modern vocal. Students MUST have a teacher from within or outside the school. In the five periods, students work on performances (solo and group), developing their aural/listening skills, creative work and investigating music styles. Being able to read music is an advantage in the aural section of the course. Because units 1 and 2 measure improvement, it is easier to do year 11 than year 12 (where very high standards are set.) Students should see Mr. Woods before selecting to do units 3 and 4.

### UNITS 1 & 2

You will focus on improving on your solo instrument. The grade you receive will reflect this growth. You will perform in groups, develop listening skills (aural), engage in a range of creative activities (composing, arranging, improvising) and investigate musical styles. All assessments are carried out by the school.

### UNITS 3 & 4

The school assesses 30% of the final mark, 50% is assessed on the solo performance externally, 20% aural and written test assessed externally. The solo performance is graded by an external examiner based on absolute standards.

### **CONTACT: Damien Woods**

### **Certificate III in Music Performance**

### Description

In this subject, students will extend their music skills which will enhance their employment prospects within the Music Industry. Students who complete this program will obtain the expertise to compose and record their own music, work in a group and solo, improvisation, work at a music event, explore career options and understand copyright. The course runs for two years.

### **Career Opportunities**

On completion of this course, you will have the opportunity to pursue an occupation in such areas as musician, music teacher, singer, songwriter or jingle writer, stage producer, music technician, stage manager, director or music editor, broadcaster, and disk jockey.

### **CONTACT: Damien Woods**

### **Certificate IV in Music Performance**

### Description

This course offers a broadening experience for students and provides training in practical skills and background knowledge related to the music industry. It extends their knowledge of the music industry including its commercial aspects, copyright and OH&S issues. The course runs for one year.

More specifically this course aims to give students the opportunity to achieve the following outcomes:

- · Music performance and presentation before live audiences
- Progress to higher level tertiary studies in music and employment opportunities in the music industry

#### **Career Opportunities**

There are a number of employment opportunities resulting from this course, and graduates can look forward to careers in the music industry, in roles that include performing, recording or multimedia music production.

#### **CONTACT: Damien Woods**

### VCE Drama

The study of Drama both continues and introduces skills and activities associated with performance Drama, such as role play, solo performance, and ensemble work. It also involves the examining of theatre styles through theatre excursions so there will be some cost involved.

#### **UNIT 1– DRAMATIC STORYTELLING**

You will develop characters from theatre history and modern situations and transform these into performance in both group and solo activities.

### **UNIT 2 – CREATING AUSTRALIAN DRAMA**

Here you will use play scripts to create and present dramatic performances, as well as analyse the work of professional theatre companies.

#### **UNIT 3 ENSEMBLE PERFORMANCE**

You will work as an ensemble and perform to explore non-realistic drama.

#### **UNIT 4 – SOLO PERFORMANCE**

In this unit you will study theatre history and select from a list of topics, develop a solo performance.

#### CONTACT: Jess Quick

## **VCE Theatre Studies**

You will study the traditions, styles, conventions and crafts of theatre. It also involves the examining of theatre styles through theatre excursions so there will be some cost involved.

### Areas of Study

### UNIT 1 – THEATRICAL STYLES OF THE PRE-MODERN ERA

Stagecraft in this unit forms the basis by which students learn to realise play scripts. Stagecraft includes equipment and materials, design, construction, artistic and business management. You will focus on works prior to the 1880s.

### **UNIT 2 – THEATRICAL STYLES OF THE MODERN ERA**

You will focus on plays from the 1880s to the present. Here you will explore a range of performance styles and the theatrical conventions that are appropriate to these styles.

#### **UNIT 3 – PRODUCTION DEVELOPMENT**

Here you will produce a play or excerpts to explore the production process.

#### **UNIT 4 – PERFORMANCE INTERPRETATION**

You will select a monologue from a prescribed text and develop it to performance.

### CONTACT: Jess Quick

# **VCE SCIENCE**

### **Biology**

### UNIT 1: HOW DO ORGANISMS REGULATE THEIR FUNCTIONS?

In this unit students examine the cell as the structural and functional unit of life, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation. They explore how systems function and consider the role of homeostasis.

### UNIT 2: HOW DOES INHERITANCE IMPACT ON DIVERSITY?

In this unit students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They examine chromosomes, alleles, epigenetic factors and environment influences on gene expression. Students analyse the advantages and disadvantages of sexual and asexual reproduction including cloning technologies. They also study adaptations that enhance an organism's survival. They consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding the survival of organisms in the Australian ecosystem.

### **UNIT 3: HOW DO CELLS MAINTAIN LIFE?**

In this unit students explore the relationship between nucleic acids (that make up DNA and RNA0 and proteins as key molecules in cellular processes. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies. Students also investigate the biochemical pathways of photosynthesis and cellular respiration.

### UNIT 4: HOW DOES LIFE CHANGE AND RESPOND TO CHALLENGES?

In this unit students consider the continual change and challenges to which life on Earth has been, and continues to be, subjected to. They study the human immune system and how application of biological knowledge can be used to respond to bioethical issues and challenges related to disease. Students examine the evidence for relatedness between species and change in life forms over time including human evolution.

### **Chemistry**

Chemical processes have led to new drugs, synthetic materials, biotechnology, microelectronics, new forms of food preservation, fuels, transportation and communication systems. Chemical processes are important in improving human health, preventing environmental problems and rehabilitating degraded environments.

### UNIT 1 - HOW CAN THE DIVERSITY OF MATERIALS BE EXPLAINED?

In this unit students focus on the nature of chemical elements, their atomic structure and their place in the periodic table. Students will also investigate the nature of metals and their properties, including metallic nanomaterials. Fundamental quantitative aspects of chemistry are introduced.

### UNIT 2 - WHAT MAKES WATER SUCH A UNIQUE CHEMICAL?

This unit introduces the role of water in the environment and the principles of green chemistry. Acid–base and redox reactions are developed, and the use of chemical calculations is extended. Students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis.

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

In this unit students focus on the options for energy production and how can the yield of a chemical product can be optimised

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

In this unit students investigate how the diversity of carbon compounds are explained and categorised, and the chemistry of food

# **Environmental Science**

VCE Environmental Science enables students to explore the interrelationships between Earth's four systems. Students examine how past and current human activities affect the environment and how future challenges can be managed sustainably. In undertaking this study, students gain an understanding of the complexity of environmental decision-making, and how innovative responses to environmental challenges can reduce pressure on Earth's natural resources and ecosystem services. In VCE Environmental Science students develop a range of inquiry skills involving practical experimentation and research, analytical skills including critical and creative thinking, and communication skills.

### UNIT 1 - HOW ARE EARTH'S DYNAMIC SYSTEMS INTERCONNECTED TO SUPPORT LIFE?

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

### UNIT 2 - WHAT AFFECTS EARTH'S CAPACITY TO SUSTAIN LIFE?

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

### UNITS 3 & 4 ARE NOT ON OFFER IN 2022

### **Physics**

Physics aims to develop an understanding of the behaviour of the material world. It has been a challenge to the human mind. Great scientists like Einstein, Newton and Galileo have given us some of the answers as to how the Universe operates, from the smallest nucleus in an atom to the enormity of space. Their imagination and ingenuity have given us a fundamental understanding which applies to a wide range of rewarding careers in science and technology. Users of physics get excited by exploring all sorts of physical things like sound, movement, electricity, light, atoms, astronomy, health, materials, machines and electronics. They have fun experimenting to gain a better knowledge of these physical phenomena.

### UNIT 1: WHAT IDEAS EXPLAIN THE PHYSICAL WORLD?

- Thermodynamics
- Electricity
- Matter

### UNIT 2: WHAT DO EXPERIMENTS REVEAL ABOUT THE PHYSICAL WORLD?

- Motion
- Student/Teacher negotiated area of study
- Extended practical investigation (thermodynamics or electricity)

### UNIT 3 - HOW DO FIELDS EXPLAIN MOTION AND ELECTRICITY?

- · How do things move without contact
- How are fields used to move electrical energy
- How fast can things go

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

- · How can waves explain the behaviour of light
- How are light and matter similar
- Practical investigation

## **Psychology**

Psychology is the systematic study of behaviour and mental processes. In learning about their own and others' behaviour, students become aware of the complexities and variations involved in all kinds of behaviour. Students also develop knowledge and skills about scientific research methods, including an appreciation of ethics and controversial issues involved in psychology.

Psychology is relevant to most careers dealing with people, and is included as a component, in a broad range of tertiary studies including education, health, welfare, industry, business and administration. Psychology is also a career path for students interested in counselling and/or behavioural research. Fields include early childhood learning, industrial relations, criminal matters, sports motivation and personal development.

### Unit 1 - HOW ARE BEHAVIOUR AND MENTAL PROCESSES SHAPED?

Students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. They consider the complex nature of psychological development and the development of thoughts, feelings and behaviours.

### Unit 2 - HOW DO EXTERNAL FACTORS INFLUENCE BEHAVIOUR AND MENTAL PROCESSES?

Students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted.

### Unit 3 - HOW DOES EXPERIENCE AFFECT BEHAVIOUR AND MENTAL PROCESSES?

Students investigate the nervous system and how it influences behaviour. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge.

### Unit 4 - HOW IS WELLBEING DEVELOPED AND MAINTAINED?

Students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach.

# **VCE/VET TECHNOLOGY**

# VCE Food Studies

VCE Food Studies allows students to develop their understanding of food while acquiring practical skills to cook and prepare meals. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, nutrition, food manufacturing, food science, and hospitality.

### Unit 1

This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world including the evolution of food/agriculture, Indigenous food and food from international cultures.

### Unit 2

In this unit students investigate food systems in contemporary Australia. Students gain insight into the significance of food industries to the Australian economy and investigate how the food industry provides safe, high-quality food that meets the needs of consumers.

### Unit 3

This unit investigates the many roles and everyday influences of food. Area of Study 1 explores the science of food while Area of Study 2 focuses on influences on food choice: how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop.

### Unit 4

In this unit students examine debates about global and Australian food systems. Area of Study 1 focuses on issues about the environment, sustainability, technology, and the challenges of food security. Area of Study 2 focuses on individual responses to food information and misinformation, and the development of food knowledge, skills and habits to empower consumers to make food choices.

### **CONTACT: Fiona Finnegan**

# VCE Product Design and Technology

VCE Product Design and Technology is open to all students studying in years 10, 11 and 12 at Ballarat High School. VCAL and VCE students and Year 10 students still deciding on an appropriate pathway are welcome to apply. Students participating in Units 3 and 4 will be required to purchase their own materials after class discussion about appropriate projects for individual students based on their personal budgets.

VCE Product Design and Technology offers students a range of career pathways in design fields such as industrial, transport, service, interior and exhibition, engineering, fashion, furniture, jewellery, textile and ceramics, at both professional and vocational levels. Moreover, VCE Product Design and Technology informs sustainable behaviours and develops technical skills enabling students to present multiple solutions to everyday life situations. It contributes to developing creative problem solvers and project managers well-equipped to deal with the multidisciplinary nature of modern workplaces.

There are no prerequisites for entry to Units 1, 2 and 3 and students can apply for a single semester course participating in Units 1 to 3 though students must undertake Unit 3 and Unit 4 as a sequence. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education.

Non-scored VCE students and VCAL students do not need to participate in the external examination process to receive a satisfactory in the course outcomes.

Unit 1: Sustainable Product Redevelopment Area of Study 1 - Sustainable redevelopment of a product Area of Study 2 - Producing and evaluating a redeveloped product

Unit 2: Collaborative Design Area of Study 1 - Designing within a team Area of Study 2 - Producing and evaluating within a team

Unit 3: Applying the Product Design Process Area of Study 1 - Designing for end-user/s Area of Study 2 - Product development in industry Area of Study 3 - Designing for others

Unit 4: Product Development and Evaluation Area of Study 1 - Product analysis and comparison Area of Study 2 - Product manufacture Area of Study 3 - Product evaluation

### Why study Product Design and Technology?

Product Design and Technology is a valuable subject for students considering employment in building surveying, cabinet making, landscape architecture, furniture design, fashion design, fabric design, fashion marketing, metal fabrication, fitting and machining and more. It is not usually a prerequisite for tertiary courses but it can be a useful tool for the demonstration of related skills when applying for places in courses.

### **CONTACT:** Fran Deutscher (Textiles)

# **Information Technology - Applied Computing**

### Year 11 – Computing: Data Analytics Unit 1

In this unit, students focus on how data, information and networked digital systems can be used to meet a range of users' current and future needs. In Area of Study 1 students collect primary data when investigating an issue, practice or event and create a digital solution that graphically presents the findings of the investigation. In Area of Study 2 students investigate how networks with wireless capability allow data and information to be exchanged locally and within the global environment. Area of Study 3 students are encouraged to work in small groups and use web authoring software to create a website which presents an overview of an issue associated with the use of mobile devices.

### Year 11 – Computing: Programming Unit 2

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

### Year 12 - Data Analytics Unit 3

In Data Analytics Units 3 and 4 students focus on data, information and information systems. In Unit 3 students consider data and how it is acquired, managed, manipulated and interpreted to meet a range of needs. In Area of Study 1 students investigate using interactive online solutions, such as websites and applications (apps). Students use software to create user flow diagrams that depict how users interact with these online solutions, and acquire and apply knowledge and skills in the use of an RDBMS to create a solution. In Area of Study 2 students complete the first part of a project. where data is manipulated using tools such as spreadsheets or databases to help analyse and interpret it so that students can form a conclusion regarding their hypothesis. Students take an organised approach to problem solving by preparing project plans and monitoring the progress of the project. The second part of the project is completed in Unit 4.

### Year 12 - Data Analytics Unit 4

In this unit students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs. In Area of Study 1 students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate a multimodal, online solution that effectively communicates the conclusion and findings. The evaluation focuses on the effectiveness of the solution in communicating the conclusion and the reasonableness of the findings. Students use their project plan to monitor their progress and assess the effectiveness of their plan and adjustments in managing the project. In Area of Study 2, students explore how different organisations manage the storage and disposal of data and information to minimise threats to the integrity and security of data and information and to optimise the handling of information.

### Year 12 - Software Development Unit 3

In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions. They consider the risks to software and data during the software development process, as well as throughout the use of the software solution by an organisation.

In Area of Study 1 students apply the problem-solving stages of development and evaluation to develop their preferred design prepared in Unit 3, Area of Study 2, into a software solution and evaluate the solution, chosen development model and project plan. Area of Study 1 forms the second part of the School-assessed Task (SAT). In Area of Study 2 students examine the security practices of an organisation and the risks to software and data during the development and use of the software solutions. Students evaluate the current security practices and develop a risk management plan.

### Year 12 - Software Development - Unit 4

In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions. They consider the risks to software and data during the software development process, as well as throughout the use of the software solution by an organisation.

In Area of Study 1 students apply the problem-solving stages of development and evaluation to develop their preferred design prepared in Unit 3, Area of Study 2, into a software solution and evaluate the solution, chosen development model and project plan. Area of Study 1 forms the second part of the School-assessed Task (SAT). In Area of Study 2 students examine the security practices of an organisation and the risks to software and data during the development and use of the software solutions. Students evaluate the current security practices and develop a risk management plan.

### CONTACT: David Harradine

### VCE Systems Engineering

VCE Systems Engineering involves the design, production, operation, evaluation and iteration of integrated systems, which mediate and control many aspects of human experience. This study can be applied to a diverse range of engineering fields such as manufacturing, transportation, automation, control technologies, mechanisms and mechatronics, electrotechnology, robotics, pneumatics, hydraulics, and energy management. VCE Systems Engineering promotes innovative systems thinking and problem-solving skills through the application of the systems engineering process. The study is based on integrated mechanical and electro technological engineered systems. The study provides opportunities for students to learn about and engage with systems from a practical and purposeful perspective. Students gain knowledge and understanding about technological systems and their applications

#### The study is made up of four units.

Unit 1: Mechanical systems

- Unit 2: Electro Technological systems
- Unit 3: Integrated and controlled systems
- Unit 4: Systems control

#### Units 3 & 4 are unavailable in 2022.

**Contact: Steve White** 

### VET Certificate II in Automotive (Light Vehicle Mechanics)

### Description

This course will suit you if you are looking towards a career in the automotive industry. It covers the competency to carry out research activities and perform generic mechanical tasks that are encountered in the automotive industry sector. The program is of approximately 400 hours duration to be taken over two full years of study and delivered in class time at Ballarat High School. The units selected are from the pre–apprenticeship descriptor for motor mechanics.

### **Career opportunities**

On completion of this course, you will have the opportunity to pursue a career in such areas as automotive mechanics, engine reconditioning, automotive electrician and electronics, vehicle body repair, painting, panel beating and trimming.

**CONTACT: Steve White**