



# *2023 Year 9 Subject Information*

*More than you imagine*

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## OVERVIEW

**Year 9 is the first year in which students have more choice in the direction that their education takes.** This is a chance for students to take ownership of their educational pathway. This ownership comes in the form of choosing elective subjects. Our electives cover a broad range of different curriculum areas and cater to a wide variety of different interests and learning skills. Choosing electives is an opportunity for students to follow their interests and increase their future opportunities. Our electives have been designed to meet the needs of Year 9 students at Maffra Secondary College.

Students are encouraged to investigate areas of study that they may not have encountered before or choose subjects to further their knowledge, skills and attitudes.

### Advice on choosing your electives:

#### **THE RIGHT REASONS INCLUDE:**

- ✓ I enjoy the subject
- ✓ I know that these subjects will help my career choice because I have researched into it.
- ✓ I have achieved good feedback or grades in the subject
- ✓ If in doubt – ask for and get help!

#### **THE WRONG REASONS WOULD INCLUDE:**

- ✗ I like the teacher
- ✗ All the other choices are boring / too difficult
- ✗ All my friends are doing that subject
- ✗ I think it will help me get a job

#### **SOME IMPORTANT POINTS FOR PARENTS/GUARDIANS:**

- Talk to your child about what their interests are.
- Find out what they would like to do in the future.
- Let them know that full-time jobs for 17 year olds are increasingly rare. The key to their future is in good education, good training and developing skills and attitudes that employers want and are prepared to pay for.
- Check that your child is choosing subjects for the right reasons.
- Try to encourage a variety in their choices – this will allow more choice in Year 10.
- If in doubt about your child's choices, please contact the school to make an appointment to see the Careers Leader, Mrs Marie Clark. Alternatively, contact Ms Sue Clancy the Year Level Leader for more information.

### Key Dates and Deadlines

- Handbook available at end of term for year 8 students and families to read over the holidays.
- Information discussed at the MSC Virtual Careers Expo (6:00pm Wednesday 20<sup>th</sup> July).
- Initial preferences submitted online between **Friday 29<sup>th</sup> of July – Sunday 7<sup>th</sup> of August.**
- High-cost electives (>\$50) must be paid by **Friday 16<sup>th</sup> September (End of term 3)** to secure a place in the elective.

## ADVANCED NOTICE: Changes to Senior Education Certificate in 2023

After extensive consultation and review, the VCAA have announced that from 2023, all Year 11 and 12 students will study an integrated Victorian Certificate of Education (VCE). This means that the current Victorian Certificate of Applied Learning (VCAL) will no longer exist as a separate Senior School Certificate / qualification.

While there are still a number of decisions to be made by VCAA regarding the structure of the new, integrated certificate, the advice we have is that vocational pathways and opportunities including VET and structured work placement will be part of the qualification, along with opportunities to study practical and theory-based VCE subjects.

We will continue to work with all students on an individual basis on their chosen pathway, to provide each student with the best opportunity to reach their goals and begin their career after secondary school.

## ADVANCED WARNING: School Requirements for entry to VCE in 2024 (for Year 9 students in 2023)

### Accelerated program - VCE

**Students at Year 9 will be invited to study a VCE subject in Year 10** (units 1 and 2) provided they have demonstrated the following:

- Regular timely submission of work in all classes (ascertained by semester reports)
- A minimum Victorian Curriculum level of 'at the level' in English AND a recommendation from their Year 9 English teacher that they have the required literacy skills to succeed at VCE
- A minimum Victorian Curriculum level of 'at the level' in the subject area they have chosen to undertake at VCE. If this subject is unavailable in Year 9 they must produce evidence of their skills in this area
- An average progress report score of at least 3.5, demonstrating the minimum required learning habits
- Exemplary attendance
- Special consideration may be granted depending on individual circumstances

**Note:** Priority will be given to students who are studying a full VCE load (Year 11/12 students)

**Note:** Only certain VCE subjects are available to be selected for the accelerated program (see table of subjects to view these)

# COMPULSORY SUBJECTS

## ENGLISH

English classes cover essential literacy skills, including reading, viewing and writing, speaking and listening. Students will have four periods a week to hone their English skills and develop their learning, preparing them for their senior years of schooling and beyond. These skills include analysing written and visual texts, presenting their own opinion in writing and in a speech and developing their creative writing abilities.

### **Literacy Skills include:**

- Reading
- Viewing and Writing
- Speaking and Listening

Students will have the opportunity to participate in the annual overnight 'Writers Workshop' trip in Melbourne. This is **not compulsory** however it the purpose of this excursion is for students to work with likeminded students and apply their Literacy skills in a range of different genres. This event will take place in **Semester two during August/September**.

### **Victorian Curriculum links:**

- **Language**
  - *Language for Interaction (VCELA428, 453)*
  - *Text structure and organisation (VCELA429-430, 445)*
  - *Expressing and developing ideas (VCELA431-433, 446)*
  - *Phonics and word knowledge (VCELA434)*
  - *Language variation and change (VCELA452)*
- **Literature**
  - *Literature and context (VCELT435)*
  - *Responding to Literature (VCELT436-437, 454)*
  - *Examining Literature (VCELT438-440)*
  - *Creating Literature (VCELT447-448)*
- **Literacy**
  - *Texts in Context (VCELY441)*
  - *Interpreting, analysing and evaluating (VCELY442-444)*
  - *Creating texts (VCELY449-451)*
  - *Interacting with others (VCELY455-456)*

## MATHS

**Year 9 Maths** involves the study of key mathematics curriculum areas through the integration of key mathematics skills practise, using problem-solving skills and applying maths to real-world situations. Among other topics, students will learn how to graph linear relations and solve linear equations using tables of values, graphs and algebra. They will explore the use of measurement skills to find areas of composite shapes and the surface area of prisms and cylinders. They will use Pythagoras' Theorem and trigonometric ratios to solve real-world problems involving right-angled triangles. Throughout all topics students will be encouraged to approach and solve problems creatively, using critical thinking skills, technology and will learn to communicate their mathematical thinking. Students will complete an exam at the end of each semester.

### **Skills include:**

- Algebraic solving skills
- Measurement skills and unit conversion
- Problem-solving skills
- Skills using mathematical technology
- Communicating mathematical thinking
- Sketching graphs and using Cartesian coordinates
- Representing data mathematically

### **Victorian Curriculum links:**

- Number and algebra (VCMNA301 – VCMNA311)
- Measurement and Geometry (VCMNA312 – VCMNA320)
- Statistics and Probability (VCMNA321 – VCMNA326)

## SCIENCE

**Year 9 Science** involves the study of a variety of science-related issues and concepts through inquiry-based skills and thinking skills. In Year 9 Science, students consider the roles of the nervous and endocrine systems and investigate how neurotoxins and disease can cause these systems to malfunction. They predict how future applications of science and technology may affect people's lives. Students explore interactions between organisms and their environment and the flow of energy within ecosystems as part of a scientific investigation of the Maffra Wetlands. In Chemistry, students investigate the role of energy in chemical reactions and explore how atoms are rearranged to form new substances during chemical reactions. Students will also use the concepts of voltage and current to explain the operation of electric circuits. They explore the theory of plate tectonics to explain patterns of geological activity and continental movement.

### **Skills include:**

- Developing questions and hypotheses
- Planning and conducting scientific investigations, including fieldwork
- Data collection and representation using technologies
- Analyse patterns and trends
- Evaluate methodologies and draw conclusions
- Communication of scientific ideas and concepts

**Victorian Curriculum links:**

- Science as a human endeavour
- Biological Sciences
- Chemical Sciences
- Earth and Space Sciences
- Physical Sciences
- Science Inquiry Skills

## **HEALTH AND PHYSICAL EDUCATION**

Health and Physical Education explores the benefits of participation in physical activity. A major theme throughout is 'being active for life.' Hence encouraging students to continue to participate in a variety of physical activities and understand the social, mental, physical and financial benefits of participation in physical activity.

The physical activity component of the subject will focus on students understanding of and meeting the National Physical Activity Guidelines, developing their fitness and understanding of a variety of fitness components through sports specific training. All students will participate in a wide variety of sports that are available across the life span (of varying intensity) and further development of motor skills in a range of sports.

The health and wellbeing aspect of this class will not only complement the learning that occurs in practical sessions, but also on the health concerns that young Australians are faced with. The students will look at sexual health, building social relationships, harm minimisation and drug education.

**Skills include:**

- Persistence
- Resilience
- Collaboration
- Analysis and Evaluation

**Victorian Curriculum links:**

- Personal, Social & Community Health
- Movement and Physical Activity

## CONNECT

Connect involves students participating in a variety of activities to aide their interpersonal development such as communication, teamwork, resilience, empathy for others and leadership. They work collaboratively with their classmates to learn strategies that develop their own resilience, build empowerment and challenge students. In Connect students also engage in Individual and Community based-projects. In 2020, students will elect to participate in one of the following streams:

- 1) **Duke of Edinburgh (DOE)** - The DOE's International Award is a non-competitive, internationally recognised program designed to encourage young people to develop positive skills and lifestyle habits. DOE is about personal challenge and development and is adaptable according to each participant's interests and abilities. The Award concept is one of individual challenge. By undertaking four core activities and working towards individual goals, participants are equipped and empowered to achieve their personal best, take ownership of their own goals and life choices and become actively engaged within their community and workforce.

Note: Students participate in an overnight journey

- 2) **Community Learning Projects** – students work in small groups to identify an issue within their community (school or wider community). They then work through the design process to develop a solution to their issue/s.
- 3) **Personal Challenge** - in semester one runs as a **passion project**. This is a project-based learning activity in which students research any topic they are passionate about and create a project to share with the class, the school, the community! The purpose of this class is for students to learn something new; something that you have always wanted to do. Maybe you have wanted to learn how to play a guitar. Build a dog kennel, cook a gourmet meal, complete a family tree or even learn to make a movie. Personal Challenge encourages creativity in the classroom and promotes inquiry, perseverance, problem solving, and innovation, among other lifelong skills.

Personal Challenge in semester two runs as a **Physical Challenge** - a dynamic learning journey, as it is a physically and mentally challenging outdoor experience. This stream contains five distinct phases of Planning, Preparation, Experience, Celebration and Presentation. The major component is the physical /outdoor education experience.

### Costs:

- Duke of Edinburgh - \$172 for the registration fee and \$50 for the practise and qualifying overnight camps
- Personal Challenge – between \$0 and \$70 (dependent upon the challenge students complete)



## HUMANITIES

Humanities includes Civics and Citizenship, Economics and Business, Geography and History.

In Civics and Citizenship, students learn about how political parties are formed and their role in Australia's system of government. They examine the influence of the media and how this can affect attitudes in the community. They also examine Australia's judicial system, focusing on how courts resolve disputes and create common law.

In Economics and Business, students investigate globalisation and Australia as a trading nation. They will participate in hands on trading and currency exchange activities. As well as exploring national and global issues and how these can affect Australia's economy.

In Geography, students explore the distribution and characteristics of biomes as regions with distinctive climates, soils, vegetation and productivity. They will investigate land and resource management strategies used by Aboriginal or Torres Strait Islander peoples to achieve food security over time. Students will complete fieldwork as part of this unit and will produce a report on food security.

In History, students study the Industrial Revolution; focusing on how and why it began, the change in working and living conditions and the impact of the revolution on Australia. They also study the First World War; focusing on how it started, how Australia became involved, where it was fought and the impacts it still has today in both commemoration and removal of ordnance.

### **Victorian Curriculum Links:**

#### **Civics and Citizenship**

- Explain the values and key features of Australia's system of government
- Describe the key features of Australia's court system, including jurisdictions and how courts apply and interpret the law, resolve disputes and make law through judgments, and describe the role of the High Court in interpreting the Constitution
- Discuss the role of political parties and independent representatives in Australia's system of government, including the formation of governments, and explain the process through which government policy is shaped and developed
- Examine the influence of a range of media, including social media, in shaping identities and attitudes to diversity and how ideas about Australian identity may be influenced by global events

#### **Economics and Business**

- Explain why and describe how people manage financial risks and rewards in the current Australian and global financial landscape
- Investigate Australia as a trading nation and its place within Asia and the global economy
- Identify and explain the indicators of economic performance and examine how Australia's economy is performing

#### **Geography**

- Predict changes in the characteristics of places over time and identify the possible implications of change for the future
- Identify, analyse and explain significant interconnections within places and between places over time and at different scales, and evaluate the resulting changes and consequences
- Select, organise and represent data and information in different forms
- Analyse and evaluate data, maps and other geographical information

## History

- Sequence significant events in chronological order to support analysis of the causes and effects of these events and identify the changes they brought about
- Analyse and corroborate sources and evaluate their accuracy, usefulness and reliability
- Analyse the different perspectives of people in the past and evaluate how these perspectives are influenced by significant events, ideas, location, beliefs and values
- Evaluate different historical interpretations and contested debates
- Identify and evaluate patterns of continuity and change in the development of the modern world and Australia
- Analyse the long term causes, short term triggers and the intended and unintended effects of significant events and developments
- Evaluate the historical significance of an event, idea, individual or place

## LANGUAGES (Indonesian)

**Languages (Indonesian)** provides an opportunity for students to continue the language study into Year 9, combined with the study of Humanities. Students will develop their language skills with a classroom focus on communicative activities, alongside the study of Humanities, including Geography and Economics. These pursuits all allow students to explore and understand the world and our place in it and become active participants in the global community.

### **Skills include:**

- Communicating in the target language in both oral and written forms
- Developing inter-cultural awareness
- Research and analysis

Students will learn in English as well as Indonesian, becoming more active in their learning as they develop subject specific skills and investigate the answers to key questions about our past, present and future. There will be an opportunity for following areas of interest within these areas. There will be a greater focus on how more complex grammatical structures contribute to the meaning of language.

### **Victorian Curriculum Links:**

#### **Languages 7-10 Sequence:**

- **Communicating:** socialising, informing, creating, translating and reflecting
- **Understanding:** system of language, language variation and change and role of language and culture

#### **Humanities:**

- **Geography:** Geographies of interconnections, effects of people's travel, recreational, cultural or leisure choices on places, and the implications for the future of these places (VCGGK143) environmental change and management, causes and consequences of an environmental change (VCGGK147), geographies of human wellbeing, issues affecting the development of places and their impact on human wellbeing, drawing on a study from a developing country or region (VCGGK153)
- **Economics:** Investigate Australia as a trading nation and its place within Asia and the global economy (VCEBR020), explain the links between economic performance and living standards, including the variations that exist within and between economies, and give reasons for the possible causes of variations (VCEBR022)

# ELECTIVES

Electives are broken into 3 categories. Art, Technology and Other. To ensure a breadth of subjects, you are required to complete one elective in each category. Your fourth elective can come from any category.

## ART

- Art
- Drama
- Media & Visual Communication
- Music
- Photography

## TECHNOLOGY

- Automotive (small engines)
- Cultural Foods
- Digital Technologies
- Energy Breakthrough (2<sup>nd</sup> semester only)
- Excellent Foods
- Retro Fashion
- Woodwork

## OTHER

- Ag and Hort
- Creative Writing
- Forensic Science
- Health and Human Development
- Marine Science
- Personal Best
- Psychology
- Sport Science
- Surf and Turf

# ART ELECTIVES

## ART

**Cost** \$20

Year 9 Art is unit where students create exciting art works using a variety of mediums. Students will explore printing techniques such as; etching, linoleum printing and screen printing. They will also investigate clay modelling and various painting and drawing methods. A range of styles and art movements will be explored through art making and art analysis. Art analysis assists students to understand how an artwork is made as well as giving them an insight into the creative decisions made by the artist.

### **Skills include:**

- The Arts
- Personal development
- Research and analysis

### **Victorian Curriculum links:**

#### **Explore and Express Ideas**

- Explore the visual arts practices and styles as inspiration to develop a personal style, explore, express ideas, concepts and themes in art works (VCAVAE040)
- Explore how artists manipulate materials, techniques, technologies and processes to develop and express their intentions in art works (VCAVAE041)

#### **Visual Arts Practices**

- Select and manipulate materials, techniques, and technologies and processes in a range of art forms to express ideas, concepts and themes (VCAVAV042)
- Conceptualise, plan and design art works that express ideas, concepts and artistic intentions (VCAVAV043)

#### **Present and Perform**

- Create, present, analyse and evaluate displays of artwork considering how ideas can be conveyed to an audience (VCAVAP044)

#### **Respond and Interpret**

- Analyse and interpret artworks to explore the different forms of expression, intentions and viewpoints of artists and how they are viewed by audiences (VCAVAR045)
- Analyse, interpret and evaluate a range of visual artworks from different cultures, historical and contemporary contexts, including artworks by Aboriginal and Torres Strait Islander Peoples to explore differing viewpoints (VCAVAR046)

## DRAMA

**Cost** \$10

Drama is a creative and challenging class that tells stories, explores ideas, makes sense of the world and communicates meaning. After researching traditions and styles of drama, students will create their own plays. Through writing, rehearsing and refining their performances, students will build confidence. Resilience and perseverance layers with a dramatic aesthetic. Exploring acting and other stagecrafts students will collaborate to create pieces of theatre.

### **Skills include:**

- Expressive Skills
- Researching
- Brainstorming
- Improvising
- Scripting
- Rehearsing
- Refining
- Building Confidence
- Communication

Students will have the opportunity to attend a live theatre performance and workshop to expand their understanding of how dramatic elements, expressive skills and various stagecraft work together to create theatre as art. There is a cost associated with this elective - Please refer to the elective charge sheet.

### **Victorian Curriculum links:**

#### **Explore and Express Ideas**

- **Improvise** with the elements of drama and narrative structure to develop ideas, and explore subtext to shape devised and scripted drama
- **Manipulate** combinations of the elements of drama to develop and convey the physical and psychological aspects of roles and characters consistent with intentions in dramatic forms and performance styles

#### **Drama Practice**

- **Practise and refine** the expressive capacity of voice and movement to communicate ideas and dramatic action in a range of forms, styles and performances spaces
- **Structure drama** to engage an audience through manipulation of dramatic action, forms and performance styles and by using design elements

#### **Present and Perform**

- **Perform** devised and scripted drama making deliberate artistic choices and shaping design elements to unify dramatic meaning for an audience

#### **Respond and Interpret**

- **Evaluate** how the elements of drama, forms and performance styles in devised and scripted drama to convey meaning and aesthetic effect
- **Analyse** a range of drama from contemporary and past times, including the drama of Aboriginal and Torres Strait Islander Peoples to explore differing viewpoints and develop understanding of drama practice across local, national and international contexts

## **MEDIA AND VISUAL COMMUNICATION**

**Cost** \$15

This is an exciting expressive unit based on creating artistic solutions to a range of media and design tasks. Students will use media codes and conventions to create their own films individually and collaboratively in groups, filming and editing techniques will be explored to facilitate this. Students will apply design skills to create a tribal tattoo and a logo and signage for a corporate airline and trucking company. Designs will incorporate the design process and include freehand drawings and computer-generated drawings using Illustrator, InDesign and Photoshop to complete the tasks.

### **Skills include:**

- Filming and editing skills
- Design and drawing skills using Adobe Illustrator and Photoshop
- Construction skills – 3D
- Research and analysis of design

### **Victorian Curriculum links:**

#### **Explore and Represent Ideas**

- Develop and present visual communications that demonstrate the application of methods, materials, media, design elements and design principles that meet the requirements of a specific brief and target audience (VCAVCDE006)
- Experiment with ideas and stories that manipulate media elements, and genre conventions to construct new and alternative viewpoints in images, sounds and text (VCAMAE040)

#### **Media Arts Practice**

- Use manual and digital drawing methods to create visual communications in the specific design fields of Environmental, Industrial and Communication Design (VCAVCDV008)
- Develop and refine media production skills to integrate and shape the technical and symbolic elements in images, sounds and text to represent a story, purpose, meaning and style (VCAMAM042)

#### **Present and Perform**

- Develop work for a specific audience and needs, and present visual communications that meet the brief (VCAVCDP009)
- Plan, produce and distribute media artworks for different audiences (VCAMAP044)

#### **Respond and Interpret**

- Analyse and evaluate the use of methods, media, materials, design elements and design principles in visual communications from different historical, social and cultural contexts, including presentations by Aboriginal and Torres Strait Islander peoples (VCAVCDR011)
- Analyse and evaluate how technical and symbolic elements are manipulated in media artworks (VCAMAR045)

## MUSIC

**Cost** \$50

There are two aspects to this course: students will work on developing their music performance skills on a chosen instrument or voice, and will explore music's role in film.

Students will develop skills on a chosen instrument as a group or individual, developing their rehearsal and performance skills. They will continue to develop their music theory and aural skills through a series of exercises and worksheets.

Students will focus on Australian rock and film music. They complete research on Australian rock music and performers and work towards writing a rock song to a rock chord progression. Students will learn how music can enhance film and create a piece of music to a selection of short films.

### **Skills include:**

- Music performance and composition
- Music production and technology
- Research and analysis
- Aural recognition and dictation

### **Victorian Curriculum links:**

#### **Explore and Express Ideas**

- Improvise and arrange music, using aural awareness and technical skills to manipulate the elements of music to explore options for interpretation and developing music ideas
- Manipulate combinations of the elements of music in a range of styles, using technology and notation to communicate music ideas and intentions

#### **Music Practices**

- Create, practise and rehearse music to interpret a variety of performance repertoire with increasing technical and expressive skill and awareness of stylistic conventions
- Plan, develop, and notate compositions with an understanding of style and convention

#### **Present and Perform**

- Rehearse and perform to audiences in different settings and contexts, a range of music they have learnt or composed, using techniques and expression appropriate to style

#### **Respond and Interpret**

- Analyse composers' use of the elements of music and stylistic features when listening to and interpreting music

## PHOTOGRAPHY

**Cost** \$25 includes excursion

Photography is an exciting unit based on photo-journalism to communicate news and stories through photography. Students will learn to apply these techniques and skills to the production of a series of photographs as well as the School Year Book in semester 2. Students will experiment with various forms of photographic techniques, with computer skills being taught in relation to layout, composition, design and image manipulation through Photoshop.

### **Skills include:**

- Photography and camera essentials
- Use of Adobe Photoshop and Adobe InDesign
- Research and analysis of photographers

An excursion to Tarra-Bulga National Park will also allow students to apply learnt skills in the production of a photojournalism book documenting their experience. The purpose of the excursion is for students to apply their learnt skills to promoting Tarra-Bulga N.P. to the local community through promotional material that utilises the student's photography compositions following the given briefs. Semester One the excursion usually takes place early term 2, whilst in semester 2 the excursion takes place early term 4 - dependent on students paying.

### **Victorian Curriculum links:**

#### **Explore and Represent Ideas**

- Experiment with ideas and stories that manipulate media elements, and genre conventions to construct new and alternative viewpoints in images (VCAMAE040)

#### **Media Arts Practice**

- Develop and refine media production skills to integrate and shape the technical and symbolic elements in images, to represent a story, purpose, meaning and style (VCAMAM042)

#### **Present and Perform**

- Plan, produce and distribute media artworks for a range of community, institutional contexts and different audiences, and consider social, ethical and regulatory issues (VCAMAP044)

#### **Respond and Interpret**

- Analyse and evaluate a range of media artworks from contemporary and past times, to explore differing viewpoints and enrich their media arts making (VCAMAR046)



# TECHNOLOGY ELECTIVES

## ***AUTOMOTIVE – SMALL ENGINES***

**Cost** \$0

In this subject, students will:

- Investigate how automotive systems such as disc brakes, drum brakes, exhaust system, electrical system + alternator, cooling system, lubrication systems work. Students will learn how to remove these systems from cars and how to put back on.
- Understand how 2 stroke engines work using real engines to explore the different components.
- Understand how 4 stroke engines work disassembling and reassembling a car engine.
- Follow fault diagnosis processes and recondition small engines to get working again to be used in creating own project.
- Look at environmental issues related to fuel and general maintenance.
- Work individually and in teams to develop skills in the use of appropriate tools and equipment

### ***Skills include:***

- Team work
- Leadership
- Research, Investigation and Design
- General car maintenance
- Small engine fault diagnosis

### ***Victorian Curriculum links:***

#### **Technologies and Society**

- Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved.

#### **Engineering principals and systems**

- Investigate and make judgements on how the characteristics and properties of materials are combined with force, motion and energy on design decisions.

#### **Materials and technologies specialisations**

- Investigate and make judgements on how the characteristics and properties of materials, systems, components, tools and equipment can be combined to create design solutions.

#### **Generating**

- Apply design thinking, creativity, innovative and enterprise skills to develop, modify and communicate design ideas of increasing sophistication.

#### **Producing**

- Work flexibly to safely test, select, justify and use appropriate technologies and processes to make design solutions.

#### **Evaluating**

- Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability.

**Planning and managing**

- Develop project plans to plan and manage projects individually and collaboratively taking into consideration time, costs, risk and production processes.

**CULTURAL FOODS****Cost** \$150

Wow! Look at all the great foods we have in Australia that have been brought in by people from other countries. We have such a diverse and exciting range of foods to choose from. In this study, students have the opportunity to investigate and prepare foods from all over the world. Students will work in teams to research recipes they can make in class, whilst learning about cultural traditions and celebrations, culminating in their own production of a gingerbread house.

**Skills include:**

- Food preparation and presentation
- Sensory analysis
- Investigation and analysis
- Design in response to a brief

Excursions to a range of supermarkets to complete research, pricing and investigate marketing strategies and international food availability.

**Victorian Curriculum Links:****Food specialisations**

- Food and fibre production
- Creating Designed solutions
- Investigating, Generating, Producing, Evaluating, Planning and Managing

**Technologies and Society**

- Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved.

**Technologies Contexts**

- Investigate and make judgements on the ethical and sustainable production and marketing of food.
- Investigate and make judgements on how the principles of food safety, preservation, preparation, presentation and sensory perceptions influence the creation of food solutions for healthy eating

**Creating Designed Solutions**

- Apply design thinking, creativity, innovation and enterprise skills to develop, modify and communicate design ideas of increasing sophistication

Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary. They select and use appropriate technologies skilfully and safely to produce quality designed solutions suitable for the intended purpose.

## **DIGITAL TECHNOLOGIES**

**Cost** \$0

**Digital Technologies** is a unit based on problem solving skills. When analysing problems, students consider the functional and non-functional requirements of a solution by interacting with clients and regularly reviewing processes. They develop their design skills and their understanding of the user experience to incorporate a variety of user needs. Students develop solutions to complex problems using an object-oriented programming language where appropriate, and evaluate their solutions.

Students progressively become more skilled at identifying the steps involved in planning solutions and developing detailed plans. When creating solutions, both individually and collaboratively, and sharing them online, students comply with legal obligations, particularly with respect to the ownership of information.

### **Skills include:**

- Problem solving skills – Analysis, Design, Development and Evaluation
- Collaboration skills
- Object-oriented programming skills

### **Victorian Curriculum links:**

- Define and decompose real-world problems precisely, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs (VCDTCD050)
- Design the user experience of a digital system, evaluating alternative designs against criteria including functionality, accessibility, usability and aesthetics (VCDTCD051)
- Design algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases (VCDTCD052)
- Develop modular programs, applying selected algorithms and data structures including using an object-oriented programming language (VCDTCD053)
- Evaluate critically how well student-developed solutions and existing information systems and policies take account of future risks and sustainability and provide opportunities for innovation (VCDTCD054)

## **ENERGY BREAKTHROUGH** – *will only be offered in Semester 2*

**Cost:** \$340 (Class Materials, Maryborough Excursion, Team shirt)

In this subject students will:

- Investigate and research the concepts of recumbent cycles as a means of transport.
- Plan and make a pedal vehicle, as a team activity.
- Compete in the Energy Breakthrough Challenge.
- Investigate mechanical principles, design processes, ergonomics, manufacturing techniques, emerging materials and aerodynamics.
- Develop drawing skills and graphic techniques to design a team logo, uniform and produce a collection of graphic presentations and promotional material.
- Gain sponsorship from community organisations.
- Plan and be involved in all race preparations which include fitness training, public speaking, and a compulsory presentation.

### **Skills include:**

- Team work
- Leadership
- Research, Investigation and Design
- Bicycle maintenance and repair
- Public speaking and group presentations

As a culmination of the program, students will undertake an excursion to Maryborough Victoria to compete in the Energy Breakthrough Challenge; a 24 hour endurance race for recumbent racing trikes. This excursion allows the students to put into practice all of the skills, knowledge, individual leadership and teamwork skills that they have acquired and is a true test of their learning.

### **Victorian Curriculum links:**

#### **Technologies and Society**

- Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved.

#### **Engineering principals and systems**

- Investigate and make judgements on how the characteristics and properties of materials are combined with force, motion and energy on design decisions.

#### **Materials and technologies specialisations**

- Investigate and make judgements on how the characteristics and properties of materials, systems, components, tools and equipment can be combined to create design solutions.

#### **Generating**

- Apply design thinking, creativity, innovative and enterprise skills to develop, modify and communicate design ideas of increasing sophistication.

#### **Producing**

- Work flexibly to safely test, select, justify and use appropriate technologies and processes to make design solutions.

**Evaluating**

- Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability.

**Planning and managing**

- Develop project plans to plan and manage projects individually and collaboratively taking into consideration time, costs, risk and production processes.

**EXCELLENT FOODS**

**Cost** \$150

***Students who like to cook and taste-test food love this class!***

Students participating in this subject will learn valuable life-skills in meal/food preparation whilst comparing home-made to bought food products. They will make a range of familiar foods e.g. pizza, cheesecake, lasagne and sticky date pudding, and compare these to commercially produced products available to buy, analysing and evaluating the price, nutritional value and sensory appeal. They will use the design brief process to choose recipes to make in class and complete supermarket research to learn about pricing and marketing.

***Skills include:***

- Food preparation and presentation
- Sensory analysis
- Investigation and analysis
- Design in response to a brief

Excursions to a range of supermarkets to complete research, pricing and investigate marketing strategies

***Victorian Curriculum Links:*****Food specialisations**

- Food and fibre production
- Creating Designed solutions
- Investigating, Generating, Producing, Evaluating, Planning and Managing

**Technologies and Society**

- Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved.

**Technologies Contexts**

- Investigate and make judgements on ethical and sustainable production and marketing of food.
- Investigate and make judgements on how the principles of food safety, preservation, preparation, presentation and sensory perceptions influence the creation of food solutions for healthy eating

**Creating Designed Solutions**

- Apply design thinking, creativity, innovation and enterprise skills to develop, modify and communicate design ideas of increasing sophistication

Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, making adjustments to plans when necessary. They select and use appropriate technologies skilfully and safely to produce quality designed solutions suitable for the intended purpose.

## RETRO FASHION

**Cost:** \$30 plus a trip to Spotlight to purchase material at student's own cost.

What you will be doing:

- Learn how to make a textile product from new & recycled materials.
- Hand and electric sewing machine use
- Safety practises
- Fashion drawing techniques
- Design brief for different eras
- Production of clothing from your era

Retro fashion - TEXTILES Costs: \$30 plus a trip to Spotlight to purchase materials.

Students will develop techniques associated with textiles to bring different eras of fashion designs to life!

Through the study of fashions from different eras, students will investigate trends and function of the clothing and create a design brief that allows them to design, produce and evaluate different products. Students will address design issues and technology dilemmas to produce clothing that can be shown in their own fashion shoot or show.

## WOODWORK

**Cost:** \$70 there may be an additional material levy dependent on the size and timber type used in their model selection. Parents will be contacted in advance.

What you will be doing:

- Students will make design modifications to a basic coffee table plan and then manufacture the model.
- Students will develop their production planning techniques related to material lists, costing, risk assessment and model assembly planning.
- Students will produce a single model for the semester made predominantly from timber.
- Students will develop their knowledge of timber construction by using a number of more difficult timber joining, fixing and finishing techniques.
- Students will learn about the properties of various timbers and timber related products.
- Students will evaluate their finished models and their own work related skills.

### **Skills included:**

- Hand and power tool use
- Awareness of safe workshop practices.
- Drawings techniques
- Production planning
- Joint development
- Evaluation of the model, production skills and techniques.

**Victorian Curriculum Links:**

**Investigating**

- Critique needs or opportunities to develop design briefs and investigate and select an increasingly sophisticated range of materials, systems, components, tools and equipment to develop design ideas

**Generating**

- Apply design thinking, creativity, innovation and enterprise skills to develop, modify and communicate design ideas of increasing sophistication

**Producing**

- Work flexibly to safely test, select, justify and use appropriate technologies and processes to make designed solutions

**Evaluating**

- Evaluate design ideas, processes and solutions against comprehensive criteria for success recognising the need for sustainability

**Planning and Managing**

- Develop project plans to plan and manage projects individually and collaboratively taking into consideration time, cost, risk and production processes

# OTHER ELECTIVES

## **AG AND HORT**

**Cost:** \$50

Ag and Hort will provide students with the opportunity to develop their knowledge and skills with the areas of agriculture and horticulture. Students will be provided with the opportunity to participate in a range of theory and practical classes that will develop their understanding of different farming practices. Students will take part in learning about the farming industry and complete a range of projects. This could include caring for dairy calves on loan from local farmers and growing different plants. Farmers and dairy industry professionals, such as vets, dairy company field officers, agronomists or cheesemakers, work with the students to teach them about different aspects of the dairy industry. Excursions to local farms will be involved in this unit.

**Skills include:**

- Knowledge and understanding of information, materials and farms systems
- Application of knowledge
- Practical expertise of students

***The ways in obtaining the above skills are through processes such as:***

- Investigating and analysing situations
- Communicating design ideas
- Planning, monitoring and managing resources
- Participate in making their own cheese
- Evaluating products
- Participate in a calf rearing project

**Victorian Curriculum links:**

- Geography
- Critical and Creative thinking
- Design and Technology: Food and Fibre



## CREATIVE WRITING

**Cost:** \$132

In **Creative Writing**, you will write in a range of styles, including short stories, poetry, novellas, memoirs, songs and scripts. The subject will use a workshop model, in which you will share and give feedback on each other's writing. You will also research and explore the publishing industry and avenues for publication.

The cost involved is to attend the Melbourne Writers Festival, where you will have the opportunity to meet and network with authors and other students.

### **Skills include:**

- Writing imaginatively
- Creative and critical thinking
- Giving feedback
- Proofreading and editing at a professional standard

### **Curriculum Links:**

- Create imaginative, informative and persuasive texts that present a point of view and advance or illustrate arguments, including texts that integrate visual, print and/or audio features (VCELY449)
- Review and edit students' own and others' texts to improve clarity and control over content, organisation, paraphrasing, sentence structure, vocabulary and audio/visual features (VCELY450)
- Publishing texts using a range of software, including word processing programs, flexibly and imaginatively (VCELY451)
- Experiment with the ways that language features, image and sound can be adapted in literary texts (VCELT447)
- Create literary texts, including hybrid texts, that innovate on aspects of other texts, including through the use of parody, allusion and appropriation (VCELT448)

## **FORENSIC SCIENCE**

**Cost:** \$0

**Year 9 Forensic Science** involves the application of the sciences (Biology, Physics, Chemistry and Psychology) to analyse and interpret evidence in order to investigate crimes. Students explore topics such as the history of forensic science, evidence collection and analysis, crime sciences and deductive reasoning. Students develop techniques used in Forensic Science to collect and analyse evidence such as, fingerprints, DNA, blood splatters, shoe prints, impressions, hairs and fibres. Students will also analyse the psychology of criminals through case studies and research and develop their own criminal profile of some of Australia's criminals. They develop questions and hypotheses that can be investigated using a range of inquiry skills, including the systematic collection of data, analysis of the data and the construction of evidence-based conclusions. They will also solve crime case studies using the skills that they have learnt and create their own hypothetical crime scene for a group of Year 7's to solve.

### ***Skills include:***

- Developing questions and hypotheses
- Planning and conducting scientific investigations
- Data collection and representation using technologies
- Analyse patterns and trends
- Evaluate methodologies and draw conclusions
- Communication of scientific ideas and concepts

### ***Victorian Curriculum links:***

- Science as a human endeavour
- Biological Sciences
- Chemical Sciences
- Physical Sciences
- Science Inquiry Skills

## **HEALTH AND HUMAN DEVELOPMENT**

**Cost:** \$0

Through the study of Health and Human Development, students investigate health and human development in local, Australian and global communities.

Health is a dynamic condition that is influenced by complex interrelationships between individuals and biomedical and behavioural factors, as well as physical and social environments. The study of Health and Human Development is based on the premise that health and human development needs to be promoted at an individual level, and within group and community settings at national and international levels, to maximise global development potential. Students will look at the dimensions of health and wellbeing and what needs to be done for optimal health before moving into community strategies. Following on from this students will look at the health of Australia and how we measure this before comparing to other countries with the same health status measurements being used in the analysis.

The study also promotes the understanding that nutrition plays a major role in influencing both health status and individual human development.

**Skills include:**

- Persistence
- Resilience
- Collaboration
- Analysis and Evaluation

**Victorian Curriculum links:**

- Personal, Social & Community Health

## MARINE SCIENCE

**Cost:** \$40

**Year 9 Marine Science** involves the study of marine and coastal ecosystems, the diversity of marine life and the environmental issues associated with marine environments. Students investigate how marine ecosystems consist of communities of interdependent organisms and abiotic components of the environment. They compare different types of marine and coastal ecosystems, understand their importance and identify the marine organisms that depend on these habitats. Students understand how marine organisms respond to changes in their environment, by studying the structure and function of a variety of marine organisms. They undertake a number of dissections and practical activities to investigate the structures that ensure survival of organisms and learn how these structures are used in scientific classification. Students explore a variety of environmental issues that impact marine ecosystems and identify management and conservation strategies used to protect marine and coastal ecosystems. Students learn skills and safety precautions required for snorkelling.

**Skills include:**

- Developing questions and hypotheses
- Planning and conducting scientific investigations, including dissections
- Data collection and representation using technologies
- Analyse patterns and trends
- Evaluate methodologies and draw conclusions
- Communication of scientific ideas and concepts
- Snorkelling and safety in coastal environments

An **excursion to Cape Paterson** will allow students to investigate a marine environment and apply the skills learnt in the classroom, as well as experience snorkelling in a marine environment. Multiple **pool sessions** are undertaken prior to the excursion for students to develop their snorkelling skills. **Students are expected to attempt the swimming component.** The excursion and swimming pool sessions are undertaken in **Term 1**.

**Victorian Curriculum links:**

- Science as a human endeavour
- Biological Sciences
- Earth and Space Sciences
- Science Inquiry Skills

## **PERSONAL BEST**

**Cost:** \$460

During this unit students are given the opportunity to extend personal boundaries and explore the past, present and future of Victoria. Topics such as War, Immigration, Water, Power, Transport, Government, Culture and Women in Victoria will guide students learning while comparing rural and urban life. Students will come up with a topic and carry out their research in Melbourne. A compulsory component of this course is a week-long camp in Melbourne, where students will visit iconic Melbourne locations to gather evidence, which is presented to a community forum.

### **Skills include:**

- Investigative skills
- Research and analysis
- Presenting

### **Victorian Curriculum Links:**

#### **Critical and Creative Thinking**

- Investigate the characteristics of effective questions in different contexts to examine information and test possibilities (VCCCTQ043)

#### **Analysing and Evaluating**

- Analyse patterns and trends in data, including describing relationships between variables, identifying inconsistencies in data and sources of uncertainty, and drawing conclusions that are consistent with evidence (VCSIS138)

#### **Explore and Represent Ideas**

- Develop and present visual communications that demonstrate the application of methods, materials, media, design elements and design principles that meet the requirements of a specific brief and target audience (VCAVCDE006)

## PSYCHOLOGY

**Cost:** \$0

Year 9 Psychology introduces students to psychology as a science. Students will be challenged to think critically as they investigate key case studies in the field of psychology. Students explore the history of psychology and psychological treatments, analyse the ethics of different studies, and observe how psychological beliefs and practices have changed over time. Students explore many different branches of psychology (including forensic, sports, and educational), and make links to future opportunities for study or careers in these fields. Students study the application of clinical psychology, personality and intelligence testing, mental illness, forensic psychology and visual perception. A large portion of the subject is dedicated to studies of the structure and function of the brain, understanding of the central nervous system and the role of neurons. In this subject, students conduct research into the causes, symptoms and treatments of various brain disorders, undertake group work, practical activities and analysis of case studies.

**Skills include:**

- Developing questions and hypotheses
- Planning and conducting scientific investigations
- Data collection and representation using technologies
- Analyse patterns and trends
- Evaluate methodologies and draw conclusions
- Communication of scientific ideas and concepts

**Victorian Curriculum links:**

- Science as a human endeavour
- Science Inquiry Skills
- Personal and social capability: Collaboration

## **SPORT SCIENCE**

**Cost:** \$85

Sports Science is an introduction to VCE Physical Education aims to allow students to investigate how a range of factors effect sports performance. Through theory and practical application students will develop their understanding of the body and body systems and how these can aid performance. They also investigate a range of sport science factors and apply these to practical situations to enhance their understanding of how performance in sports can be improved. There is a possible excursion to Melbourne to participate in a range of different sporting activities.

**Skills Include:**

- Research and analysis
- Fitness testing methods and analysis of performance

Students will undertake study of Anatomy and some basic Physiology. They will also complete several labs throughout the semester in which they will study biomechanical principles. Following this they will complete units on fitness and technology in sport.

**Victorian Curriculum Links:**

- Evaluate own and others' movement compositions, and provide and apply feedback in order to enhance performance situations (VCEPEM152)
- Formulate questions or hypotheses that can be investigated scientifically, including identification of independent, dependent and controlled variables (VCSIS134)

## ***SURF AND TURF***

**Cost:** \$120 includes excursions for field work and expeditions

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

***Skills include:***

- Understanding of different environments
- Practical skills relating to different outdoor activities
- Research and analysis of the management of different environments and technology relating to the activities undertaken

***Victorian Curriculum links:***

- Health and Physical Education: Movement and physical activity
- Science – Science Inquiry and Science Understanding
- Geography



# YEAR 9 SUBJECT SELECTION 2023 – EXAMPLE

NAME \_\_\_\_\_

FORM GROUP \_\_\_\_\_

## MY CURRENT STUDIES

My semester one Progress Report average score was: \_\_\_\_\_

My semester one Victorian Curriculum Levels for English were: R&V\_\_\_\_\_, S&L\_\_\_\_\_, W\_\_\_\_\_

My semester one Victorian Curriculum Levels for Maths were: M&G\_\_\_\_\_, N&A\_\_\_\_\_, S&P\_\_\_\_\_

### CAREER INTERESTS

### LEARNING GOALS for next year

A Year 9 program will consist of compulsory subjects English, Maths, Science, Health & PE, Connect, either Humanities or Language, and four elective subjects (two per semester).

2022 SUBJECT CHOICES	
Select subjects in order of preference from 1 to 5	
<b>COMPULSORY SUBJECTS</b>	
CIRCLE your preferred choice	
Humanities OR Indonesian	
<b>CONNECT SUBJECT OPTIONS</b>	
CIRCLE your preferred choice	
Duke OR Personal OR Community Learning of Ed Challenge Project	
<b>ART ELECTIVES (preference)</b>	
<i>You need to study one of these semester long units.</i>	
1.	
<b>TECHNOLOGY ELECTIVES (preference)</b>	
<i>You need to study one of these semester long units.</i>	
1.	
<b>OTHER ELECTIVES (preference)</b>	
<i>You need to study one of these semester long units.</i>	
1.	
<b>OWN CHOICE ELECTIVE (preference)</b>	
Choose from ANY category	
1.	
<b>RESERVE ELECTIVES (preference 1-8)</b>	
Choose from ANY category.	
Include at least ONE from each category.	
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

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Year 9 Elective Subjects Offerings	
ART ELECTIVES	Cost
Art	\$20
Drama	\$10
Media & Visual Communication	\$15
Music	\$50
Photography	\$25
TECHNOLOGY ELECTIVES	Cost
Automotive – small engines	
Cultural Foods	\$150
Digital Technologies	\$0
Energy Breakthrough	\$340
Excellent Foods	\$150
Retro Fashion	\$30
Woodwork	\$70
OTHER ELECTIVES	Cost
Ag and Hort	\$50
Creative Writing	\$132
Forensic Science	\$0
Health and Human Development	\$0
Marine Science	\$40
Personal Best	\$460
Psychology	\$0
Sport Science	\$85
Surf and Turf	\$120