# 2027
# VCE
# CURRICULUM GUIDE

Hume Anglican Grammar
Donnybrook Campus

Wisdom through Christ

Anglican Grammar Hume

## Aim High, Be Proud

## Table of Contents



*Please note: Curriculum descriptions for all subjects in the Guide are based on the current Study Design as published by the Victorian Curriculum and Assessment Authority.*

*The School reserves the right to withdraw a subject from the listings or offer a Unit 3 – 4 sequence only, should interest in the subject be very low.*

*All details are correct at the time of publication.*

## Introduction

Hume Anglican Grammar seeks to blend academic excellence with richness of opportunity and experience beyond the classroom. In the interests of their personal wellbeing, the School encourages students to pursue activities other than study, such as sport, debating, music, the Arts and leadership.

At all times, we strive to provide an equitable educational experience for all, preparing students to be confident, critical thinkers who have a passion for learning in any setting. Our academic program seeks to develop the pursuit of excellence as a habit of mind and equip students with the skills for lifelong learning.

## The Victorian Certificate of Education (VCE)

The VCE (Victorian Certificate of Education) is a two-year program in Years 11 and 12 administered by the Victorian Curriculum and Assessment Authority (VCAA). It is important that students consult personnel such as the Careers Counsellors, the Heads of Faculty and Subject Coordinators, the VCE Coordinator and the Head of Teaching and Learning – Secondary to gain advice and make informed decisions about subject selection.

For students to be eligible for satisfactory completion of their VCE certificate and obtain an ATAR, Hume Anglican Grammar must abide by the rules set by VCAA pertaining to the submission of work, examination procedures and prerequisite curriculum rules.

It is important to understand the difference between a study (subject) and a Unit (semester). Most studies are made up of four units. Units 1 and 2 are usually undertaken in the first year, and Units 3 and 4 are usually undertaken in the second year of the VCE program. A 'unit' represents about 100 hours of work (of which 50 – 60 hours will be class time) and is undertaken in one semester or half-year.

### Graduation Requirements

Over the two years of the VCE program, most students will complete a total of 24 units. To be awarded the VCE, students must satisfactorily complete at least 16 Units:

- Three units of English, or English Language or Literature or a combination of two of these. This combination must include on Unit 3-4 sequence
- Three sequences of Units 3 and 4 studies other than English

Aside from the compulsory English/English Language/Literature requirement, students have considerable choice over the Units and the mix of Units 1, 2, 3 and 4 they attempt. Tertiary entry is largely based on performance in up to six sequences of Units 3 and 4 studies.

### Unit Outcomes and Satisfactory Completion

Each Unit includes a set of outcomes. All requirements of each Unit must be achieved for satisfactory completion. Achievement of the outcomes is based on the teacher's assessment of the student's performance on assessment tasks prescribed for the Unit.

## The Subject Selection Process

### Choosing a Suitable Course

The most important part of the subject selection process is for students to choose an appropriate program of study from the courses available through the School or other external providers. Students are advised to:

- Gather information about the VCE subjects on offer at Hume Anglican Grammar.
- Consider their strengths as well as their level of interest in the various subject areas available. Students SHOULD NOT select subjects based on preferred teachers, being with friends or ATAR scaling.
- Think about possible tertiary options they might follow and establish the prerequisites and other requirements stipulated by tertiary institutions.
- Think about whether they need a program that guides them more directly into the work force.
- Speak to current senior students about the courses which interest them.
- Seek advice from relevant staff (see 'Contacts' page of this handbook).
- Visit Open Days and Experience Days offered by many tertiary Institutions.

We recommend students invest significant time and energy into this process to ensure selecting a course that will be both challenging and enriching, and one to which they will be fully committed. We provide a plethora of opportunities in a community that rewards ambition, enthusiasm, hard work, and, where without doubt, everyone enjoys themselves. Even more importantly, we desire our community to be a place where honesty and mutual respect are expected. We look forward to assisting students in the process of course selection for their final years of Secondary education.

## Year 11 and Year 12 Course Overviews

The following is an overview of a typical course followed by a student at Hume Anglican Grammar.

### Year 11

| | | | | | | |
|---|---|---|---|---|---|---|
| **Semester 1** | English/Literature Unit 1 | Elective Unit 1 | Elective Unit 1 | Elective Unit 1 | Elective Unit 1 | Elective Unit 1 |
| **Semester 2** | English/Literature Unit 2 | Elective Unit 2 | Elective Unit 2 | Elective Unit 2 | Elective Unit 2 | Elective Unit 2 |

### Year 12

| | | | | | |
|---|---|---|---|---|---|
| **Semester 1** | English/Literature Unit 3 | Elective Unit 3 | Elective Unit 3 | Elective Unit 3 | Elective Unit 3 |
| **Semester 2** | English/Literature Unit 4 | Elective Unit 4 | Elective Unit 4 | Elective Unit 4 | Elective Unit 4 |

## Subject Selection Timeline

For further information contact the Head of Teaching and Learning – Secondary or relevant Head of Faculty/Subject Coordinator – see 'Contacts' page.

| Date | Action |
|---|---|
| Final Week of Term 2 | Curriculum Guides emailed to students and parents. |
| Week 2-3, Term 3 | Year 10 Students have individual meetings with selected members of staff to discuss VCE pathway. |
| Week 2, Term 3<br>**Tuesday 21 July** | Attend Subject Selection Information Evening with parents. |
| Week 2, Term 3 | **Web preferences open** for students Years 8-11 for subject selection. |
| Week 3, Term 3<br>**Friday 31 July** | Web preferences and Acceleration Applications **close.** |
| Early November | Confirmation of subjects sent to students. |

## Accelerated Studies Guidelines

The VCE program is normally studied over a two-year period with subjects benchmarked for student ability in Years 11 and 12. Students who are excelling in their academic studies in Year 10 are offered the opportunity to take up the challenge of accelerating in a VCE subject, thus completing their VCE studies over a three-year period. These students will have demonstrated that they are working above the level expected of their current year, placing them within the top 16% of students of those in the year above (equal to a study score above 36). Selecting a single Unit 1 and 2 sequence in Year 10, alongside Year 10 subjects, allows students to experience the rigour, pleasures, and requirements of studying a Year 11 course, helping them know what to expect in their final years at school.

Students in Year 11 may also wish to accelerate into a Unit 3 and 4 Subject in Year 11 if the subject is running at the campus.

### Requirements to Accelerate

Students who accelerate are expected to be able to cope with both the demands of their accelerated subject, as well as maintaining a high level of achievement and attitude in their other subjects. Acceleration will only be on an application basis, but only students who meet the criteria below are encouraged to apply; due to the negative impact it can have on a student's achievement and some students may not perform as well as they could if studying the subject in the same year as their peers. In addition to the student application, several sources of student data will be thoroughly analysed to ensure we identify students who will benefit most from acceleration by meeting both the academic and social/emotional demands of their acceleration subject and the rest of their Year 10 program.

Students will be offered the opportunity to accelerate if they meet the following required criteria:

1. Student results in English are above 80%.
2. Student achievement across all subjects is of a high standard; graded Assessments are over 80% on average.
3. Student has demonstrated a superb attitude and aptitude towards their studies in all subjects, based on their previous school reports and no concerns raised throughout the year.
4. Student attendance rate is at or above 90%.

Only students who meet all criteria will be considered for acceleration. This will be an extra challenge for students, and they will need to demonstrate that they have the maturity, attitude, ability, and social/emotional capability to balance their workload. In addition, the student's wellbeing will be considered to ensure they are able to cope emotionally with the additional pressures involved in the acceleration program.

### Ongoing Review

The performance of accelerated students will be reviewed at the end of Semesters One and Two. They will be monitored by a panel (VCE Coordinator, Year 10 Coordinator, Head of Teaching and Learning – Secondary). If a student is not progressing as expected in either their accelerated subject or maintaining their expected average in the other Year 10 subjects, they will not be permitted to continue with the Unit 3 and 4 in that subject and, hence, may be withdrawn from the acceleration program. Any breaches to VCAA rules, attendance below 90% or significant changes in the student's wellbeing may result in a withdrawal at the discretion of the VCE Panel. Please note that a minor review will also be undertaken this year to ensure grades remain consistently high in Term 4 and Semester 2 examinations.

A Year 10 student studying a Unit 1 and 2 subject studies will result in the student completing five Year 10 subjects rather than six. All students who accelerate are to complete a full Year 12 program of five subjects in their final year at school, which will equate to studying six VCE subjects in total.

*Students wishing to apply for Acceleration should consult the Acceleration Program Handbook and complete the Acceleration Application Form.*

### Available Subjects and Prerequisites

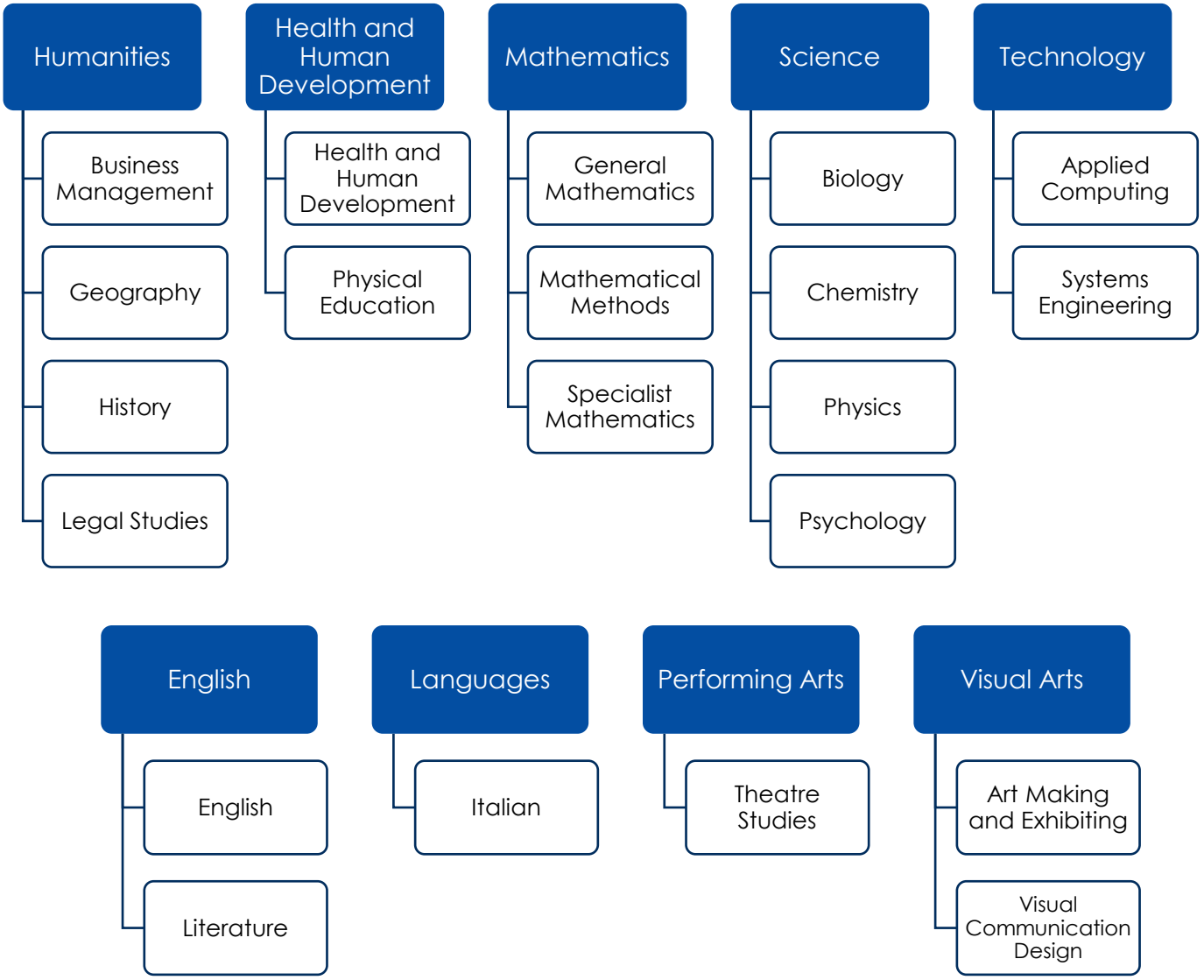
The following subjects are available for acceleration into **Units 1-2** *directly*, with any additional prerequisites listed below:

| Subject | Prerequisites |
|---|---|
| Art Making & Exhibiting | Results of 85% or above in a Visual Arts subject. |
| Biology | Results of 85% or above in Science. |
| Business Management | Results of 85% or above in Humanities. |
| Geography | Results of 85% or above in Humanities. |
| Health and Human Development | Results of 85% or above in Core PE. |
| History | Results of 85% or above in Humanities. |
| Legal Studies | Results of 85% or above in Humanities. |
| Physical Education | Results of 85% or above in Core PE. |
| Psychology | Results of 85% or above in Science. |
| Systems Engineering | Results of 85% or above in a Technology subject. |

The following subjects are available for acceleration into **Units 3-4** *directly*, with any additional prerequisites listed below:

| | |
|---|---|
| Biology | Results of 85% or above in Science. |

## Overview of Subject Offerings in the VCE



## Applied Computing – Unit 1 and 2

### Unit 1: Applied Computing

Students are introduced to the stages of the problem-solving methodology. Students focus on how data can be used within software tools such as databases and spreadsheets to create data visualisations, and the use of an object-oriented programming (OOP) language to develop a working software solution.

In Area of Study 1, as an introduction to data analytics, students respond to a teacher-provided analysis of requirements and designs to identify and collect data to present their findings as data visualisations. They present work that includes database, spreadsheet and data visualisations solutions. In Area of Study 2, students select and use a programming language to create a working software solution. Students prepare, document and monitor project plans and engage in all stages of the problem-solving methodology.

**Area of Study 1:** Database software, spreadsheet software, data visualisation software and an appropriate tool for running Structured Query Language (SQL) queries

**Area of Study 2:** An appropriate OOP language

### Unit 2: Applied Computing

Students focus on developing innovative solutions to needs or opportunities that they have identified and propose strategies for reducing security risks to data and information in a networked environment.

In Area of Study 1, students work collaboratively and select a topic for further study to create an innovative solution in an area of interest. The innovative solution can be presented as a proof of concept, a prototype or a product. Students engage in all areas of the problem-solving methodology. In Area of Study 2, as an introduction to cybersecurity, students investigate networks and the threats, vulnerabilities and risks to data and information. They propose strategies to protect the data accessed using a network.

**Area of Study 1:** Any software tools used to create an innovative solution, for example a programming language, spreadsheet software, web-authoring software, presentation software, tool for planning a project

**Area of Study 2:** A software tool to represent a network

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Folio of exercises or software solutions and a written report
- Presentation (oral, multimedia, visual) to present findings or software solutions
- Annotated visual report
- Case study with structured questions
- Design of a wireless network or a working model of a wireless network
- End-of-semester examination

## Art Making and Exhibiting – Unit 1 and 2

### Unit 1: Explore, Expand and Investigate

Students explore materials, techniques and processes in a range of art forms. They expand their knowledge and understanding of the characteristics, properties and application of materials used in art making. Students also explore the historical development of specific art forms and investigate how the characteristics, properties and use of materials and techniques have changed over time. Throughout, students become aware of and understand the safe handling of materials they use. Their exploration and experimentation is documented in both visual and written form in a Visual Arts journal. The three Areas of Study invite students to consider:

- How do artists use materials and techniques in their art making?
- How do artists use materials and techniques to represent ideas and achieve a style in their artworks?
- What role do artworks and their presentation play in society?

**Area of Study 1:** Explore – materials, techniques and art forms

**Area of Study 2:** Expand, present and reflect

**Area of Study 3:** Investigate – research and present

### Unit 2: Understand, Develop and Resolve

Students continue to research how artworks are made by investigating how artists use aesthetic qualities to represent ideas in artworks. They broaden their investigation to understand how artworks are displayed to audiences and how ideas are represented to communicate meaning. Students respond to a set theme and progressively develop their own ideas. They consolidate these ideas to plan and make finished artworks, reflecting on their knowledge and understanding of the aesthetic qualities of artworks. Students begin to understand how exhibitions are planned and designed and how spaces are organised for exhibitions. The three Areas of Study invite students to consider:

- How are thematic exhibitions planned and designed?
- How does an artist develop aesthetic qualities and style in artworks?
- How does an artist develop ideas and personal style in artworks?

**Area of Study 1:** Understand – ideas, artworks and exhibition

**Area of Study 2:** Develop – theme, aesthetic qualities and style

**Area of Study 3:** Resolve – ideas, subject matter and style

### Prerequisites

Students are to discuss their suitability for this subject with the current VCE Visual Arts subject teacher. Enrolled VCE Visual Arts students are expected to demonstrate a commitment to their chosen art form both in and out of the classroom. Participation in afterschool studio enrichment activities may be required.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Visual Arts journal
- Artwork analysis assignments
- Visual report
- End-of-semester examination
- Finished Artworks and exhibition (art form: choose from painting, drawing, printmaking, sculpture, film, video, ceramics, sound, photography, installations, interdisciplinary practices, digital artworks, fashion, textiles and street art)

## Biology – Unit 1 and 2

### Unit 1: How do Organisms Regulate their Functions?

In this unit, students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation and renewal of cells. They explore how systems function through cell specialisation in vascular plants and animals and consider the role homeostatic mechanisms play in maintaining an animal's internal environment. A student-adapted or student-designed scientific investigation is undertaken in Area of Study 3. The investigation involves the generation of primary data and is related to the function and/or the regulation of cells or systems.

**Area of Study 1:** How do cells function?

**Area of Study 2:** How do plant and animal systems function?

**Area of Study 3:** How do scientific investigations develop understanding of how organisms regulate their functions?

### Unit 2: How does Inheritance Impact on Diversity?

Students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They apply their understanding of chromosomes to explain the process of meiosis. Students consider how the relationship between genes, and the environment and epigenetic factors influence phenotypic expression. They explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including the use of reproductive cloning technologies. They study structural, physiological and behavioural adaptations that enhance an organism's survival. Students explore interdependences between species, focusing on how keystone species and top predators' structure and maintain the distribution, density and size of a population. They also consider the contributions of indigenous Australian knowledge and perspectives in understanding the survival of organisms in Australian ecosystems. A student-directed research investigation into a contemporary ethical issue is undertaken which relates to the application of genetic knowledge, reproductive science, inheritance or adaptations and interdependencies beneficial for survival.

**Area of Study 1:** How is inheritance explained?

**Area of Study 2:** How do inherited adaptations impact on diversity?

**Area of Study 3:** How do humans use science to explore and communicate contemporary bioethical issues?

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- A case study analysis
- Problem-solving involving biological concepts and skills
- A bioinformatics exercise
- A data analysis
- Response to an issue
- Reflective annotations of a logbook of practical activities
- Media analysis of two or more media sources
- Laboratory or fieldwork report
- A modelling or simulation activity
- A scientific poster

## Biology – Unit 3 and 4

### Unit 3: How do Cells Maintain Life?

Students investigate the workings of the cell from several perspectives. They analyse the structure and function of nucleic acids as information molecules, gene structure and expression in prokaryotic and eukaryotic cells and proteins as a diverse group of functional molecules. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies. Students explore the structure, regulation and rate of biochemical pathways, with reference to photosynthesis and cellular respiration. They explore how the application of biotechnologies to biochemical pathways could lead to improvements in agricultural practices. Students investigate a selected case study, data analysis and/or a bioethical issue with investigation topics including, but not limited to: discovery and development of the model of the structure of DNA; proteomic research applications; transgenic organism use in agriculture; use, research and regulation of gene technologies, including CRISPR-Cas9; outcomes and unexpected consequences of enzyme inhibitors; research into increasing efficiency of photosynthesis or cellular respiration or impact of poisons on the cellular respiration pathway.

**Area of Study 1:** What is the role of nucleic acids and proteins in maintaining life?

**Area of Study 2:** How are biochemical pathways regulated?

### Unit 4: How does Life Change and Respond to Challenges?

Students consider the continual change and challenges to which life on Earth has been and continues to be subjected. They study the human immune system and interactions between its components to provide immunity. Students consider how biological knowledge can respond to bioethical issues and challenges related to disease. Students consider how evolutionary biology is based on the accumulation of evidence over time. They investigate various change events on a population's gene pool and the biological consequences of changes in allele frequencies. Students examine the evidence for species relatedness and change in life forms using evidence from palaeontology, structural morphology, molecular homology and comparative genomics. Students examine the evidence for structural trends in the human fossil record. Students apply their knowledge through investigation of a selected case study, data analysis and/or bioethical issue, including but not limited to: deviant cell behaviour and links to disease; autoimmune diseases; allergic reactions; development of immunotherapy strategies; bacteriophage therapy; prevention and eradication of disease; vaccinations; bioprospecting for new medical treatments; patterns and evidence for evolutionary relationships; population and species changes over time in non-animal communities; monitoring of gene pools for conservation planning; role of selective breeding programs in conservation of endangered species; or impact of technologies on the study of evolutionary biology.

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

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

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

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Comparison and evaluation of practical activities, student-designed or adapted investigation and independent research investigation
- Structured scientific poster and logbook entries
- Analysis and evaluation of primary/secondary data
- External end-of-year examination

## Business Management – Unit 1 and 2

### Unit 1: Planning a Business

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. The ability of entrepreneurs to establish a business and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. Students explore the factors affecting business ideas and the internal and external environments within which businesses operate, as well as the effect of these on planning a business. They also consider the importance of the business sector to the national economy and social wellbeing.

**Area of Study 1:** The business idea

**Area of Study 2:** Internal business environment and planning

**Area of Study 3:** External business environment and planning

### Unit 2: Establishing a Business

This unit focuses on the establishment phase of a business. Establishing a business involves compliance with legal requirements as well as decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. Students examine the legal requirements that must be met to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse management practices by applying key knowledge to contemporary business case studies from the past four years.

**Area of Study 1:** Legal requirements and financial considerations

**Area of Study 2:** Marketing a business

**Area of Study 3:** Staffing a business

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Case study analysis
- Development of a business plan
- School-based, short-term business activity
- Tests
- Analytical exercises
- Media analysis
- Investigation and report (written, visual, oral)
- End-of-semester examination

## Chemistry – Unit 1 and 2

### Unit 1: How can the Diversity of Materials be Explained?

The development and use of materials for specific purposes is an important human endeavour. Students investigate the chemical structures and properties of a range of materials, including covalent compounds, metals, ionic compounds and polymers. They are introduced to ways that chemical quantities are measured. They consider how manufacturing innovations lead to more sustainable products being produced for society through the use of renewable raw materials and a transition from a linear toward a circular economy. Students conduct practical investigations involving the reactivity series of metals, separation of mixtures by chromatography, use of precipitation reactions to identify ionic compounds, determination of empirical formulas, and synthesis of polymers. A student-directed research investigation into the sustainable production or use of a selected material is undertaken to explore how sustainability factors such as green chemistry principles and the transition to a circular economy are considered in the production of materials to ensure minimum toxicity and impacts on human health and the environment.

**Area of Study 1:** How do chemical structures of materials explain their properties and reactions?

**Area of Study 2:** How are materials quantified and classified?

**Area of Study 3:** How can chemical principles be applied to create a more sustainable future?

### Unit 2: How do Chemical Reactions Shape the Natural World?

Society is dependent on the work of chemists to analyse the materials and products in everyday use. Students analyse and compare different substances dissolved in water and the gases that may be produced in chemical reactions. They explore applications of acid-base and redox reactions in society. Students conduct practical investigations involving the specific heat capacity of water, acid-base and redox reactions, solubility, molar volume of a gas, volumetric analysis, and the use of a calibration curve. A student-adapted or designed scientific investigation is undertaken, involving the generations of primary data related to the production of gases, acid-base or redox reactions, or the analysis of substances in water. In both Units 1 and 2, students use chemistry terminology, including symbols, formulas, chemical nomenclature and equations, to represent and explain observations and data from their own investigations and to evaluate the chemistry-based claims of others.

**Area of Study 1:** How do chemicals interact with water?

**Area of Study 2:** How are chemicals measured and analysed?

**Area of Study 3:** How do quantitative scientific investigations develop our understanding of chemical reactions?

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- A report of a laboratory or fieldwork activity, including the generation of primary data
- Comparison and evaluation of chemical concepts, methodologies and methods, and findings from at least two student activities
- Reflective annotations of one or more practical activities from a logbook
- A report of selected practical investigations
- Critique of an experimental design, chemical process or apparatus
- Analysis and evaluation of generated primary and/or collated secondary data
- A modelling or simulation activity
- A media analysis/response
- Problem-solving involving chemical concepts, skills and/or issues
- A report of an application of chemical concepts to a real-world context
- Analysis and evaluation of a chemical innovation, research study, case study, socio-scientific issue, secondary data or a media communication, with reference to sustainability (green chemistry principles, sustainable development, the transition to a circular economy)
- An infographical scientific poster

## English – Unit 1 and 2

### Unit 1: English

Students engage in reading and viewing texts with a focus on personal connections with the story. They discuss and clarify ideas and values presented by authors through their evocations of character, setting and plot and through investigations of the point of view and/or voice of the text. They develop and strengthen inferential reading and viewing skills, and consider the ways a text's vocabulary, text structures and language features can create meaning on several levels and in different ways. Students' exploration of texts involves understanding and appreciating the role of vocabulary, text structures and language features in creating story and meaning. They contemplate the ways a text can present and reflect human experiences, and how stories or aspects of stories resonate with their own memories and lives. Students are encouraged to share their experience and understanding of the world, and make connections with key ideas, concerns and tensions presented in a text. They also explore the cultural, social and historical values embedded in the text, and can compare these values with their own. It is through these moments of connection that students engage more closely with the reading experience and draw parallels with their own observations of the world.

**Area of Study 1:** Reading and exploring texts

**Area of Study 2:** Crafting texts

### Unit 2: English

Students develop their reading and viewing skills, including deepening their capacity for inferential reading and viewing, to further open possible meanings in a text, and to extend their writing in response to text. Students will develop their skills from Unit 1 through an exploration of a different text type from that studied in Unit 1. Students read or view a text, engaging with the ideas, concerns and tensions, and recognise ways vocabulary, text structures, language features and conventions of a text work together to create meaning. Through discussions about representations in a text, they examine the ways readers understand text considering its historical context, and social and cultural values. They also explore the text through the prism of their own cultural knowledge, experiences and understanding of the world, and extend their observations into analytical and abstracted explorations. Developing analytical writing about a text provides students with opportunities to build skills to discuss ideas, apply appropriate metalanguage, integrate evidence from a text to support key points, and explore organisational structures such as formal essays.

**Area of Study 1:** Reading and exploring texts

**Area of Study 2:** Exploring argument

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Personal response to a set text
- Student created texts (such as short stories, speeches, essays etc.)
- Analytical response to a set text
- Annotated persuasive texts
- Analysis of the use of argument and persuasive language
- End-of-semester examination

## Geography – Unit 1 and 2

### Unit 1: Hazards and Disasters

This unit investigates how people have responded to specific hazards and disasters. Hazards represent the potential to cause harm to people and or the environment, whereas disasters are serious disruptions of the functionality of a community at any scale.

Students examine the processes involved with hazards and hazards events, considering their causes and impacts, human responses to the hazards event and the interconnections between human activities and natural phenomena, including the impact of climate change.

**Area of Study 1:** Characteristics of hazards

**Area of Study 2:** Responses to hazards and disasters

### Unit 2: Tourism Issues and Challenges

Students investigate the characteristics of tourism: where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and the environment, issues and challenges of ethical tourism. Students select contrasting examples of tourism from within Australia and elsewhere in the world to support their investigations. The scale of tourism movement since the 1950s and its predicted growth has had and continues to have a significant impact on local, regional and national environments, economies and cultures. The travel and tourism industry is directly responsible for a significant number of jobs globally and generate a considerable portion of the global GDP.

**Area of Study 1:** Characteristics of Tourism

**Area of Study 2:** Impacts of Tourism: Issues and Challenges

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Multi-media presentations
- Tests
- Data analysis tasks
- Case study analysis
- End-of-semester examination

## Health and Human Development – Unit 1 and 2

### Unit 1: Understanding Health and Wellbeing

In this unit, students explore health and wellbeing as a concept with varied and evolving perspectives and definitions. As a foundation to their understanding of health, students investigate the World Health Organization's (WHO) definition and other interpretations. They also explore the fundamental conditions required for health as stated by the WHO, which provide a social justice lens for exploring health inequities.

In this unit, students identify perspectives relating to health and wellbeing, and inquire into factors that influence health attitudes, beliefs and practices, including among Aboriginal and Torres Strait Islander Peoples. Students look at multiple dimensions of health and wellbeing, the complex interplay of influences on health outcomes and the indicators used to measure and evaluate health status. With a focus on youth, the unit equips students to consider their own health as individuals and as a cohort. They build health literacy by interpreting and using data in a research investigation into one youth health focus area, and by investigating the role of food.

**Area of Study 1:** Concepts of Health

**Area of Study 2:** Youth health and wellbeing

**Area of Study 3:** Health and nutrition

### Unit 2: Managing Health and Development

In this unit, students investigate transitions in health and wellbeing, and human development, from lifespan and societal perspectives. They explore the changes and expectations that are integral to the progression from youth to adulthood. Students apply 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 explore health literacy through an investigation of the Australian healthcare system from the perspective of youth and analyse health information. They investigate the challenges and opportunities presented by digital media and consider issues surrounding the use of health data and access to quality health care.

**Area of Study 1:** Developmental transitions

**Area of Study 2:** Youth health literacy

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Visual presentations
- Oral presentations
- Written report
- Structured questions
- Extended response questions
- End-of-semester examination

## History – Unit 1 and 2

### Unit 1: Modern History – Change and Conflict

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

Students will focus on the events, ideologies, individuals and movements of the period that led to the end of empires and the emergence of new nation states before and after World War One; the consequences of World War One; the emergence of conflict; and the causes of World War Two. They investigate the impact of the treaties which ended the Great War which redrew the maps of Europe and its colonies, breaking up the former empires of the defeated nations, such as the partitioning of the German, Austro-Hungarian and Ottoman Empires. They consider the aims, achievements and limitations of the League of Nations. Students focus on the social life and cultural expression in the late nineteenth century and the first half of the twentieth century, and their relation to the technological, political and economic changes.

**Area of Study 1:** Ideology and conflict

**Area of Study 2:** Social and cultural change

### Unit 2: Modern History – The Changing World Order

Students investigate the nature and impact of the Cold War and challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the 21st century.

Students investigate the causes of the Cold War in the decades that followed World War Two. They analyse the significant contribution of events, ideologies and individuals, and the consequences for nations and people in the period 1945 – 1991. While the USA and the USSR never engaged in direct armed conflict, they opposed each other in a range of international conflicts and proxy wars such as those in Berlin, Korea, Angola, Cuba and Vietnam. The reasons for the end of this long-running period of ideological conflict and the collapse of the USSR in 1991, as well as exploring the legacy of communism and/or socialism in the post-Soviet era and the emergence of democracy in new nations are also studied. There is also a focus how traditional ideas, values and political systems were challenged and changed by individuals and groups in a range of contexts during the second half of the twentieth century and first decade of the twenty-first century. Students also consider the extent to which ideas, values and political systems remained the same and/or change was resisted. Students explore the causes of significant political and social events and movements, and their consequences for nations and people.

**Area of Study 1:** Causes course and consequences of the Cold War

**Area of Study 2:** Challenge and change

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- A historical inquiry
- An essayevaluation of historical sources
- Short-answer questions
- Extended responses
- A multimedia presentation.
- End-of-semester examination

## Italian – Unit 1 and 2

### Unit 1: Italian

Students develop an understanding of the language and culture/s of Italian-speaking communities through the study of three or more topics from prescribed themes (VCAA). Each area of study in the unit must focus on a different subtopic. Students access and share useful information on the topics and subtopics through Italian and consolidate and extend vocabulary and grammar knowledge and language skills. They focus on analysing cultural products or practices including visual, spoken or written texts. Cultural products or practices can be drawn from a diverse range of texts, activities and creations. These may include: stories, poems, plays, novels, songs, films, photographs, artworks, architecture, technology, food, clothing, sports and festivals. Students apply acquired knowledge of Italian culture and language to new contexts. Students reflect on the interplay between language and culture, and its impact on the individual's language use in specific contexts and for specific audiences.

**Area of Study 1:** Interpersonal communication

**Area of Study 2:** Interpretive communication

**Area of Study 3:** Presentational communication

### Unit 2: Italian

Students develop an understanding of aspects of language and culture through the study of three or more topics from prescribed themes. Each area of study must focus on a different subtopic. Students analyse visual, spoken and written texts. They access and share useful information on the topics and subtopics through Italian and consolidate and extend vocabulary, grammar knowledge and language skills. Cultural products or practices can be used to demonstrate how culture and perspectives may vary between communities. Students reflect on the interplay between language and culture, and its impact on meaning, understanding and the individual's language use in specific contexts and for specific audiences.

**Area of Study 1:** Interpersonal communication

**Area of Study 2:** Interpretive communication

**Area of Study 3:** Presentational communication

### Prerequisites

Students need to have studied Year 10 Italian or equivalent.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Personal, imaginative, persuasive, informative and evaluative written responses
- Class and interview-style oral presentations
- Evaluation of opposing arguments as well as interpreting written and visual texts
- Interpretation of authentic aural samples
- End-of-semester examination

## Legal Studies – Unit 1 and 2

### Unit 1: The Presumption of Innocence

In this unit, students develop an understanding of legal foundations, such as the different types and sources of law, the characteristics of an effective law, and an overview of parliament and the courts. Students are introduced to and apply the principles of justice. They investigate key concepts of criminal law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime. In doing this, students develop an appreciation of the manner in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused. Students also develop an appreciation of how a criminal case is determined, and the types and purposes of sanctions. Students apply their understanding of how criminal cases are resolved and the effectiveness of sanctions through consideration of recent criminal cases from the past four years.

**Area of Study 1:** Legal foundations

**Area of Study 2:** Proving Guilt

**Area of Study 3:** Sanctions

### Unit 2: Wrongs and Rights

In this unit, students investigate key concepts of civil law and apply these to actual and/or hypothetical scenarios to determine whether a party is liable in a civil dispute. Students explore different areas of civil law, and the methods and institutions that may be used to resolve a civil dispute and provide remedies. They apply knowledge through an investigation of civil cases from the past four years. Students also develop an understanding of how human rights are protected in Australia and possible reforms to the protection of rights, and investigate a contemporary human rights issue in Australia, with a specific focus on one case study.

**Area of Study 1:** Civil Liability

**Area of Study 2:** Remedies

**Area of Study 3:** Human Rights

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Folios
- Structured questions
- Essays / Reports
- Case studies
- Class presentations
- End-of-semester examination

## Literature – Unit 1 and 2

### Unit 1:

In this unit, students consider how language, structure and stylistic choices are used in different literary forms and types of text. They consider both print and non-print texts, reflecting on the contribution of form and style to meaning. Students reflect on the degree to which points of view, experiences and contexts shape their own and others' interpretations of text. Students closely examine the literary forms, features and language of texts. They begin to identify and explore textual details, including language and features, to develop a close analysis response to a text. Further, students explore the concerns, ideas, style and conventions common to a distinctive type of literature seen in literary movements or genres. Examples of these groupings include literary movements and/or genres such as modernism, epic, tragedy and magic realism, as well as more popular, or mainstream, genres and subgenres such as crime, romance and science fiction. Students explore texts from the selected movement or genre, identifying and examining attributes, patterns and similarities that locate each text within that grouping.

**Area of Study 1:** Reading practices

**Area of Study 2:** Exploration of literary movements and genres

### Unit 2:

Students explore the voices, perspectives and knowledge of Aboriginal and Torres Strait Islander authors and creators. They consider the interconnectedness of place, culture and identity through the experiences, texts and voices of Aboriginal and Torres Strait Islander peoples, including connections to Country, the impact of colonisation and its ongoing consequences, and issues of reconciliation and reclamation. Further, in Area of Study 2, students focus on the text in its historical, social and cultural context, reflecting on representations of a specific time, period and/or culture with a text. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

**Area of Study 1:** Voices of Country

**Area of Study 2:** The text in its context

### Prerequisites

None.

### Methods of Assessment

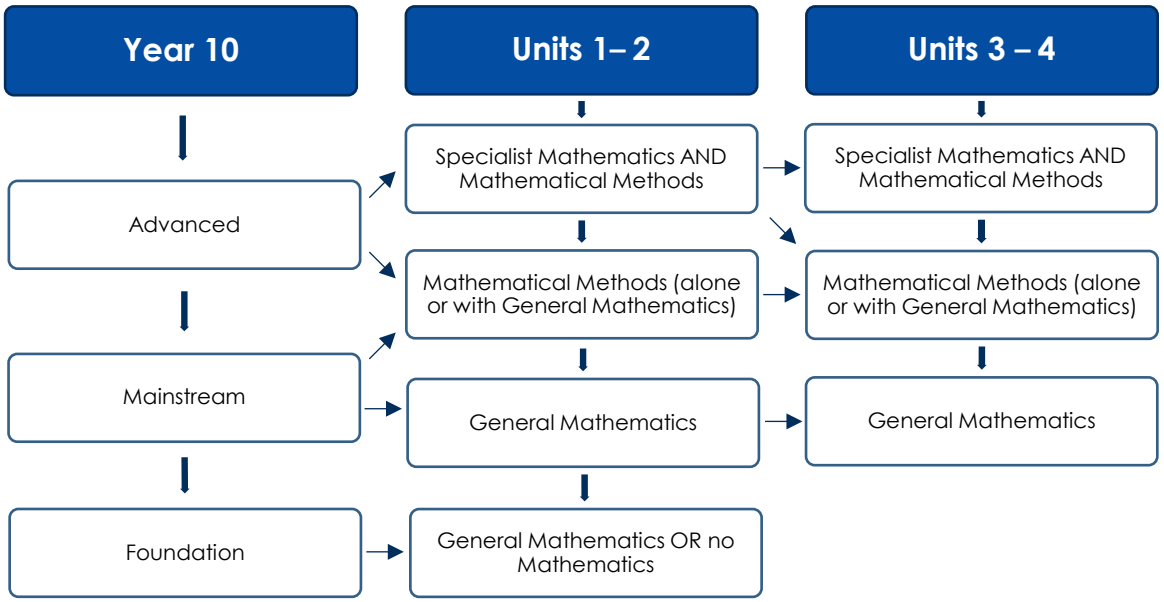
Students will complete several assessment tasks over the semester. These will include:

- Close analysis of selected passages
- Creative writing pieces
- Essays
- End-of-semester examination

## Mathematics

### Choosing an appropriate Mathematics course at the end of Year 10

The following Table illustrates the complexity of Mathematics pathways in the VCE.




For entry into Mathematical Methods Unit 1 and 2 and Specialist Mathematics Unit 1 and 2, please refer to the recommended entry scores below. Each student in Year 10 will be given a recommendation regarding the most suitable Mathematics pathway before the subject selection process into Year 11.

| Recommendation for Year 11 | Criteria |
|---|---|
| No Mathematics at VCE | Test Average and Examination less than 50% |
| General Mathematics Unit 1 and 2 | Test Average and Examination above 50% |
| Mathematical Methods Unit 1 and 2 | Test Average and Examination above 70% |
| Specialist Mathematics Unit 1 and 2 | Test Average and Examination above 85% |
| Acceleration*<br>General Mathematics Unit 3 and 4 in Year 11 | Test Average and Examination above 85% for students currently studying Advanced Mathematics in Year 10.<br>Students need to demonstrate a strong commitment to their studies.<br>Applications will be considered individually. |

***Please note:** that each student is considered individually, and recommendations are made at the Faculty's discretion.*

## General Mathematics – Unit 1 and 2

A readily accessible course, General Mathematics Units 1 and 2 caters for a range of student interests, provides preparation for the study of VCE General Mathematics at Unit 3 and 4 level and contains assumed knowledge and skills for these Units.

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

### Unit 1: General Mathematics

**Area of Study 1:** Data analysis, probability and statistics (types of data, data distributions, centre, spread and comparison of data sets)

**Area of Study 2:** Algebra and structure (number patterns and recursion)

**Area of Study 3:** Functions, relations and graphs (linear graphs and models)

**Area of Study 4:** Discrete mathematics (matrices)

### Unit 2: General Mathematics

**Area of Study 1:** Data analysis, probability and statistics (investigating relationships between two numerical variables, scatterplots and lines of good fit)

**Area of Study 2:** Discrete mathematics (graphs and networks)

**Area of Study 3:** Functions relations and graphs (direct and inverse variation, transformations and modelling)

**Area of Study 4:** Space and measurement (measurement, similarity, trigonometry and Pythagoras).

### Prerequisites

None.

### Methods of Assessments

Students will complete several assessment tasks over the semester. These will include:

- Topic tests
- Modelling and problem-solving tasks
- End-of-semester examination

## Mathematical Methods – Unit 1 and 2

### Unit 1: Mathematical Methods

Mathematical Methods Unit 1 and 2 provides an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics and their applications in a variety of practical and theoretical contexts. The Units are designed as preparation for Mathematical Methods Unit 3 and 4 and contain assumed knowledge and skills for these units.

The focus of Unit 1 is the study of simple algebraic functions, and the areas of study are 'Functions, relations and graphs', 'Algebra, number and structure', 'Calculus' and 'Data analysis, probability and statistics'. At the end of Unit 1, students are expected to have covered the content outlined in each area of study, with the exception of 'Algebra, number and structure' which extends across Unit 1 and 2. This content should be presented so there is a balanced and progressive development of skills and knowledge from each of the four areas of study with connections between and across the areas of study being developed consistently throughout both Units.

Students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs and differentiation, with and without the use of technology.

### Unit 2: Mathematical Methods

The focus of Unit 2, following on from Unit 1, is the study of simple transcendental functions, the calculus of polynomial functions and related modelling applications. In undertaking this Unit, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, algorithms, algebraic manipulation, equations, graphs, differentiation and anti-differentiation, with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout the Unit as applicable.

**Area of Study 1:** Functions, relations and graphs

**Area of Study 2:** Algebra, number and structure

**Area of Study 3:** Calculus

**Area of Study 4:** Data analysis, probability and statistics

### Prerequisites

Students need to have studied Year 10 Mainstream or Advanced Mathematics (Year 10 elective Applied Mathematics is also highly encouraged).

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Topic tests
- Modelling and problem-solving tasks
- End-of-semester examination

## Specialist Mathematics – Unit 1 and 2

Specialist Mathematics Unit 1 and 2 provides a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem-solving, reasoning and proof. This study has a focus on interest in the discipline of mathematics and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics-related fields.

Mathematical Methods Unit 1 and 2 and Specialist Mathematics Unit 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Unit 3 and 4. Study of Specialist Mathematics Unit 3 and 4 also assumes concurrent study or previous completion of Mathematical Methods Unit 3 and 4.

At the end of Unit 1, concepts from the two Areas of Study will be further developed and used in Units 2, 3 and 4. Students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists, tables and matrices, diagrams, graphs, logic gates and geometric constructions, algorithms, algebraic manipulation, recurrence relations, equations and graphs, with and without the use of technology. They are expected to be able to construct proofs and develop and interpret algorithms to solve problems. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment is incorporated throughout each unit as applicable.

### Unit 1: Specialist Mathematics

**Area of Study 1:** Algebra, Number and Structure

- Proof and number
- Graph theory
- Logica and algorithms

**Area of Study 2:** Discrete mathematics

- Sequences and series
- Combinatorics
- Matrices

### Unit 2: Specialist Mathematics

**Area of Study 1:** Data analysis, probability and statistics

- Simulation, sampling and sampling distributions

**Area of Study 2:** Space and measurement

- Trigonometry
- Transformations
- Vectors in the plane

**Area of Study 3:** Algebra, Number and Structure

- Complex numbers

**Area study 4:** Functions, relations and graphs

### Prerequisites

These Units need to be studied in conjunction with Mathematical Methods Unit 1 and 2.

Students need to have studied Year 10 Mainstream or Advanced Mathematics.

### Methods of Assessments

Students will complete several assessment tasks over the semester. These will include:

- Modelling and problem-solving tasks
- Topic tests
- End-of-semester examination

## Physical Education – Unit 1 and 2

### Unit 1: Bodies in Motion

Students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through participation in practical activities, students explore and analyse the relationships between the body systems and movement, and how these systems interact and respond at various intensities. Students investigate possible conditions and injuries associated with the musculoskeletal and cardiorespiratory systems. Students will then recommend and implement strategies to minimise and manage such injuries and conditions. They consider the ethical implications of using permitted and prohibited practices to improve the performance of the cardiorespiratory systems, evaluating perceived physiological benefits and describing potential harms.

**Area of Study 1:** How does the musculoskeletal system work to produce movement?

**Area of Study 2:** What role does the cardiorespiratory system play in movement?

### Unit 2: Physical Activity, Sport, Exercise and Society

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

Through a series of practical activities, students experience and explore different types of physical activity promoted within and beyond their community. They gain an appreciation of the movement required for health benefits and the consequences of physical inactivity and sedentary behaviour. Using various methods to assess physical activity and sedentary behaviour, students analyse data to investigate perceived barriers and enablers and explore opportunities to enhance participation in physical activity. Students explore and apply the social-ecological model to critique a range of individual- and settings-based strategies that are effective in promoting participation in regular physical activity. They create and participate in a personal plan with movement strategies that optimise adherence to physical activity and sedentary behaviour guidelines.

By investigating a range of intrapersonal and interpersonal factors that affect access to, and inclusion, participation and performance in, physical activity and sport, such as injuries, coaching, sports technology and the media, psychological strategies and equity for a range of population groups. Students explore one contemporary issue relevant to physical activity and/or sport and prescribe and participate in practical activities to highlight the issue. Students develop an understanding of the historical and current perspectives on the issue and forecast future trends. They form conclusions about the impacts these issues have on physical activity and sport in society.

**Area of Study 1:** How do physical activity, sport and exercise contribute to healthy lifestyles?

**Area of Study 2:** What are the contemporary issues associated with physical activity and sport?

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Structured Questions
- Extended response question
- Written Plan or Multimedia presentation
- Oral presentation
- Practical laboratory report
- End-of-semester examination

## Physics – Unit 1 and 2

### Unit 1: How is Energy Useful to Society?

Students examine some of the fundamental ideas and models used by physicists to enhance their ability to understand and explain energy. Models used to understand light, thermal energy, radioactivity, nuclear processes and electricity are explored. Students apply these physics ideas to contemporary societal issues: communication, climate change and global warming, medical treatment, electrical home safety and Australian energy needs. In the three different Areas of Study, students study light using the wave model and thermal energy using a particle model forming an understanding of the fundamental physics ideas of reflection, refraction and dispersion. They build on their understanding of energy to explore energy that derives from the nuclei of atoms and learn about the properties of the radiation from the nucleus and effects of radiation on human cells and tissues and apply this understanding to the use of radioisotopes in medical therapy. They develop conceptual models to analyse electrical phenomena and undertake practical investigations of circuit components.

**Area of Study 1:** How are light and heat explained?

**Area of Study 2:** How is energy from the nucleus utilised?

**Area of Study 3:** How can electricity be used to transfer energy?

### Unit 2: How does Physics Help us to Understand the World?

Students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments. In the three different Areas of Study, students describe and analyse graphically, numerically and algebraically the energy and motion of an object, using specific physics terminology and conventions. Selecting from eighteen options, they explore the related physics and use this physics to form a stance, opinion or solution to a contemporary societal issue or application. They adapt or design and then conduct a scientific investigation to generate appropriate primary qualitative and/or quantitative data, organise and interpret the data and reach and evaluate a conclusion in response to the research question.

**Area of Study 1:** How is motion understood?

**Area of Study 2:** How does physics inform contemporary issues and applications in society?

**Area of Study 3:** How do physicists investigate questions?

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- A report of a laboratory or fieldwork activity including the generation of primary data
- Reflective annotations related to one or more practical activities from a logbook
- An analysis and evaluation of generated primary and/or collated secondary data
- A critique of an experimental design, process or apparatus
- A modelling or simulation activity
- A report of the design, building, testing and evaluation of a device
- An explanation of a selected physics device, design or innovation
- A physics-referenced response to an issue
- A report of a selected physics phenomenon
- A media analysis/response
- An infographic and scientific poster
- Problem-solving physics concepts and/or skills
- A report of an application of physics concepts to a real-world context
- An analysis, including calculations, of physics concepts applied to real-world contexts
- Comparison and evaluation of two solutions to a problem, explanations of a physics phenomenon or concept, or methods and/or findings from practical activities
- End-of-semester examination

## Psychology – Unit 1 and 2

### Unit 1: How are Behaviour and Mental Processes Shaped?

Students examine the complex nature of psychological development, including situations where psychological development may not occur as expected. They examine the contribution that classical and contemporary knowledge from Western and non-Western societies, including Aboriginal and Torres Strait Islander peoples has made to an understanding of psychological development to the development of psychological model and theories used to predict and explain the development of thoughts, emotions and behaviours. They investigate the structure and functioning of the human brain and the role it plays in mental processes and behaviour and explore brain plasticity and the influence that brain damage may have on a person's psychological functions. A student-directed research investigation into contemporary psychological research is undertaken in Area of Study 3 which involves the exploration of research, methodology and methods, as well as the application of critical and creative thinking to evaluate the validity of a research study by analysing secondary data.

**Area of Study 1:** What influences psychological development?

**Area of Study 2:** How are mental processes and behaviour influenced by the brain?

**Area of Study 3:** how does contemporary psychology conduct and validate psychological research?

### Unit 2: How do Internal and External Factors Influence Behaviour and Mental Processes?

Students evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. They explore a variety of factors and contexts that can influence the behaviour of individuals and groups, recognising that different cultural groups have different experiences and values. They are encouraged to consider Aboriginal and Torres Strait Islander people's experiences within Australian society and how these experiences may affect psychological functions. Students examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways. They investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. A student-adapted or designed scientific investigation is undertaken in Area of Study 3 involving the generation of primary data and is related to internal and external factors that influence behaviour and mental processes.

**Area of Study 1:** How are people influenced to behave in particular ways?

**Area of Study 2:** What influences a person's perception of the world?

**Area of Study 3:** How do scientific investigations develop understanding of influences on perception and behaviour?

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Analysis and evaluation of an experiment or case study
- A data analysis of generated primary and/or collated secondary data
- Reflective annotations of a logbook of practical activities
- Analysis of one or more contemporary media texts
- A literature review
- Response to a psychological issue or ethical dilemma
- A modelling or simulation activity
- Problem-solving involving psychological concepts, skills and/or issue
- A report of a scientific investigation, including the generation, analysis and evaluation of primary data
- End-of-semester examination

## Systems Engineering – Unit 1 and 2

### Unit 1: Mechanical Systems

In this area of study, students learn about fundamental mechanical engineering principles and the components required when producing an operational system. Students learn fundamental principles of how mechanisms and simple mechanical systems provide movement and mechanical advantage, and how the specific components of a system or an entire mechanical system can be represented diagrammatically. Using the systems engineering process students research, design and plan a mechanical system. They consider relevant factors that influence the creation and use of their system and document their findings and process.

**Area of Study 1:** Mechanical system design

**Area of Study 2:** Producing and evaluating mechanical systems

### Unit 2: Electrotechnological Systems

Students study fundamental electrotechnological engineering principles. 'Electrotechnological' encompasses systems that include electrical/electronic circuitry including microelectronic circuitry. Through the application of the systems engineering process, students create operational electrotechnological systems, which may also include mechanical components or electro-mechanical subsystems. While this unit contains fundamental physics and theoretical understanding of electrotechnological systems and how they work, the focus is on the creation of electrotechnological systems, drawing heavily upon design and innovation processes.

Electrotechnology is a creative field that responds to, and drives rapid developments and change brought about through technological innovation. Contemporary design and manufacture of electronic equipment involves increased levels of automation and inbuilt control through the inclusion of microcontrollers and other logic devices. Students explore some of these emerging technologies.

Students study fundamental electrotechnological principles including applied electrical theory, standard representation of electronic components and devices, elementary applied physics in electrical circuits and mathematical processes that can be applied to define and explain the electrical characteristics of circuits.

**Area of Study 1:** Electrotechnological systems design

**Area of Study 2:** Producing and evaluating electrotechnological systems

### Prerequisites

None.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Folio
- Production work
- Practical demonstrations
- End-of-semester examination

## Theatre Studies – Unit 1 and 2

### Unit 1: History of Theatre Styles and Conventions Pre-1945

Students work in production roles with scripts from specific periods that fall between the beginning of theatre history until the end of 1944 focusing on at least two theatre styles, their conventions and histories. They study innovations in theatre production through the styles they explore and apply this knowledge to their interpretations of works. Students develop knowledge and skills about theatre production processes, including dramaturgy, planning, development, and performance to an audience, and they apply this knowledge and skill to their own work. They study safe, ethical, inclusive, and sustainable (where possible, environmentally sustainable) working practices in theatre production. Theatre up to and including 1944 encompasses scripts from a wide range of styles including, but not limited to, Agitprop, Ancient Greek, Ancient Roman, Beijing Opera, Bunraku, Epic Theatre (early works), Elizabethan, Medieval, Musical theatre, Neoclassical, Noh, Melodrama, Realism, Surrealism, Theatre of Cruelty and Wayang Kulit Theatre.

**Area of Study 1:** Exploring pre-1945 theatre styles and conventions

**Area of Study 2:** Interpreting scripts

**Area of Study 3:** Analysing a theatre production in performance

### Unit 2: Contemporary Theatre Styles and Movements

In this unit, students study contemporary theatre practice through the exploration of scripts from 1945 to the present day. They select scripts from either two distinct theatre styles OR a theatre movement between 1945 and the present day. In either option, students should study at least one Australian play. Contemporary theatre movements can be defined as performance styles from 1945 onwards that push the boundaries of traditional theatre styles and conventions. They often consist of a range of conventions and features and can cut across art forms, genres, and disciplines. This unit focuses on the application of acting, direction and design in relation to contemporary theatre practice from 1945 to the present day. Students work in production roles to interpret scripts. They study developments and innovations in theatre and apply this knowledge to their own work. Students develop knowledge of, and skills relating to, theatre production processes that include dramaturgy, planning, development and presentation to an audience, and they apply these to their own work. They study safe, ethical, inclusive, and sustainable working practices (where possible, using environmentally sustainable approaches) in theatre production. They develop skills in theatre production analysis and evaluation, which they apply to their own work and to the work of other practitioners. Examples of theatre styles post-1945 include Kitchen Sink Drama, Immersive theatre, Verbatim theatre, Theatre of the Absurd, Australian realism, Musical theatre, Butoh, Forum theatre.

**Area of Study 1:** Exploring contemporary theatre styles and/or movements

**Area of Study 2:** Interpreting scripts

**Area of Study 3:** Analysing and evaluating a theatre production

### Prerequisites

Students are to discuss their suitability for this subject with the current VCE Performing Arts subject teacher. Enrolled VCE Performing Arts students are expected to demonstrate a commitment to their chosen art form both in and out of the classroom. Participation in evening assessment performances and/or afterschool studio enrichment activities may be required.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Interpretation of scripts through the application of at least two production roles: actor, director, designer (concept/design - costume, makeup, props, set, lighting, sound)
- Oral/visual/media reports and /or presentations
- Structured questions
- End-of-semester examination

## Visual Communication Design – Unit 1 and 2

### Unit 1: Finding, Reframing and Resolving Design Problems

In this unit students are introduced to the practices and processes used by designers to identify, reframe and resolve human-centred design problems. They learn how design can improve life and living for people, communities and societies, and how understandings of good design have changed over time. Practical projects in Unit 1 focus on the design of messages and objects, while introducing the role of visual language in communicating ideas and information. Students learn to apply the Develop and Deliver phases of the VCD design process and use methods, media and materials typically employed in the specialist fields of communication and industrial design. Student projects invite exploration of brand strategy and product development, while promoting sustainable and circular design practices. They also consider how design decisions are shaped by economic, technological, cultural, environmental and social factors, and the potential for design to instigate change. The three Areas of Study invite students to consider:

- How do designers find and reframe human-centred design problems?
- How can visual language communicate to audiences and shape behaviours?
- What influences design, and what does design influence?

**Area of Study 1:** Reframing design problems

**Area of Study 2:** Solving communication design problems

**Area of Study 3:** Design's influence and influences on design

### Unit 2: Design Contexts and Connections

Unit 2 builds on understandings of visual communication practices developed in Unit 1. Practical tasks across the unit focus on the design of environments and interactive experiences. Students adopt the practices of design specialists working in fields such as architecture, landscape architecture and interior design, while discovering the role of the interactive designer in the realm of user-experience (UX). Student learning activities highlight the connections between design and its context, and the emotive potential of interactive design experiences in both physical and digital spaces. Students also look to historical movements and cultural design traditions as sources of inspiration, and in doing so consider how design from other times and places might influence designing for the future. The three Areas of Study invite students to consider:

- How does design reflect and respond to the time and place in which it is made?
- How do designers evolve culturally appropriate design practices?
- What is the role of visual communication in shaping positive and inclusive interactive experiences?

**Area of Study 1:** Design, place and time

**Area of Study 2:** Cultural ownership and design

**Area of Study 3:** Designing interactive experiences

### Prerequisites

Students are to discuss their suitability for this subject with the current VCE Visual Arts subject teacher. Enrolled VCE Visual Arts students are expected to demonstrate a commitment to their chosen art form both in and out of the classroom. Participation in afterschool studio enrichment activities may be required.

### Methods of Assessment

Students will complete several assessment tasks over the semester. These will include:

- Folio of visual communications
- Structured questions and short answer responses
- An annotated visual report
- Presentation for critique
- End-of-semester examination

## Contacts

Before making decisions about course composition and balance, students and parents may wish to seek advice from relevant staff. Students are not guaranteed entry into any VCE subject of their choosing and selections will be considered according to proven work ethic, learning progress and final results. Class size limits apply and students submitting selections late or not showing appropriate commitment to their subjects may be precluded from certain subjects.

Please contact the following staff should you have any queries.

| **For Curriculum and VCE Enquiries** | | |
|---|---|---|
| Head of Teaching and Learning – Secondary | Ms Kaye Elvin | Elvink@humegrammar.vic.edu.au |
| VCE Coordinators | Ms Natalie Shephard | Shephardn@humegrammar.vic.edu,au |
| **For Career and Post-Schooling Pathways Advice** | | |
| Careers Counsellor | Mrs Emily Parry | Parrye@humegrammar.vic.edu.au |
| **For Subject Specific Information** | | |
| Subject Coordinator – Visual Arts | Ms Navpreet Batth | Batthn@humegrammar.vic.edu.au |
| Subject Coordinator – Performing Arts | Ms Amy Besic | Besica@humegrammar.vic.edu.au |
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