

Subject Descriptions

Year 12 VCE Offerings

2025



Melton

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VICTORIAN CERTIFICATE OF EDUCATION (VCE)

The Victorian Certificate of Education (VCE) is a senior secondary certificate of education recognised within the Australian Qualifications Framework (AQF) and is designed to be completed over a minimum of 2 years. Studies are nationally and internationally benchmarked at:

- Units 1 and 2 levels to a Year 11 standard, and
- Units 3 and 4 levels to a Year 12 standard

Units 1 and 2 can be completed as single units. However, Units 3 and 4 must be completed as a sequence. Students enrolled in VCE studies must undertake Unit 3 before commencing Unit 4 of a study. A student may not enrol in Unit 4 only.

THE VCE AT HEATHDALE CHRISTIAN COLLEGE'S MELTON CAMPUS

The VCE is awarded based on satisfactory completion of units. The Victorian Curriculum and Assessment Authority (VCAA) requires a student to satisfactorily complete at least sixteen units to be awarded the VCE. The sixteen units must include:

- At least three units of English, and
- At least two of these units must be at Unit 3 and 4 level

Heathdale requires students to complete ten units in Year 12 (five subjects per semester).

The award of satisfactory completion of a VCE unit is based upon the teacher's decision that the student has demonstrated their achievement of the set of outcomes as specified in the subject's relevant Study Design. Evidence that the student has demonstrated an achievement of the outcomes may take the form of both learning activities and assessment tasks, such as school-assessed coursework (SACs) or task (SATs).

The decision about satisfactory completion of a unit is distinct from the assessment of a student's level of achievement and their respective grade for this level. Whilst featuring in units as a numerical indicator of student achievement of the outcome, a level of achievement is used in Units 3 and 4 to provide a contribution towards the student's study score for the unit. An Australian Tertiary Admissions Rank (ATAR) is generated with the input of the student's study score and:

- if the student completes external assessments
- if the student satisfactorily completes both Unit 3 and Unit 4 of an English sequence.

The ATAR is a rank (not a score) out of 100 and ranks every student according to their levels of achievement in their Year 12 subjects. The ATAR is a number between 0 and 99.95.

Each Unit 3-4 subject will create a study score out of 50. The ATAR consists of adding together the score for English, plus the next three (3) highest subject scores and then 10% of any scores for fifth or sixth subjects. Students are then assigned a percentage rank based on that combined score total and it is distributed evenly over a 100-point scale.

YEAR 12 VCE SUBJECT SELECTION

As students transition into Year 12, it is strongly suggested that students continue to pursue the same subjects in Year 12 as they did in Year 11. Alterations to this should be discussed with a pathways advisor and will be agreed upon by the Principal before being formally decided on. The only necessary alteration to a student's subject allocation is that they choose five subjects in Year 12, in comparison to six subjects in Year 11. Therefore, a student will need to consider what subject they will cease studying in Year 12.

The Year 11 subject blocking for 2025 is as follows:

Table 1: Year 12 2025 Subject Blocking

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Option 1	English	General Mathematics	History	Business Management	Health and Human Development	Art Making and Exhibiting
Option 2		Mathematical Methods	Psychology	Biology	Chemistry	Philosophy
Option 3		External VET*	External VET*	External VET*	External VET*	External VET*

A student can only choose one subject from each block. For example, a student must choose to study *either* Foundation Mathematics, General Mathematics or Mathematical Methods, and *cannot* study multiple of these.

WHAT SUBJECTS SHOULD I CHOOSE?

It can be confusing to select the best course for you, with so many options and combinations available.

Some good questions to ask are:

- What are my interests?
- What subjects do I enjoy studying?
- Have I asked my parents what they think my strengths are?
- If I go on to university, what courses am I thinking of enrolling in? Have I spoken to the Pathways Coordinator about any prerequisites I might need?

Remember that you're not expected to decide on your subjects alone. Please talk to your parents and teachers about the best direction forward.

WHAT SUBJECTS DO I NEED FOR UNIVERSITY?

In Australia, most universities have very few pre-requisites for their undergraduate courses. Usually there is a minimum score for English that must be achieved, along with a minimum ATAR for that course, although this can vary greatly between universities and campuses. Other entrance factors such as SEAS (Special Equity Access Scheme) can make a difference to the minimum required score.

Prerequisites are studies you must have completed to be eligible for selection to a course. All prerequisites for Victorian Courses are found via the VTAC (Victorian Tertiary Admission Centre) website under Course Search. Prerequisites are released by all universities well in advance. Prerequisites may be listed under 'Essential

requirements for selection and application' or 'Admission criteria'. You can look up the courses of interest and check the prerequisites to be sure that you've selected what you need.

All undergraduate courses will require English and possibly one or two other subjects from a range of options. For example, a Science/Engineering based course might require a study score of 25 in English plus a study score of 20 or 25 in Mathematical Methods. Courses rarely require very specific subjects to be taken. For example, a Bachelor of Arts or Science majoring in Psychology will not require Psychology as a prerequisite or Bachelor of Business at RMIT does not require Business Management.

Your Pathways Coordinator will schedule a Subject selection meeting with you to ensure that you have the correct prerequisites for the course you would like to take post-secondary.

HOW DO I SUBMIT MY SUBJECTS PREFERENCES?

You submit your subject preferences via an online portal called: noreply@selectmysubjects.com.au. This will be available after Year 12 Information Night. Follow the prompts and submit these by the deadline.

BLOCK 1 SUBJECT

ENGLISH - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking skills
- Developing God-given creativity
- Understanding God's story
- Developing empathetic understanding

LEARNING AREA

English

SUBJECT OVERVIEW

Content

In VCE English Units 3 and 4, students study two complete texts and a number of smaller mentor texts, and complete three assessment tasks in response to them: a creative written piece and two analytical text response essays. Students also study how language is used to persuade in the media, as well as developing and presenting a point of view in an oral presentation.

The Study is made up of two units with multiple areas of study covering:

- Reading and exploring texts
- Crafting texts
- Crafting argument

Skills

Students will further develop their skills in textual and media analysis, workshopped writing and persuasion. In terms of higher order thinking skills, students' analysis, synthesis and evaluation skills are significantly developed in Units 3 and 4 English.

Types of Assessment

- Analytical essays
- Creative writing
- Oral presentations
- Reflective essays
- Examination

Lifelong Skills

- Analytical thinking
- Writing and communication skills
- Logical reasoning
- Critical and creative thinking
- Reflective skills

BLOCK 2 SUBJECTS

GENERAL MATHEMATICS - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking skills
- Recognising and understanding divinely created order

LEARNING AREA

Mathematics

SUBJECT OVERVIEW

Content

Unit 3 comprises of four modules. The first is Data Analysis and the second is Recursion and Financial Modelling. Unit 4 comprises a further two areas, including Matrices and Networks. Each module will include an Application task with a duration over multiple lessons.

The Study is made up of two units with multiple areas of study covering:

- Data analysis, probability and statistics
- Discrete mathematics

Skills

The areas of study are designed to enable students to develop mathematical knowledge and skills and to learn how to apply them to practical contexts and problem solving situations. Students also use appropriate technology, such as the CAS calculator, to aid in this.

Types of Assessment

- Tests
- Problem-solving tasks
- Mathematical Investigation
- Examinations

Lifelong Skills

- Analytical thinking
- Logical reasoning
- Group work
- Reflective thinking
- Critical and creative thinking

MATHEMATICAL METHODS - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

The study of this subject will help students develop an appreciation of Mathematics:

- As a language that describes patterns and order in God's Creation
- A powerful tool for problem-solving and therefore best stewardship of our world
- A field where they will be able to develop their God-given potential in logical reasoning
- Recognising and understanding divinely created order

LEARNING AREA

Mathematics

SUBJECT OVERVIEW

Content

Mathematical Methods Units 3 and 4 applies mathematical techniques to help model, analyse, interpret and predict in practical real life problems. This enables students to develop mathematical confidence and critical thinking in the areas of:

- Functions and Algebra, which model a plethora of phenomena that operate in our world and universe.
- Calculus, which is used to explore the variations of functions and make sense of our changing environment.
- Probability and Statistics, that help predict events and also to interpret data in our society.

Skills

On completion of this course students should be able to define, explain and apply key concepts and processes to both routine and non-routine contexts, including situations requiring problem-solving, modelling or investigative techniques, and analyse and discuss these applications of mathematics. Students should also be able to select and use appropriate technology (CAS calculator and other software) to aid in this.

Types of Assessment

- Tests
- Problem-solving tasks
- Mathematical investigations
- Modelling tasks
- Examinations

Lifelong Skills

- Analytical thinking
- Group work
- Logical reasoning
- Critical and creative thinking

BLOCK 3 SUBJECTS

HISTORY - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking skills
- Understanding God's story

LEARNING AREA

Humanities

SUBJECT OVERVIEW

Content

The study of revolutions provides students with the opportunity to look at the motives behind and effects of social change. The study of how ideas, individuals and other factors have shaped the world in which we live is both rewarding and necessary. As the French and American revolutions were pivotal in shaping global events through to this time, they are the focuses of our study in History: Revolutions.

The Study is made up of two units with multiple areas of study covering:

- The causes of revolution
- The consequences of revolution

Skills

The key skills of History include critical thinking, writing analytically and the understanding of historical sources. There are two assessment tasks (SACs) for each unit, which can be in the form of: a research report, an analysis of visual and/or written documents or an essay, as well as an end-of-year examination.

Types of Assessment

- Analytical essays
- Research tasks
- Source analysis tasks
- Examination

Lifelong Skills

- Analytical thinking
- Writing and communication skills
- Critical and creative thinking
- Reflective skills

PSYCHOLOGY - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking skills
- Recognising and understanding divinely created order

LEARNING AREA

Science

SUBJECT OVERVIEW

Content

Students examine how experience affects behaviour and mental processes. They explore how the nervous system enables a person to interact with the world around them. They consider stress and its causes and management. Students investigate learning and memory, and how memory can be improved. In Unit 4, students examine how wellbeing is developed and maintained. They explore sleep deprivation, sleep disorders and sleep hygiene and how they affect mental processes and behaviour. Finally, students explore phobias and the influence of change, resilience and protective factors on mental wellbeing.

The Study is made up of two units.

- Unit 3: How does experience affect behaviour and mental processes?
- Unit 4: How is mental wellbeing supported and maintained?

Skills

Students employ critical and creative thinking as they conduct scientific investigations involving primary and secondary data. Students grow in their understanding of key science skills, including aims, methodology, accuracy and precision of data collected and ethical understanding and application. They learn to draw evidence-based conclusions, communicate and explain scientific ideas, analyse and evaluate data, and utilise scientific methods and models.

Types of Assessment

- Folios
- Tests
- Research tasks
- Practical reports
- Case studies and Media response tasks
- Examination

Lifelong Skills

- Analytical thinking
- Writing and communication skills
- Reflective skills
- Research skills
- Logical reasoning
- Group work

BLOCK 4 SUBJECTS

BUSINESS MANAGEMENT - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking and decision-making skills
- Learning a moral framework for the effective stewardship of resources, both physical and human
- Developing the God-given creative and productive capabilities of students

LEARNING AREA

Business and Economics

SUBJECT OVERVIEW

Content

VCE Business Management students explore the key processes and considerations for managing a business efficiently and effectively to achieve business objectives. They investigate strategies to manage both staff and business operations to meet objectives, and develop an understanding of the complexity and challenge of managing businesses. Students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future.

The Study is made up of two units:

- Unit 3: Managing a business
- Unit 4: Transforming a business

Skills

Students interpret, compare and evaluate business theories and ideas. They analyse case studies and contemporary examples of business management and apply business management knowledge to practical and/or simulated situations. They also propose, justify and evaluate management strategies to improve business performance.

Types of Assessment

- Tests and case studies
- Examination

Lifelong Skills

- Ethical Decision-making skills
- Analytical thinking
- Writing and communication skills
- Initiative
- Work-place skills
- Logical reasoning
- Critical and creative thinking

BIOLOGY – UNITS 3 AND 4**BIBLICAL PERSPECTIVE**

- Developing critical thinking skills
- Appreciating and caring for God's creation
- Recognising and understanding divinely created order
- Developing God-given creativity

LEARNING AREA

Science

SUBJECT OVERVIEW

Content

Unit 3 Biology focuses on the workings of a cell which includes understanding the relationship between nucleic acids and proteins as key molecules in cellular processes. Students examine DNA structure and function in prokaryotic and eukaryotic cells and investigate the possible biological consequences in manipulating the DNA molecule and applying biotechnologies. Students investigate biochemical pathways, especially in relation to photosynthesis and cellular respiration. In Unit 4, students focus on the changes and challenges of life on Earth and consider the claim that the theory of evolutionary biology is based on the accumulation of evidence over time. Students examine the role of the immune system and its role in fighting pathogens. Students also consider the technological advances that help with immune disorders and the role Biology plays in mediating the global challenges in: the identification of pathogens, the prevention of spread and the development of treatments for diseases.

The Study is made up of two units.

- Unit 3: How do cells maintain life?
- Unit 4: How does life change and respond to challenges?

Skills

Students employ critical and creative thinking as they conduct scientific investigations involving primary and secondary data. Students grow in the key science skills as they consider a number of factors including aim, methodology, accuracy and precision of data collected, sample size, and ethical understanding and application.

Types of Assessment

- Field reports
- Practical reports
- Research tasks
- Tests
- Problem-solving tasks
- Data and media analysis
- Design practical investigations
- PowerPoint presentations
- Scientific posters
- Examination

Lifelong Skills

- Analytical thinking
- Writing and communication skills
- Group work

BLOCK 5 SUBJECTS

HEALTH AND HUMAN DEVELOPMENT - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Appreciating and caring for God's creation
- Developing critical thinking skills

LEARNING AREA

Health and Physical Education

SUBJECT OVERVIEW

Content

Unit 3 looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry.

Unit 4 examines health and wellbeing and human development in a global context. Students use data to investigate health status and the burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live.

The Study is made up of two units.

- Unit 3: Australia's health in a globalised world
- Unit 4: Health and human development in a global context

Skills

Students gain skills in explaining the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status. They also develop the ability to explain changes to public health approaches, analyse improvements in population health over time and evaluate health-promotion strategies.

Types of Assessment

- Research tasks
- Tests
- Oral presentations
- Examination

Lifelong Skills

- Group work
- Writing and communication skills

CHEMISTRY - UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Recognising and understanding divinely created order
- Developing critical thinking skills
- Appreciating and caring for God's creation

LEARNING AREA

Science

SUBJECT OVERVIEW

Content

In Unit 3 students investigate the chemical production of energy and materials. They explore how innovation, design and sustainability principles and concepts can be applied to produce energy and materials while minimising possible harmful effects of production on human health and the environment. They explore food in the context of supplying energy in living systems. Students compare and evaluate different chemical energy resources and investigate the combustion of fuels.

In Unit 4 students investigate the structures and reactions of carbon-based organic compounds, including considering how green chemistry principles are applied in the production of synthetic organic compounds. Carbon is the basis not only of the structure of living tissues but is also found in fuels, foods, medicines, polymers and many other materials that we use in everyday life. They study the metabolism of food and the action of medicines in the body. They explore how laboratory analysis and various instrumentation techniques can be applied to analyse organic compounds in order to identify them and to ensure product purity

The Study is made up of two units:

- Unit 3: How can design and innovation help to optimise chemical processes?
- Unit 4: How are carbon-based compounds designed for purpose?

Skills

In VCE Chemistry Unit 3 and 4 students develop skills in scientific report writing through formulating hypotheses, aims and analyzing results. Students develop key skills in reporting findings through summarising both quantitative and qualitative data. Students then develop skills in creating evidence-based conclusions from the theoretical and experimental findings. Chemistry-related theories allow students to effectively communicate and explain scientific ideas by using appropriate terminologies, ideas, conventions, and units.

Types of Assessment

- Practical reports
- Research tasks
- Tests
- Problem-solving tasks
- Design projects
- Oral presentations
- Examination

Lifelong Skills

- Analytical thinking
- Writing and communication skills
- Group work

BLOCK 6 SUBJECTS

ART MAKING AND EXHIBITING – UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking skills
- Appreciating and caring for God's creation
- Developing God-given creativity
- Recognising and understanding divinely created order

LEARNING AREA

Visual Arts

SUBJECT OVERVIEW

Content

The aim for Art Making and Exhibiting is to introduce students to the methods used to make artworks and how artworks are presented and exhibited. Students use inquiry learning to explore, develop and refine the use of materials, techniques and processes and to develop their knowledge and understanding of the ways artworks are made. They learn how art elements and art principles are used to create aesthetic qualities in artworks and how ideas are communicated through the use of visual language. Their knowledge and skills evolve through the experience of making and presenting their own artworks and through the viewing and analysis of artworks by other artists.

The Study is made up of two units.

- Unit 3: Collect, extend and connect
- Unit 4: Consolidate, present and conserve

Skills

Students will develop skills in investigating and using materials, techniques and processes in specific art forms inspired in their research of artists. They will document the development of art making in a Visual Arts journal, developing their use of visual language and art terminology to document this process. Through this, they will work towards the completion of a number of finished artworks. They will also research and discuss exhibition characteristics and conservation practices, including the development of a proposal for an exhibition.

Types of Assessment

- Analytical essays
- Practical reports
- Research tasks
- Folios
- Oral presentations
- Design projects
- Examination

Lifelong Skills

- Writing and communication skills
- Critical and creative thinking
- Design skills
- Reflective skills

PHILOSOPHY – UNITS 3 AND 4

BIBLICAL PERSPECTIVE

- Developing critical thinking skills
- Understanding God's story

LEARNING AREA

Humanities

SUBJECT OVERVIEW

Content

Philosophy is broadly concerned with questions of ethics, epistemology and metaphysics. Philosophy is the founding discipline of logic, and it continues to develop and refine the tools of critical reasoning, influencing approaches in mathematics, digital coding, science and the humanities. Philosophers grapple with the problems that lie at the foundation of issues of public debate such as the concept of artificial intelligence, justification for a charter of human rights and freedom of speech.

Philosophers are concerned with thinking rigorously and rationally about ideas, and exploring their meaning, context, coherence and implications. The nature of the questions studied, together with the techniques of reasoning and argument used to study them, can in turn help to create new ideas and insights.

VCE Philosophy explores foundational ideas and enduring questions related to diverse fields including the humanities, sciences and the arts. It is a challenging study, which nurtures curiosity, problem-solving skills, open-mindedness and intellectual rigour.

The Study is made of two units:

- Unit 3: The Good Life
- Unit 4: On believing

Skills

VCE Philosophy develops students' abilities to identify and articulate philosophical questions, understand and analyse significant philosophical ideas, and understand relationships between responses to philosophical questions and contemporary issues. It also helps students to cultivate open-mindedness, reflecting critically on their thinking and that of others, and exploring alternative approaches to philosophical questions.

Types of Assessment

- Analytical essays
- Short-answer responses
- Written reflections
- Oral or multimedia presentations
- Research tasks
- Dialogues (oral or written)
- Examination

Lifelong Skills

- Analytical thinking
- Writing and communication skills
- Critical and creative thinking
- Reflective skills

CONTACTS

If after reading this Handbook you require further clarification about the VCE, VET or Pathways programs at the College, you are invited to contact one or more of the following staff members who will be able to support you in answering your questions:

- Year 11 Coordinator, Mr Rodney Latham: rlatham@heathdale.vic.edu.au
- Learning and Teaching Coordinator (Secondary), Ms Clarisse McGregor: cmcgregor@heathdale.vic.edu.au
- Pathways Coordinator, Ms Vicky Bawden: vbawden@heathdale.vic.edu.au
- Careers Practitioner, Ms Kylie Wills: kwills@heathdale.vic.edu.au
- VCE Coordinator, Mr Russell Parker: rparker@heathdale.vic.edu.au
- VET Coordinator, Ms Bronwyn Graham: bgraham@heathdale.vic.edu.au