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**Senior School 2017 Subject Guide Berwick Campus**
English

Pathways opportunities from Year 10 to Year 12

*Students enrolled in Year 10 English A will progress to Year 11 English A. Students wishing to progress to VCE English must demonstrate sufficient progress by the end of Year 10.

**Students enrolled in Year 11 English A progress to Unit 3/4 English A course.

***This course is chosen instead of English. It offers more of a challenge than mainstream English and is more text focussed. This course can progress to any of the English courses offered at VCE.
English - Year 10

Introduction
The Year 10 English course aims to foster in students an understanding of the English language and develop the ability to successfully communicate using written and oral language for a range of purposes.

Learning Focus
- Reading and Responding - students identify and discuss key aspects of a set text, and construct a response in oral or written form
- Writing in Context - students create and present texts taking account of audience, purpose and context
- Creative Writing – students create a piece of writing designed to engage an audience and generate an ambience
- Comparative writing – comparing a series of texts, the style, content and purpose of the writer
- Using Language to Persuade - students create and present texts taking account of audience, purpose and context
- Conventions of spelling, punctuation and syntax

Assessment
- Written and oral responses (analytical, creative and visual) to print media, visual media, films, novels, poetry and plays
- Written and oral analysis and evaluation of texts
- Writing for a range of purposes and audiences. This takes a variety of forms: narrative, personal, informative, instructional, persuasive, argumentative, and script
- Language analysis (media), and point of view
- Group and individual oral presentations

Semester 1
- Coursework 60%
- Examination 40%

Semester 2
- Coursework 60%
- Examination 40%
English and Literature - Year 10

Introduction
This course is designed to enrich and enhance student understanding of writing and literature. It is taken instead of the mainstream English course. Each semester will focus on both extended writing and a deep study of a literary text. This course is ideal for those students who anticipate studying Literature or English Language at VCE, while still offering a pathway towards the standard VCE English course.

Learning Focus
- Reading and Responding - students identify and discuss key aspects of a set text, and construct a response in oral or written form
- Writing in Context - students create and present texts taking account of audience, purpose and context
- Using Language to Persuade - students create and present texts taking account of audience, purpose and context
- Poetry analysis
- Film as text
- Creative Writing
- Conventions of spelling, punctuation and syntax

Assessment
- Written and oral responses (analytical, creative and visual) to print media, visual media, films, novels, poetry and plays
- Written and oral analysis and evaluation of texts
- Writing for a range of purposes and audiences. This takes a variety of forms: narrative, personal, informative, instructional, persuasive, argumentative, and script
- Language analysis (media), and point of view

Semester 1 & 2
Coursework 60%
Examination 40%
English A - Year 10

Introduction
The Year 10 English A course is designed for students who have special academic needs or have an Individual Learning Plan. Students will be provided with additional time and assistance to strengthen and refine their literacy skills. The course will focus on developing learning strategies and literacy skills.

The purpose of this course is to enable students to develop skills and knowledge in spelling, sentence structure, paragraphing, comprehension and oral communication. It also aims to develop key workplace written and communication skills. Students will be encouraged to understand the processes required to read and write effectively in a variety of settings. There will be a focus on developing learning strategies and literacy skills which will enhance achievement in English.

Learning Focus
• Reading: Read accurately to locate, extract, understand, organise and synthesise ideas and information
• Writing: Communicate ideas and information clearly; write for a range of audiences and purposes
• Speaking and Listening in a range of informal and formal settings for different purposes
• Workplace Literacy
• Grammar and comprehension

Assessment
In each Semester:
• Class work (Folio of written work, presentations, analysis pieces, short answer questions, paragraph responses) 60%
• End of Semester examination 40%
English - Units 1 & 2 and English A 1 & 2

Pathway Requirements
For Unit 1 & 2 it is compulsory that a student has satisfactorily passed a Year 10 English subject.

English A
This course will effectively be the same as English, however, given that it is offered to students who may need additional support with writing and comprehension of the texts, the course may be modified in its presentation, but not in its assessment.

Unit 1
Introduction
The focus of this unit is the reading of a range of texts, particularly narrative and persuasive texts, in order to comprehend, appreciate and analyse the ways in which texts are constructed and interpreted. Students will develop competence and confidence in creating written, oral and multimodal texts.

Learning Focus
The focus of this unit is the following:
- Reading and creating texts
- Analysing and Presenting an Argument

For this unit, students are required to demonstrate achievement of two outcomes.

Outcome 1: On completion of this unit the student should be able to produce analytical and creative responses to texts.

Outcome 2: On completion of this unit the student should be able to analyse how argument and persuasive language can be used to position audiences, and create their own texts intended to position audiences.

Assessment
Assessment will include:
- Responses to text in written and oral form
- Discussion of the use of language and points of view in a persuasive text
- Personal, imaginative and argumentative writing
- Participation in discussion groups

Coursework 50%
Examination 50%
Unit 2
Introduction
The focus of this unit is on reading and responding to an expanded range of text types and genres in order to analyse ways in which they are constructed and interpreted, and on the development of competence and confidence in creating written, oral or multimodal texts.

Learning Focus
The focus of this unit is the following:
- Reading and comparing texts
- Analysing and presenting an argument

For this unit, students are required to demonstrate achievement of two outcomes.

Outcome 1: On completion of this unit the student should be able to compare the presentation of ideas, issues and themes in two texts.

Outcome 2: On completion of this unit the student should be able to identify and analyse how argument and persuasive language are used in text/s that attempt to influence an audience, and create a text which presents a point of view.

Assessment
Assessment may include:
- Responses to text in written and oral form
- Discussion of the use of language and points of view in a persuasive text
- Participation in discussion groups

Coursework 50%
Examination 50%
Literature - Units 1 & 2

Pathway Requirements
Literature Units 1 & 2 is recommended only for high achieving Year 10 English students. A grade of B or higher is recommended in Year 10 English or English Enrichment, coupled with a desire to engage with the written word and the preparedness to read extensively.

Unit 1
Introduction
This unit focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations and those of others. The study encompasses texts that vary in form and range from past to contemporary social and cultural contexts.

This unit also focuses on the ways literary texts represent human experience and the reading practices students develop to deepen their understanding of a text. Students respond to a range of texts personally, critically and creatively.

Learning Focus
The focus of this unit is the following:
- Reading Practices
- Ideas and Concerns in Texts

For this unit, students are required to demonstrate achievement of two outcomes.

- Outcome 1: On completion of this unit the student should be able to respond to a range of texts and reflect on influences shaping these responses.
- Outcome 2: On completion of this unit the student should be able to analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society.

Assessment
Assessment includes:
- Essays
- Detailed passage analyses
- Oral presentation
- Reviews
- Coursework 50%
- Examination 50%
Unit 2
Introduction
The focus of this unit is on students’ critical and creative responses to texts. Students deepen their understanding of their responses to aspects of texts such as the style of narrative, the characters, the language and structure of the text. Students extend their exploration of the ideas and concerns of the text. They understand the ways their own culture and the cultures represented in the text can influence their interpretations and shape different meanings.

Learning Focus
The focus of this unit is the following:
- The text, the reader and their contexts
- Exploring connections between texts

For this unit, students are required to demonstrate achievement of two outcomes.

Outcome 1: On completion of this unit the student should be able to analyse and respond critically and creatively to the ways a text from a past era and/or a different culture reflect or comment on the ideas and concerns of individuals and groups in that context.

Outcome 2: On completion of this unit the student should be able to compare texts considering the dialogic nature of texts and how they influence each other.

Assessment
Assessment includes:
- A journal
- A review
- Analytical, persuasive, creative writing
- Oral presentation
- Coursework 50%
- Examination 50%
English Language Units 1 & 2

Pathway Requirements
Successful completion of either English or English Enrichment in Year 10. A grade B or higher is recommended, as the demands of this course are very specific and would not suit the needs of all students. Interested parents should consult with the Head of English who will advise of student suitability.

Unit 1
Introduction
In this unit, students consider the way language is organised and explore the various functions of language and the nature of language as an elaborate system of signs. The relationship between speech and writing as the dominant modes of language and the impact of situational and cultural contexts on language choices are also considered. Students investigate children’s ability to acquire language, and the stages of language acquisition across a range of subsystems.

Learning Focus
• Area of Study 1: The nature and function of language
• Area of Study 2: Language Acquisition

Assessment
• Coursework 60%
• End of semester exam 40%

Unit 2
Introduction
In this unit, students consider factors contributing to change over time in the English language and factors contributing to the spread of English. They explore texts from the past and from the present, considering how all subsystems of the language system are affected. Students also consider how the global spread of English has led to a diversification of the language and to English now being used by more people as an additional or a foreign language than as a first language. Students consider the cultural repercussions of the spread of English and the various possibilities for the future of English.

Learning Focus
• Area of Study 1: English across time
• Area of Study 2: Englishes in contact

Assessment
• Coursework 60%
• End of semester exam 40%
English - Units 3 & 4

Pathway Requirements
For Unit 3 & 4 it is compulsory that a student has satisfactorily passed Units 1 & 2 in at least one English subject.

Unit 3 & 4
The focus of Unit 3 is on reading and responding both orally and in writing to a range of texts. Students analyse how the authors of texts create meaning and the different ways in which texts can be interpreted. They develop competence in creating written texts by exploring ideas suggested by their reading, and the ability to explain choices they have made as authors.

The focus of Unit 4 is on reading and responding in writing to a range of texts in order to analyse their construction and provide an interpretation. Students create written or multimodal texts suggested by their reading and explain creative choices they have made as authors in relation to form, purpose, language, audience and context.

Learning Focus
The focus of Unit 3,4 English is the following:

• Reading and creating texts
• Analysing argument
• Reading and comparing texts
• Presenting argument

Unit 3
Students are required to demonstrate achievement of three outcomes.

Outcome 1: Present an analytical interpretation of a text, and present a creative response on a different text
Outcome 2: Compare the use of argument and persuasive language in a written essay
Outcome 3: Analyse the use of language in texts that present a point of view on an issue currently debated in the Australian media, and to construct, orally or in writing, a sustained and reasoned point of view on the selected issue.

Unit 4
Students are required to demonstrate achievement of two outcomes.

Outcome 1: On completion of this unit the students should be able to produce a detailed comparison which analyses how selected texts present ideas, issues and themes
Outcome 2: Present a sustained and reasoned point of view on an issue in oral form

Assessment

• Unit 3 school-assessed coursework 25%
• Unit 4 school-assessed coursework 25%
• Final examination 50%
Literature - Units 3 & 4

Pathway Requirements
Literature Units 3 & 4 is recommended for students with excellent literary skills and a passion for reading. It is recommended that students have studied Literature Units 1 & 2. Alternatively, students must achieve a grade C or better in English Units 1 & 2 or English Language Units 1 & 2 and engage on the requisite vacation preparation for the course.

Unit 3 & 4
Introduction
Unit 3 focuses on the ways writers construct their work and how meaning is created for and by the reader. Students consider how the form of a text (such as poetry, prose, drama, non-print or combinations of these) affects meaning and generates different expectations in readers, the ways texts represent views and values and comment on human experience, and the social, historical and cultural contexts of literary work.

Unit 4 focuses on students’ creative and critical responses to texts. Students consider the context of their responses to texts as well as the concerns, the style of the language and the point of view in their re-created or adapted work. In their responses, students develop an interpretation of a text and learn to synthesise the insights gained by their engagement with various aspects of a text into a cogent, substantiated response.

Learning Focus
- Adaptations and transformations
- Views, values and contexts
- Considering alternative viewpoints
- Critical analysis of texts

Unit 3
Students are required to demonstrate achievement of three outcomes.

Outcome 1: Analyse how meaning changes when the form of a text changes.
Outcome 2: Analyse, interpret and evaluate the views and values of a text in terms of the ideas, social conventions and beliefs that the text appears to endorse, challenge or leave unquestioned.
Outcome 3: Evaluate views of a text and make comparisons with their own interpretation.

Unit 4
Students are required to demonstrate achievement of two outcomes. On completion of the unit, students should have the ability to:

Outcome 1: Respond imaginatively to a text, and comment on the connections between the text and the response.
Outcome 2: Analyse critically features of a text, relating them to an interpretation of the text as a whole.

Assessment
- Essays and reflective commentary
- Detailed passage analysis
- Imaginative composition in response to text
- Course Work 50%
- Examination 50%
English Language - Units 3 & 4

Pathway Requirements
It is highly recommended that students successfully complete English Language Units 1 & 2. Alternatively, students must achieve a grade C or better in English Units 1 & 2 or Literature Units 1 & 2 and engage on the requisite vacation preparation for the course.

Unit 3 & 4
Introduction
This course involves a systematic study of the English Language. Students learn about personal and public discourse in a range of fields of study and social groups. This subject is heavily informed by the discipline of Linguistics, particularly Socio-linguistics, which is about how the contexts in which we operate influence the language we use. Students are expected to explore a range of texts, including publications and public commentary about language. Students also observe and discuss contemporary language in use, as well as consider a range of historical and contemporary written and spoken texts. The course also explores the strong links between language and identity, both how we construct our own identity and how others perceive us as the result of the language we use.

Learning Focus
Unit 3 - Language variation and social purpose
• Area of Study 1: Informal Language
• Area of Study 2: Formal Language

Unit 4 - Language variation and identity
• Area of Study 1: Language variation in Australian society
• Area of Study 2: Individual and group identities

Assessment
• Unit 3 school-assessed coursework 25%
• Unit 4 school-assessed coursework 25%
• Final examination 50%
English A - Units 3 & 4

Pathway Requirements
The places for this course are limited. Interested parents should consult the Head of English who will advise of student suitability.

Unit 3 & 4
Introduction
This course is designed for students who have completed the Foundation English course in Year 11, or who have been unable to consistently attain a D grade or above in English Units 1 & 2. English A satisfies all the course requirements of VCE English Units 3 & 4. However, there is a difference: student learning is maximised by specialised teaching, directed at students with similar skills. Consequently, there will be a more concentrated focus on core language and writing skills. A student undertaking English A can still achieve a high study score, or can complete an unscored VCE in English.

Learning Focus
The focus of Unit 3,4 English A is the following:
• Reading and creating texts
• Analysing argument
• Reading and comparing texts
• Presenting argument

Assessment
• Unit 3 school-assessed coursework 25%
• Unit 4 school-assessed coursework 25%
• Final examination 50%
Mathematics

Pathway Opportunities
The Mathematics program is designed to promote students’ awareness of the importance of Mathematics in everyday life in an increasingly technological society. This includes developing the confidence to make effective use of mathematical ideas and techniques, including the use of technology wherever appropriate (CAS calculator technology is incorporated into the program at all levels); and to appreciate the rigour and power of Mathematics generally. The subject provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and unambiguous.

Please note, that although not shown on the flowchart above, enhancement of the VCE Mathematics program is possible. Interested students must apply to the Head of the Mathematics Faculty.

To guide students in their choice of Mathematics units for the following year:
- Each Year 9 student will receive notification of their recommended Year 10 Mathematics Program, based on their performance in Year 9 Mathematics (to date).
- Each Year 10 and 11 student will normally progress horizontally along their current row of the flowchart above. Students should only move diagonally after discussion with the Head of the Mathematics Faculty, Head of Senior School Teaching and Learning, or Deputy Head of Senior School.
Mathematics (Higher) - Year 10

Pathway Requirements
Enrolment in Mathematics (Higher) assumes familiarity with the key knowledge and skills from either Year 9 Mathematics (Core) or Year 9 Mathematics (Extended).

Semester 1
Introduction
The intent of this Year 10 curriculum is to encourage the development of relevant concepts, as well as an appreciation of the interconnectedness of these concepts, to better prepare students intending to undertake Unit 1-4 calculus based mathematics subjects. Opportunities are sought to extend the more mathematically able students by using appropriate Application Tasks within each topic. A deeper understanding of mathematics in the curriculum enhances a student’s potential to use this knowledge to solve non-routine problems, both at this level of study and at later stages.

Learning Focus
- Linear Functions and Graphs
- Simultaneous Equations
- Trigonometry

Assessment
- Linear Functions and Graphs: Topic Tests, an Application Task and Quiz contributing 25% to the semester grade
- Simultaneous Equations: Topic Test, an Application Task contributing 10% to the semester grade
- Trigonometry: Topic Test, an Application Task and Quiz contributing 15% to the semester grade.
- A Technology Active Semester Examination of 1.5 hours duration contributing 50% to the semester grade

Semester 2
Learning Focus
- Indices and Surd
- Geometry and Measurement
- Quadratic Functions and Graphs

Assessment
- Geometry and Measurement: Topic Test and Homework Assignment contributing 10% to the semester grade.
- Indices and Surds: Topic Tests and Application Task contributing 15% to the semester grade.
- Quadratic Functions and Graphs: Topic Tests and Application Task contributing 25% to the semester grade.
- A Technology Active Semester Examination of 1.5 hours duration contributing 50% to the semester grade.
Mathematics (Core) - Year 10

Semester 1

Pathway Requirements
Enrolment in Mathematics (Core) assumes familiarity with the key knowledge and skills from Year 9 Mathematics (Core).

Introduction
The intent of this Year 10 curriculum is to consolidate earlier concepts from arithmetic, geometry and algebra and then encourage the ongoing development of important ideas concerning linear rules and right triangles in more depth, in an effort to promote the interconnectedness of relevant mathematical concepts and to better prepare students intending to undertake Units 1-4 Further Mathematics.

Learning Focus
- Linear Algebra
- Linear Graphs and Simultaneous Equations
- Trigonometry

Assessment
- Linear Algebra: Topic Tests, an Application Task and quizzes contributing 17% to the semester grade
- Linear Graphs and Simultaneous Equations: Topic Tests, an Application Task and quizzes contributing 17% to the semester grade
- Trigonometry: Topic Tests, an Application Task and quizzes contributing 16% to the semester grade
  A Technology Active Semester Examination of 1.5 hours duration contributing 50% to the semester grade

Semester 2

Learning Focus
- Geometry and Measurement
- Financial Mathematics
- Statistics

Assessment
- Geometry and Measurement: Topic Tests, an Application Task and quizzes contributing 17% to the semester grade.
- Financial Mathematics: Topic Tests, an Application Task and quizzes contributing 17% to the semester grade.
- Statistics: Topic Tests, an Application Task and quizzes contributing 16% to the semester grade.
- A Technology Active Semester Examination: of 1.5 hours duration contributing 50% to the semester grade.
Mathematics (Essential) - Year 10

Semester 1
Pathway Requirements
Enrolment in Mathematics (Essential) assumes a familiarity with the key knowledge and skills from Year 9 Mathematics (Core).

Introduction
This curriculum focuses on using mathematics effectively, efficiently and critically to make informed decisions. It provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning and community settings.

Learning Focus
- Fractions
- Percentages
- Budgets
- Measurement
- Travelling

Assessment
- Three Topic Tests contributing 30% to the semester grade
- Three Assignments contributing 30% to the semester grade
- Classwork and homework sheets contributing 10% to the semester grade
- A Technology Active Semester Examination of 1.5 hours duration contributing 30% to the semester grade.

Semester 2
Learning Focus
Ratios and proportion, Summary Statistics, Area, Financial Mathematics, Sport and Fitness, Tessellations and Isometric drawings.

Assessment
- Three Topic Tests contributing 30% to the semester grade
- Three Assignments contributing 30% to the semester grade
- Classwork and homework sheets contributing 10% to the semester grade
- A Technology Active Semester Examination of 1.5 hours duration contributing 30% to the semester grade.
Specialist Mathematics - Units 1 & 2

Pathway Requirements
Enrolment in Specialist Mathematics Units 1 & 2 assumes familiarity with the key knowledge and skills from Year 10 Mathematics (Higher). Students selecting Specialist Mathematics Unit 1 & 2 must also choose Mathematical Methods Unit 1 & 2.

Unit 1
Introduction
Specialist Mathematics Units 1 and 2 provide 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 and reasoning. This study has a focus on interest in the discipline of mathematics in its own right 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.

Learning Focus
- Number systems and recursion
- Geometry in the plane and proof
- Transformations, trigonometry and matrices
- Principles of counting

Assessment
- Four Topic Tests contributing 40% to the semester grade
- An Analysis Task contributing 6% to the semester grade
- Four homework assignments contributing 4% to the semester grade
- A Technology Free Semester Examination of 1.5 hours duration contributing 25% of semester grade. A Technology Active Semester Examination of 1.5 hours duration contributing 25% of semester grade

Unit 2
Learning Focus
- Vectors in the plane
- Graphs of non-linear relations
- Simulation, sampling and sampling distributions
- Logic and algebra

Assessment
- Four Topic Tests contributing 40% to the semester grade
- An Analysis Task contributing 6% to the semester grade
- Four homework assignments contributing 4% to the semester grade
- A Technology Free Semester Examination of 1.5 hours duration contributing 25% of semester grade. A Technology Active Semester Examination of 1.5 hours duration contributing 25% of semester grade
Mathematical Methods - Units 1 & 2

Pathway Requirements
Enrolment in Mathematical Methods Units 1 & 2 assumes familiarity with the key knowledge and skills from Year 10 Mathematics (Higher).

Unit 1
Introduction
Unit 1 Mathematical Methods begins with a review of basic algebraic concepts and techniques required for a successful introduction to the study of calculus. Simple relationships between variable quantities are reviewed, and these are used to introduce the key concepts of a function and its graph. Average and instantaneous rates of change are introduced, and this is followed by the key concept of the derivative as an ‘instantaneous rate of change’. These are reinforced numerically, by calculating difference quotients, geometrically, as slopes of chords and tangents, and algebraically. The study of statistics begins in this unit with a review of the fundamentals of probability, and the introduction of the concepts of conditioning and independence. Access to technology to support the computational aspects of these topics is assumed.

Learning Focus
- Functions and graphs
- Algebra
- Calculus
- Probability and Statistics

Assessment
- Four Topic Tests contributing 40% to the semester grade
- An Analysis Task contributing 5% to the semester grade
- Five homework assignments contributing 5% to the semester grade
- A Technology Free Semester Examination of 1.5 hours duration contributing 25% of semester grade. A Technology Active Semester Examination of 1.5 hours duration contributing 25% of semester grade

Unit 2
Learning Focus
- Functions and graphs
- Algebra
- Calculus
- Probability and Statistics

Assessment
- Four Topic Tests contributing 40% to the semester grade
- An Analysis Task contributing 5% to the semester grade
- Five homework assignments contributing 5% to the semester grade
- A Technology Free Semester Examination of 1.5 hours duration contributing 25% of semester grade. A Technology Active Semester Examination of 1.5 hours duration contributing 25% of semester grade
General Mathematics - Units 1 & 2

Pathway Requirements
Enrolment in Further Mathematics Units 1 & 2 assumes familiarity with the key knowledge and skills from either Year 10 Mathematics (Core) or Year 10 Mathematics (Higher).

Unit 1
Introduction
General Mathematics focuses on using the techniques of discrete mathematics to solve problems in contexts that include financial modelling, decision making, and discrete growth and decay. It provides an opportunity to analyse and solve a wide range of geometrical problems in areas such as measurement, scaling, triangulation and navigation. It also provides opportunities to develop systematic strategies based on the statistical investigation process for answering statistical questions that involve comparing groups, investigating associations and analysing time series.

Learning Focus
- Financial arithmetic
- Linear Relations and Equations
- Matrices
- Number Patterns and Recursion
- Financial Arithmetic

Assessment
- Five Topic Tests contributing 44% to the semester grade
- Summer holiday homework assignment contributing 3% to the semester grade
- An Analysis Task contributing 3% to the semester grade
- A Technology Active Multiple Choice Examination of 1.5 hours duration contributing 25% of semester grade.
- A Technology Active Extended Answer Examination of 1.5 hours duration contributing 25% of semester grade.

Unit 2
Learning Focus
- Shape and Measurement
- Applications of trigonometry
- Investigating and comparing data distributions
- Investigating relationships between two numerical variables

Assessment
- Four Topic Tests contributing 40% to the semester grade
- An Analysis Task contributing 10% to the semester grade
- A Technology Active Multiple Choice Examination of 1.5 hours duration contributing 25% of semester grade.
- A Technology Active Extended Answer Examination of 1.5 hours duration contributing 25% of semester grade.
Foundation Mathematics - Units 1 & 2

Pathway Requirements
Enrolment in Foundation Mathematics Units 1 & 2 assumes familiarity with the key knowledge and skills from either Year 10 Mathematics (Essential) or Year 10 Mathematics (Core).

Unit 1
Introduction
Foundation Mathematics focuses on using mathematics effectively, efficiently and critically to make informed decisions. It provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning and community settings. This subject provides an opportunity for students to prepare for post-school options of employment and further training. However, this subject does not continue onto Unit 3.

Learning Focus
- Space, shape and design
- Patterns and number

Assessment
- Two Topic Tests contributing 30% to the semester grade
- Two investigations or projects of up to 4 periods in duration contributing 30% to the semester grade
- Classwork as assigned by the teacher (including revision notes, oral presentations, posters etc.) contributing 10% to the semester grade.
- A Technology Active Semester Examination of 1.5 hours duration contributing 30% to the semester grade.

Unit 2
Learning Focus
- Data
- Measurement

Assessment
- Two Topic Tests contributing 30% to the semester grade
- Two investigations or projects of up to 4 periods in duration contributing 30% to the semester grade
- Classwork as assigned by the teacher (including revision notes, oral presentations, posters etc.) contributing 10% to the semester grade.
- A Technology Active Semester Examination of 1.5 hours duration contributing 30% to the semester grade.
Specialist Mathematics - Units 3 & 4

Pathway Requirements
Specialist Mathematics Units 3 & 4 assumes familiarity with the key knowledge and skills from both Mathematical Methods Units 1 & 2 as well as Specialist Mathematics Units 1 & 2. Students selecting Specialist Mathematics Units 3 & 4 must have completed either Mathematical Methods Units 3 & 4 or have been studying it concurrently.

Unit 3
Introduction
Specialist Mathematics provides opportunities, beyond those presented in Mathematical Methods, to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. Specialist Mathematics contains topics in functions and calculus that build on and deepen the ideas presented in Mathematical Methods as well as demonstrate their application in many areas.

Learning Focus
- Functions and Graphs
- Algebra
- Vectors
- Differential Calculus
- Integral Calculus

Assessment
- Application Task: A mathematical investigation of a practical or theoretical context involving content from two or more areas of study of 4-6 hours duration conducted over a period of 1-2 weeks

Unit 4
Learning Focus
- Kinematics and Mechanics
- Probability and Statistics

Assessment
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from Calculus area of study
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from either the Mechanics or the Probability and Statistics areas of study
Mathematical Methods - Units 3 & 4

Pathway Requirement
Successful completion of Unit 1 & Unit 2 Mathematical Methods

Unit 3
Introduction
Mathematical Methods focuses on the development of the use of calculus and statistical analysis. The introductory study of simple elementary functions of a single real variable from Unit 1 and Unit 2 Mathematical Methods is now extended and deepened to include the algebra and geometry of a combination of these functions. The study of calculus is extended and deepened to provide a basis for an understanding of simple contexts involving rates of change, and includes the use of suitable functions, their derivatives and integrals, in modelling these contexts. The study of statistics develops the ability to describe and analyse phenomena involving uncertainty and variation.

Learning Focus
- Functions and Graphs
- Algebra
- Differential Calculus
- Integral Calculus
- Probability and Statistics

Assessment
- Application Task: A mathematical investigation of a practical or theoretical context involving content from two or more areas of study of 4-6 hours duration conducted over a period of 1-2 weeks

Unit 4
Learning Focus
- Integral Calculus
- Probability and Statistics

Assessment
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from Calculus area of study
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from the Probability and Statistics area of study
Further Mathematics - Units 3 & 4

Pathway Requirements
Further Mathematics Units 3 & 4 assumes familiarity with the key knowledge and skills from General Mathematics Units 1 & 2.

Unit 3
Introduction
Units 3 & 4 Further Mathematics provides opportunities to develop systematic strategies to model, analyse and interpret a wide range of statistical, geometrical and financial contexts.

Learning Focus
- Data analysis
- Recursion and financial modelling

Assessment
- Application Task: is a guided investigation of a given data set with several variables of 4-6 hours duration conducted over a period of 1-2 weeks
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from the Recursion and financial modelling area of study

Unit 4
Learning Focus
- Geometry and measurement
- Matrices

Assessment
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from the Geometry and measurement area of study
- A Modelling or Problem Solving Task of 2-3 hours duration conducted over a period of 1 week and drawn from the Matrices area of study
Personal Development

Pathway Opportunities
This subject has components that are taught for the whole year. This includes:
- Ethics and life
- Physical Health and Wellbeing
- Learning Pathways (Careers)

Personal development is a lifelong process. This unit allows students to question, develop a conscience, investigate organisation and study skills, increases an awareness of developing a healthy lifestyle and map out a future pathway that focuses on their skills and qualities.

*Ethics and Life - (Unit 2 Religion and Society)*

Introduction
We live in a society that has a lot of different opinions and beliefs about what is right and wrong. In this course, we seek to better understand what the issues are, why they are issues and what different ‘voices’ think about these issues. Through this course you will consider the different views that people have, including a variety of religious and global perspectives, and develop the ability to use ethical theory to reflect on your own personal ethics. Topics that can be covered can include euthanasia, capital punishment, genetic engineering, abortion, animal rights, human rights, fair trade, relationship ethics, as well as looking at issues as they come up in the media. This subject fulfils the requirements of Religion and Society Unit 2 and students may elect to have this appear on their VCE certificate if they can demonstrate the required knowledge and skill levels.

Learning Focus
- The nature of our conscience. What is our conscience? How is my conscience formed? What happens when I’m in conflict with my conscience?
- Factors involved in the process of ethical decision-making, including religious influences.
- Reflection on students’ own conscience and ethical standards
- Explore what happens when a person is in conflict with their conscience, and why ethical living can be challenging to carry out.
- Explore how a pluralist society can be a place of respectful differences of opinion and belief. Understanding the importance of the skill of hearing and appreciating different voices on issues studied.
- Understanding the key teachings of Christianity and other world religions on key ethical issues
- Occupational Codes of Conduct in our modern society.

Assessment
Students have a number of assessment tasks over four terms to complete during this course, as well as examinations.

The tasks include:
- Analytical Task on our conscience & its formation.
- Investigative Report applying an Ethical Decision Making model to a Humanitarian issue.
- Group research and presentation on a Bioethical issue
- Research Task related to Relationship Ethics.
- Reflection on a workplace Code of Conduct.

All tasks include a component of personal reflection and application to everyday life
*Physical Health & Wellbeing - Year 10*

**Introduction**
Personal Health & Wellbeing will investigate various aspects related to development of physical fitness, health, nutrition and wellbeing. Students will engage in a variety of physical activities, set individualised physical and nutrition based goals, tailored to improving overall health & wellbeing. This will include involvement in a variety of practical classes based around developing personal fitness and healthy eating.

Personal health, fitness and wellbeing plays a vital role in our young people being engaged at school and support their ongoing physical and emotional development. This course is the final year of compulsory Health and Physical Education for our students prior to commencing their VCE.

This is a year-long subject that is part of the core program designed to support our students in improving their personal fitness and become more aware of the components that contribute to their health and wellbeing. This course includes a range of theory and practical sessions aimed at improving students’ personal level of health, fitness and wellbeing.

The program will also support students preparing for a range of activities from the Year 10 Outdoor Education experience to House events such as House Athletics and Cross Country. This subject would involve a range of activities that students would be required to complete out of school and opportunities would be made available for students to pursue fitness interests outside School.

**Learning Focus**

**Physical Fitness**
- Fitness tests - series of physical tests - help to establish their Physical goal and areas for improvement & development.
- Physical - Fun - team activities & recreational based classes
- Various training types to increase fitness. (range of fitness approaches, e.g. circuits, boxing, spin, cardio, yoga, pilates, TRX etc)
- Development of Personal Training Program

**Health & Nutrition**
- Nutrition for activity - Healthy eating
- Mental health & body image
- Managing stress & anxiety
- Sleep and recovery
- Practical food unit

**Wellbeing**
- Physical, health & cognitive balance

**Assessment**
- Nutrition Assignment
- Laboratories
- Fitness testing
- Practical participation
*Learning Pathways (Careers)*

**Introduction**
Learning pathways are an individual’s navigation through opportunities presented in formal learning institutions, the workplace, community organisations, specific skill development programs and life experiences.
Student’s navigation of learning pathways will require the careful examination of their interests, abilities, values and lifestyle choices. Many programs are available for students to explore and analyse these important issues in the context of career choices.
Students are challenged to reflect, explore and investigate their own personal pathways through the provision of a structured framework that would include examining activities both within the school framework and the wider community.

**Learning Focus**
- What is Careers Education
- What are the senior secondary learning options?
- How the VCE works
- Examine tertiary studies options
- Educational options
- Personal Self-management
- Pathway options
- Employability skills
- Goal Setting

**Assessment**
Through the course students will reflect on their own personal learning journey and how it is influences their post school pathway.

On completion of this unit students will be able to put together a Pathway Plans outlining their educational studies in relation to their post school options.
Religion and Society Units 3 & 4

Pathway Requirements
Pre-requisite: Religion and Society - Unit 2 (Ethics in a Pluralist Society)

Unit 3 & 4
Introduction
Across time and cultures, humanity has sought to understand big questions of life. These include, where did we come from?; is there someone or something greater – an ultimate reality?; what is the purpose of our existence?; how do we explain death and what happens when we die? Religion has developed answers in the form of various beliefs and other aspects that have offered ways of establishing meaning for all of creation.

Unit 3 investigates the ways in which the human search for meaning is shaped by the teachings and practices of religious traditions. This unit focuses especially on how members of religious traditions find meaning through the beliefs and customs of their tradition. There is investigation between the personal life experience of adherents and their religious beliefs. We examine how religious beliefs may be communicated and expressed in ways such as formal statements of belief, sacred texts and religious writings, rituals, symbols and spirituality. At Beaconhills College we concentrate on the Judean-Christian tradition.

Unit 4 continues to explore the interaction over time of religious traditions and the societies of which they are a part. Religious traditions are living institutions that participate in and contribute to wider societies - both positively and negatively. Students consider how some aspects of religion are more likely to be involved when taking a stance, such as distinctive beliefs, rituals, the application of ethical principles, the nature and role of authority. Students examine significant internal and external challenges to religious traditions, and how these have impacted Christianity today. They also consider the implications of religious belief for positions on current challenges arising from social and technological change.

Learning Focus
- Nature and purpose of religious beliefs; How religious beliefs relate to meaning of life and death; How religious beliefs are related to the relationship between reality and humanity.
- How have religious beliefs been expressed through rituals, creeds, symbols, social structures and sacred texts?
- Investigate significant persons with religious beliefs and how those beliefs relate to their important life experiences.

Assessment
Percentage contributions to the study score in Religion and Society are as follows:
- Unit 3 school-assessed coursework: 25 %
- Unit 4 school-assessed coursework: 25 %
- End-of-year examination: 50 %
Science

Science and its applications are part of everyday life. Science education develops students’ abilities to ask questions and find answers about the natural and physical world. It provides students with insights into the way science is applied and how scientists work in the community, and it helps them to make informed decisions about issues, careers and further study.

A number of students will undertake to study Two Sciences in Year 10. Here is a list of possible combinations. These may be delivered in reverse depending on timetable constraints.

**Accelerated Pathway**

Students wishing to undertake VCE Biology or Psychology in Year 10 should have achieved at least a grade of B or better in their Year 9 Science course. (Further advice can be sought from the Science Department about your suitability.)

Any accelerated options must be taken in conjunction with one Year 10 Science module.
Science - Year 10

Introduction
General Science will expose students to the specialist areas found in the VCE Sciences of Physics, Chemistry and Biology, one third of the semester will be allocated to each discipline.

Learning Focus
- Energy as a physical concept and its conservation
- The motion of objects will be described and predicted using graphs
- The structure and bonding of atoms
- Periodic Table
- Chemical formulae and how to balance chemical equations
- Cell Structure and functions
- Cellular Processes - Photosynthesis and Respiration

Assessment
- Physics 20%
- Chemistry 20%
- Biology 20%
- Examination 40%
Introduction
This elective is designed to offer students a greater exposure to the disciplines of Biology and Psychology. It is an excellent grounding for students contemplating studying either of these subjects in Year 11. Within the Biology component, students address the question of ‘What makes me, me?’ through an understanding of Genetic Inheritance. Further to this, students learn about how species (including humans) change over time through evolutionary processes. Within the Psychology component, students approach Psychological Investigations using the scientific method. With a focus on specific Research Methods, students become familiar with the foundations of Psychology as a Science, providing them with a sound foundation for Units 1-4 Psychology. Finally, students explore various aspects of Mental Health and Mental Illness as a contemporary issue in current society, with a focus on the stigma around Mental Illness and ways to reduce this in society.

Learning Focus
- Genetics at the cellular level
- Darwin’s theory of evolution by natural selection
- Psychology as a Science
- Mental Health

Assessment
- Biology 30%
- Psychology 30%
- Examination 40%
Physics and Chemistry - Year 10

Pathway Requirements
A grade of C in Year 9 Science and Mathematics is highly recommended.

Introduction
Many of our daily interactions with the world are explainable through the laws of Physics and Chemistry. This course is strongly recommended for students planning to study Physics or Chemistry in Year 11.

Learning Focus
- Standard chemical reactions and chemical equations
- Electronegativity of ions and their effect on reaction rates
- The fundamentals of Electricity and circuit analysis
- Momentum and its conservation in systems
- Forces and Newton's Laws of Motion

Assessment
- Physics 30%
- Chemistry 30%
- Examination 40%
Biology - Unit 1 & 2

Pathway Requirements
Students with a grade of C or better in General Science and/or Year 10 Biology/Psychology are able to undertake this course. However, students are encouraged to complete the Year 10 Biology/Psychology course.

Unit 1
Introduction
In this unit students examine the cell as the structural and functional unit of life, and the requirements for sustaining cellular processes in terms of inputs and outputs. Students analyse types of adaptations that enhance the organism’s survival and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat. The role of a keystone species in maintaining the structure of an ecosystem is explored and how the planet’s biodiversity is classified. An investigation of the factors that affect the growth of a population and a practical investigation related to the survival of an organism or species is also undertaken.

Learning Focus
- How do organisms function?
  - Cell size, structure and function
  - Crossing the plasma membrane
  - Energy transformations
  - Functioning systems
- How do living systems sustain life?
  - Survival through adaptations and regulation
  - Organising biodiversity
  - Relationships between organisms within an ecosystem
- Practical investigation

Assessment
For Outcomes 1 and 2
- a report of a fieldwork activity
- annotations of a practical work folio of activities or investigations
- data analysis
- a test comprising multiple choice and/or short answer and/or extended response.

For Outcome 3
- a report of a student-designed or adapted investigation related to the survival of an organism or a species presented as a scientific poster.
- Examination 50%
Unit 2
Introduction
In this unit students investigate the cell cycle and the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproduction and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies. Students investigate the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes. They consider the role of genetic knowledge in decision making about the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions, the uses of genetic screening and its social and ethical issues.

Learning Focus
• How does reproduction maintain the continuity of life?
  - The cell cycle
  - Asexual reproduction
  - Sexual reproduction
  - Cell growth and cell differentiation
• How is inheritance explained?
  - Genomes, genes and alleles
  - Chromosomes
  - Genotypes and phenotypes
  - Pedigree charts, genetic cross outcomes and genetic decision-making
• Investigation of an issue

Assessment
For Outcomes 1 and 2
• annotations of a practical work folio of activities or investigations
• a bioinformatics exercise
• data analysis
• problem solving involving biological concepts, skills and/or issues
• a test comprising multiple choice and/or short answer and/or extended response.

For Outcome 3
• a report of an investigation into genetics and/or reproductive science using an appropriate format, for example a digital presentation.
• Examination 50%
Chemistry - Unit 1 & 2

Pathway Requirements
For Unit 1 it is highly recommended that a student has completed the Physics/Chemistry elective in Year 10 and has achieved a grade of C or better. Students who are unable to complete the Physics/Chemistry Unit in Year 10 will be expected to undertake a bridging course over the summer holidays.

Unit 1
Introduction
The development and use of materials for specific purposes is an important human endeavour. In this unit students use their knowledge of elements and atomic structure to explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms. They investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials, the factors affecting their formation, and modifications to improve the properties of the materials. Students are introduced to quantitative concepts in chemistry including the mole concept. They apply their knowledge to determine the relative masses of elements and the composition of substances. Throughout the unit, students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and experimental data as well as to discuss chemical phenomena.

Learning Focus
- Knowledge of elements including their structure and position in the periodic table can help to explain the properties and versatility of
  - Metals
  - Ionic compounds
  - Molecular compounds
  - Carbon lattices and carbon nanomaterials
  - Organic compounds (including systematic nomenclature)
  - Polymers
- Atoms and compounds be quantified and equations can be written to represent a chemical reaction. Students are introduced to Stoichiometry.
- An independent research investigation is conducted where students apply critical and creative thinking skills, science inquiry skills and communication skill.

Assessment
For Outcomes 1 and 2, students will:
- Annotate a practical work folio of activities
- Complete problem-solving tasks involving chemical concepts, skills and issues
- Complete tests comprising of multiple choice, short answer and extended response questions
- Examination 50%

For Outcomes 3
- A report of an independent investigation of a topic selected from Area of Study 1
Unit 2
Introduction
Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, including its polar nature and intermolecular forces, the reactions that occur in water and the various methods of water analysis. In this context students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox reactions. Students continue their calculations in chemistry, using a variety of analytical techniques and instrumental procedures, and then apply their findings to determine concentrations of different species in water samples, including chemical contaminants. They use chemistry terminology including symbols, units, formulas and equations, and data from experiments to discuss chemical phenomena and explain observations.

Learning Focus
- How substances interact with water in terms of:
  - Properties of water
  - Water as a solvent
  - Acid-base (proton transfer) reactions in water
  - Redox (electron transfer) reactions in water
- How substances in water are measured and analysed including
  - Water sample analysis
  - Measurement of solubility and concentration
  - Analysis for salts in water
  - Analysis for organic compounds in water
  - Analysis for acids and bases in water
- Practical investigation on water quality

Assessment
For Outcomes 1 and 2, Students will be required to do:
- Annotations of a practical work folio of activities and investigations
- A report of a practical activity
- A media response
- Problem solving tasks involving chemical concepts, data analysis, skills and/or issues
- Tests comprising of multiple choice, short answer and extended response questions.
- Examination 50%

For Outcome 3
- a report of a student-designed quantitative laboratory investigation using an appropriate format to be decided in class. This may take the form of a digital presentation, oral communication, scientific poster or written report. This will be dependent on the investigation focus.
Physics - Unit 1 & 2

Pathway Requirements
For Unit 1 it is recommended that a student has completed the Physics/Chemistry subject. A grade of C or better in the Physics/Chemistry Unit is expected.

Unit 1
Introduction
Ideas in physics are dynamic. As physicists explore concepts, theories evolve. Often this requires the detection, description and explanation of things that cannot be seen. In this unit students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter. They apply thermal laws when investigating energy transfers within and between systems, and assess the impact of human use of energy on the environment. Students examine the motion of electrons and explain how it can be manipulated and utilised. They explore current scientifically accepted theories that explain how matter and energy have changed since the origins of the Universe.

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

Assessment
- Test 17%
- Assignment 16%
- Practical Investigation 17%
- Examination 50%

Unit 2
Introduction
In this unit 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 core component of this unit students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. Students choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, and sound and sports science. The option enables students to pursue an area of interest by investigating a selected question. Students design and undertake investigations involving at least one independent, continuous variable.
Learning Focus

- How can motion be described and explained?
  - Concepts used to model motion
  - Forces and motion
  - Energy and motion

- A student designed practical investigation taken from content in Area of Study 1 or 2

Assessment

- Test 10%
- Assignment 10%
- Practical Investigation 30%
- Examination 50%
Psychology - Units 1 & 2

Unit 1
Human development involves changes in thoughts, feelings and behaviours. In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person’s psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours. A student-directed research investigation related to brain function and/or development is undertaken in this unit. The research investigation draws on content from Area of Study 1 and/or Area of Study 2.

Learning Focus
- How does the brain function?
  - Role of the brain in mental processes and behaviour
  - Brain plasticity and brain damage
- What influences psychological development?
  - The complexity of psychological development
  - Atypical psychological development
- Student-directed research investigation

Assessment
- Brain structure modelling/dissection 15%
- Test 20%
- Research Investigation - Oral Presentation 15%
- Examination 50%

Unit 2
Introduction
A person’s thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person’s attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They 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. A student practical investigation related to internal and external influences on behaviour is undertaken in this unit.

Learning Focus
- What influences a person’s perception of the world?
  - Sensation and perception
  - Distortions of perception
- How are people influenced to behave in particular ways?
  - Social cognition
  - Social influences on behaviour
- Student-directed practical investigation

Assessment
- Test 15%
- Media Response 20%
- Practical Investigation 15%
- Examination 50%
Biology - Unit 3 & 4

Pathway Requirements
For Unit 3 & 4 it is recommended that a student has achieved a C grade or better in Unit 1 & 2 Biology.

Unit 3 & 4
Introduction
The cell is a dynamic system of interacting molecules that define life. An understanding of the workings of the cell enables an appreciation of both the capabilities and the limitations of living organisms whether animal, plant, fungus or microorganism. The convergence of cytology, genetics and biochemistry makes cell biology one of the most rapidly evolving disciplines in contemporary biology.

In this unit students investigate the workings of the cell from several perspectives. They explore the importance of the insolubility of the plasma membrane in water and its differential permeability to specific solutes in defining the cell, its internal spaces and the control of the movement of molecules and ions in and out of such spaces. Students consider base pairing specificity, the binding of enzymes and substrates, the response of receptors to signalling molecules and reactions between antigens and antibodies to highlight the importance of molecular interactions based on the complementary nature of specific molecules. Students study the synthesis, structure and function of nucleic acids and proteins as key molecules in cellular processes. They explore the chemistry of cells by examining the nature of biochemical pathways, their components and energy transformations. Cells communicate with each other using a variety of signalling molecules. Students consider the types of signals, the transduction of information within the cell and cellular responses. At this molecular level, students study the human immune system and the interactions between its components to provide immunity to a specific antigen.

Unit four explores the mechanisms of inheritance, genes, DNA, mitosis and meiosis, and the causes of variation, both genetic and environmental. An examination of the processes of evolution, including natural selection, for which variation is the raw material, leads to investigation of the origins and diversity of living organisms. Recent advances in technology, including biotechnology, are also considered.

Learning Focus
- How do cellular processes work?
- How do cells communicate?
- How are species related?
- How do humans impact on biological processes?

Assessment
Unit 3 School-assessed Coursework: 16 %
- Reports of two practical activities that explain the dynamic nature of the cell in terms of key cellular processes including regulation, photosynthesis and cellular respiration, and analyse factors that affect the rate of biochemical reactions.
- Apply a stimulus-response model to explain how cells communicate with each other, outline human responses to invading pathogens, distinguish between the different ways that immunity may be acquired, and explain how malfunctions of the immune system cause disease.

Unit 4 School-assessed Coursework: 24 %
- A report using primary or second hand data analysing evidence for evolutionary change, explain how relatedness between species is determined, and elaborate on the consequences of biological change in human evolution.
- A response to an issue or a report of a laboratory investigation on describing how tools and techniques can be used to manipulate DNA, explain how biological knowledge is applied to biotechnical applications, and analyse the interrelationship between scientific knowledge and its applications in society.
- Design and undertake an investigation related to cellular processes and/or biological change and continuity over time, and present methodologies, findings and conclusions in a scientific poster.

End-of-year examination: 60 %
Chemistry - Unit 3 & 4

Pathway Requirements
Students will need to complete Units 1 and 2 Chemistry and it is also recommended a grade of C or above has been achieved.

Unit 3 & 4
Introduction
In unit 3 students investigate the global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment. Students compare and evaluate different chemical energy resources, including fossil fuels, biofuels, galvanic cells and fuel cells. They investigate the combustion of fuels, including the energy transformations involved, the use of stoichiometry to calculate the amounts of reactants and products involved in the reactions, and calculations of the amounts of energy released and their representations. Students consider the purpose, design and operating principles of galvanic cells, fuel cells and electrolytic cells. In this context they use the electrochemical series to predict and write half and overall redox equations, and apply Faraday’s laws to calculate quantities in electrolytic reactions. Students analyse manufacturing processes with reference to factors that influence their reaction rates and extent. They investigate and apply the equilibrium law and Le Chatelier’s principle to different reaction systems, including to predict and explain the conditions that will improve the efficiency and percentage yield of chemical processes. They use the language and conventions of chemistry including symbols, units, chemical formulas and equations to represent and explain observations and data collected from experiments, and to discuss chemical phenomena.

In unit 4 students investigate the carbon atoms unique characteristics that explain the diversity and number of organic compounds that not only constitute living tissues but are also found in the fuels, foods, medicines and many of the materials we use in everyday life. In this unit students investigate the structural features, bonding, typical reactions and uses of the major families of organic compounds including those found in food. Students study the ways in which organic structures are represented and named. They process data from instrumental analyses of organic compounds to confirm or deduce organic structures, and perform volumetric analyses to determine the concentrations of organic chemicals in mixtures. Students consider the nature of the reactions involved to predict the products of reaction pathways and to design pathways to produce particular compounds from given starting materials. Students investigate key food molecules through an exploration of their chemical structures, the hydrolytic reactions in which they are broken down and the condensation reactions in which they are rebuilt to form new molecules. In this context the role of enzymes and coenzymes in facilitating chemical reactions is explored. Students use calorimetry as an investigative tool to determine the energy released in the combustion of foods.

Learning Focus
• What are the options for energy production?
• How can the yield of a chemical product be optimised?
• How can the diversity of carbon compounds be explained and categorised?
• What is the chemistry of food?
• A practical investigation related to energy and/or food is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4.

Assessment
• Unit 3 School assessed coursework: 20%
• Unit 4 School assessed coursework: 20%
• End of year examination: 60%
Physics - Unit 3 & 4

Pathway Requirements
For Unit 3 & 4 it is recommended that a student has achieved a C grade or better in Unit 2 Physics. Unit 2 must be completed before attempting Units 3 & 4.

Unit 3 & 4
Introduction
In this unit students explore the importance of energy in explaining and describing the physical world. They examine the production of electricity and its delivery to homes. Students consider the field model as a construct that has enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators. They explore the interactions, effects and applications of gravitational, electric and magnetic fields. Students use Newton’s laws to investigate motion in one and two dimensions, and are introduced to Einstein’s theories to explain the motion of very fast objects. They consider how developing technologies can challenge existing explanations of the physical world, requiring a review of conceptual models and theories. Students design and undertake investigations involving at least two continuous independent variables. A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. Wave theory has classically been used to explain phenomena related to light; however, continued exploration of light and matter has revealed the particle-like properties of light. On very small scales, light and matter - which initially seem to be quite different - have been observed as having similar properties. In Unit 4, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter. Students learn to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. Students design and undertake investigations involving at least two continuous independent variables.

Learning Focus
- How do things move without contact?
  Fields and interactions, effects of fields, application of field concepts
- How are fields used to move electrical energy?
  Generation of electricity, transmission of electricity
- How fast can things go?
  Newton’s laws of motion, Einstein’s theory of special relativity, Relationships between force, energy and mass
- How can waves explain the behaviour of light?
  Properties of mechanical waves, light as a wave
- How are light and matter similar?
  Behaviour of light, matter as particles or waves, similarities between light and matter, production of light from matter
- Practical investigation

Assessment
Unit 3 School-assessed Coursework: 21%
  - Analysis of fields outcome: 7%
  - Electrical generation and distribution: 7%
  - Motion investigation: 7%
Unit 4 School-assessed Coursework: 19%
  - Behaviour of light analysis: 6%
  - Wave particle duality analysis: 6%
  - Experimental poster: 7%
End-of-year examination: 60%
Psychology - Units 3 & 4

Pathway Requirements
For Unit 3 & 4 it is recommended that a student has achieved a C grade or better in Unit 2 Psychology.

Unit 3 & 4
Introduction
In this unit students examine both macro-level and micro-level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person’s psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capabilities and changed behaviours. Students examine the contribution that classical and contemporary research has made to the understanding of the structure and function of the nervous system, and to the understanding of biological, psychological and social factors that influence learning and memory.

Learning Focus
Unit 3
• The nervous system and how it enables psychological functioning
• Memory and learning
Unit 4
• Levels of consciousness, mental processes and behaviour
• Mental wellbeing
• Practical investigation

Assessment
• Unit 3
  Outcome 1: Analysis the structure and function of the nervous system 8%
  Outcome 2: Evaluation of the biological and psychological explanations of memory 8%

• Unit 4
  Outcome 1: Analysis and evaluation of consciousness and the nature of sleep 8%
  Outcome 2: Application of the biopsychosocial approach 8%
  Outcome 3: A practical investigation presented as a scientific poster 8%

• End of year examination: 60%
Year 10 Geography: Environmental Change and Management

Introduction
Year 10 Geography - Our Earth’s Wellbeing: Environmental Change and Management, investigates human induced environmental change and management strategies. Causes and consequences of environmental change at different scales will be investigated, along with environmental world views. Students will explore what it means to be stewards of the natural environment and responsible global citizens. Mankind’s efforts to live within our ever-changing environment and manage its natural resources. A variety of geographic skills will be applied to investigate trends and issues of environmental wellbeing.

Learning Focus
- Environmental change
- Natural change and human impacts (e.g. deforestation or the Greenhouse Effect)
- Managing limited and renewable natural resources: water cycle, alternative energy sources.
- Human responses to environmental change: global agreements such as the Kyoto Protocol, technological solutions and natural processes harnessed to manage the environment.
- Skills such as reading maps and satellite photographs, analysing data and applying spatial concepts

Assessment
- Semester Coursework 60% - a combination of topic tests, student research, fieldwork, written tasks and oral presentation
- Semester Examination 40%
Year 10 Geography: The Geographies of Human Wellbeing

Introduction
Year 10 Geography - Our Earth’s Wellbeing: the Geographies of Human Wellbeing, explores the different ways of measuring and mapping human wellbeing. Of particular interest is the study of quality of life amongst the world’s diverse populations, in a time where unlimited needs and wants clash with limited resources and wealth. The role of initiatives by international and national government and non-government organisations to improve human wellbeing in Australia and other countries.

Learning Focus
- Human wellbeing
- Indicators of quality of life (e.g. Life expectancy, infant mortality)
- Environmental, social, psychological and economic factors influencing human wellbeing
- Case studies including the wellbeing of India’s population.
- Skills such as reading maps and satellite photographs, analysing data and applying spatial concepts

Assessment
- Semester Coursework 60% - a combination of topic tests, student research, fieldwork, written tasks and oral presentation
- Semester Examination 40%
Year 10 History - Conflict & Change

Pathway Requirements
There are no entry requirements.
This course is an introduction to further study at VCE level of History or Global Politics.

Introduction
Society as we know it today is shaped by the experiences of the past. This is illustrated by Australia's experiences of both war and peace since 1914. Our first experience of war as a nation both united and divided society. The optimism of the 1920's was followed by the despair of the Great Depression, a time of significant social, economic and political change throughout the world. Australia's future was on the line in World War II. This course will explore the impact these events had on today's world and what lessons we can learn. Students will develop their own research skills and form opinions on some of history's recent successes and failures.

Learning Focus
- Causes of war and conflict from 1918 to the present day.
- The Treaty of Versailles and the Weimar Republic.
- The Roaring Twenties and the modern era.
- The Great Depression and the world economy.
- The rise of Fascism (Hitler and other dictators).
- World War II: Its causes, nature and course, with particular focus on the war in the pacific.
- The reasons for Australia’s involvement in world conflicts.
- Impact of World War II on Australia’s international relations (USA, Britain, Asia).

This course is designed to enable students to:
- Research historical events using a variety of primary and secondary sources.
- Accurately reference sources.
- Analyse and evaluate historical documents such as cartoons and propaganda posters.
- Form and write coherently about opinions on the causes and impacts of historical events.
- Identify how specific events impacted on Australian society both in the short and long term.

Assessment
- Semester Coursework 60% - a combination of topic tests, research assignments, written essays, oral and multi-media presentations.
- Semester Examination 40%
Year 10 History: The Fight for Freedom

Pathway Requirements
There are no entry requirements.
This course is an introduction to further study at VCE level of History or Global Politics.

Introduction
Throughout history, oppression and inequality has destroyed the lives of millions of people in countries throughout the world. This course will focus on the struggle for freedom from Australian and International perspectives, including the plight of Australian Aboriginal and Torres Strait Islanders, the US civil rights movement and more current issues, such as treatment of refugees. This course will help students create their own informed opinions on the many struggles for freedom and place many current world issues in an historical context.

Learning Focus
- Causes of inequality and oppression.
- The changing nature of freedoms in modern society.
- Individuals and groups seeking rights and freedoms worldwide, and their methods.
- Organisations and documents protecting human rights such as the U.N. Declaration of Human Rights.
- South Africa, the rise and fall of Apartheid and reconciliation.
- US civil rights movement.
- The struggle for Aboriginal and Torres Strait Islander rights and freedoms: Stolen Generation, constitutional change and The Freedom Ride.
- Global human rights issues such as treatment of refugees and human trafficking.

This course is designed to enable students to:
- Research historical events using a variety of primary and secondary sources.
- Accurately reference sources.
- Analyse and evaluate historical documents such as cartoons and propaganda posters.
- Form and write coherently about opinions on the causes and impacts of historical events.
- Develop empathy with those facing adversity.

Assessment:
- Semester Coursework 60% - a combination of topic tests, research assignments, written essays and multi-media presentations.
- Semester Examination 40%
Year 10 ExTENd Project

Pathway Requirements
There are no entry requirements.
This course is an introduction to Extended Investigation at VCE level and can be undertaken at Year 11 or 12.

Pathway Opportunities
Although not a prerequisite, this research-focused subject should be considered by students who are potentially interested in enrolling in Extended Investigation at Units 3 & 4. Study of this subject should enhance all future learning as the key skills are applicable in all subject areas.

Introduction
This is a semester-based subject that provides students with the opportunity to engage in the study of a topic of individual interest to them. Any potential topic has to be of sufficient intellectual rigour to justify a prolonged period of study. All topics should be deemed worthwhile, viable and able to sustain individual interest.
This course will introduce students to the fundamentals of effective research. Students will learn about research methodologies, evaluate each one and select the one that is most appropriate to their chosen topic.
Students will use an established research framework as a guide to evolving their skills and will learn to use their knowledge to address the demands of their research question.
Students integrate their key findings to produce a written project, which is authenticated by their own evidence and findings. In a formal oral presentation, students will review the knowledge and skills they have developed, and reflect on the quality of their research outcome.

Learning Focus
Topics include:
- Academic Report Writing
- Research Methodologies
- Evaluation of Sources and Source Material
- Data Collection and Analysis
- Introduction to Critical Thinking
- Reflective Practice

Assessment
- Research Proposal 10%
- Written Report 60%
- Oral Reflection 30%
**Geography - Units 1 & 2**

**Pathway Requirements**
To undertake Unit 1 and/or 2 in Year 10, students need a B in English and related subjects in Year 9. No entry requirements apply for Year 11 students but completing the Year 10 Geography unit is advised.

**Unit 1 - Hazards and Disasters**

**Introduction**
Unit 1, *Hazards and Disasters*, investigates the nature, causes, impacts and human responses to hazards. Hazards are events with the potential to cause harm to people and/or the environment while disasters are judgments about the size and impact of hazardous events. This unit unpacks essential questions around the impact of human activity in creating hazards, such as climate change and its effects on rising sea levels. Students explore two contrasting hazards and how people responded to them. *Fieldwork* is a key learning activity in this unit.

**Learning Focus**
- Hazards - the nature, causes, impacts, and distribution on local, national and global scales.
- Types of hazards such as volcanic activity, bushfires or floods, water borne diseases and epidemics caused by poor living conditions (technological).
- Connections between human activity and natural events.
- Disaster warning programs and actions taken when hazards become destructive disasters.

**Assessment**
- Semester Coursework: 60% - a fieldwork report and a combination of tests, research, written tasks and oral presentation. Semester Examination: 40%

**Unit 2 - Tourism**

**Introduction**
The United Nations estimates Tourism has an industry value of US$1 trillion a year. The number of international tourist arrivals is expected to grow to 1.6 billion by 2020 and to 2.6 billion in 2050. (UNWTO Annual Reports 2011-2013).

*Unit 2, Tourism*, investigates the characteristics of tourism, where it has developed, types of tourism, how it is changing over time and its impacts on people, places and environments. Students investigate in detail at least one tourism location using appropriate fieldwork techniques, and research one other location elsewhere in the world.

**Key Topic Areas**
- Types of tourism: domestic and international.
- Patterns in the spread of tourism and tourist destinations - locally, nationally and globally.
- Environmental, economic and socio-cultural impacts of tourism within Australia and elsewhere in the world.
- Strategies to help manage the effects of rising tourism trade.
- The role of planning for sustainable outcomes in tourism.

**Assessment Unit 1 & 2**
- Semester Coursework: 60% - a fieldwork report and a combination of tests, research, written tasks and oral presentation.
- Semester Examination: 40%
History - Units 1 & 2

Pathway Requirements
To undertake Unit 1 and/or 2 in Year 10, students need a B in English and related subjects in Year 9. No entry requirements apply for Year 11 students but completing a Year 10 History unit is advised.

Unit 1 - 20th Century History (1918 - 1939)
Introduction
VCE History students gain an understanding of the causes, consequences and legacy of key historical events, creating an informed opinion and supporting their understanding of current world events.

Unit 1 explores the early 20th Century, including significant political, social and cultural changes following World War 1 and the consequences of post-war Peace Treaties in the era leading up to World War 2. It investigates political movements and organisations that emerged over this period of history in response to significant economic, social and political crises and conflicts.

Learning Focus
• Post-World War 1 Peace Treaties
• Rise of competing ideologies eg. Communism, fascism, Nazism.
• Social and cultural changes between the wars (Germany and other major nations)
• Causes of World War 2

Unit 2 - 20th Century History (1945 - 2000)
Introduction
Unit 2 explores the major themes and principal events of the late 20th Century during the post-World War 2 era. It investigates the ways in which modern society responded to political, economic and social developments during this time period, from domestic, regional and international perspectives.

Learning Focus
• The Cold War and ideological concerns (McCarthyism, Communism)
• Cold War’s role in conflicts such as the Korean War, Vietnam War or the division of Germany
• Political and social independence movements and terrorist groups (such as IRA, ETTA, Al Qaeda)

Assessment Units 1 & 2
Assessment tasks for Units 1 & 2 coursework will be chosen from:
• Analysis of primary and secondary sources
• Responses to historical accounts
• Essays
• Oral presentations
• Multimedia presentations
• Tests

Semester Coursework:  60%
Semester Examination:  40%
Geography - Units 3 & 4

Pathway Requirements
Accelerated study of Units 3 & 4 should only be undertaken by Year 11 students with a B in related subjects. There are no prerequisites for entry to Unit 3 but students are advised to complete Units 1 and 2 prior to commencing Unit 3.

Units 3 & 4
Introduction
Unit 3, Changing the Land, investigates change to land cover (known as biomes) such as forest, grassland, tundra and wetlands, as well as land covered by ice and water. Students identify interconnections between climate, soils, landforms and flora and fauna and the growing level of human activity. They analyse reasons for modifying land cover to allow different land uses are explored such as housing, resource provision, communication and recreation. They also understand the distribution and causes of deforestation, desertification, and melting glaciers and ice sheets and human responses to these.

Unit 4, Human Population - trends and issues, explores the causes and effects of the exponential growth of the human population, now in excess of 7 billion people, with a clear focus on trends in developed and developing countries. It investigates the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world. Students explore factors influencing population change, including the impact of specific government policies, changing economic conditions, wars and revolution, changes to political boundaries and the aftermath of major hazard events.

Learning Focus
Topics studied in Unit 3:
- Land use change - Using fieldwork and secondary sources to identify the processes and impacts of land use changes.
- Land cover changes - Processes involved and human responses to deforestation, desertification, melting glaciers and ice sheets.

Topics studied in Unit 4:
- Population dynamics - the change in world population over space and time, the impact of fertility and mortality and theories of population growth.
- Issues and challenges - investigate population trends in different parts of the world and resulting issues such as healthcare for aging populations, and the effectiveness of strategies to deal with these issues.

Assessment
School-assessed coursework and an examination:
- Unit 3 school-assessed coursework: 25 % - a test with structured questions, a written fieldwork report and analysis of geographic data.
- Unit 4 school assessed coursework: 25% - analysis of geographic data and a test with structured questions.
- End of year examination: 50 %
Revolutions (History) - Unit 3 & 4

Pathway Requirements
It is recommended that students wishing to study Units 3 & 4 Revolutions have studied either Units 1 or 2 History.

Units 3 & 4
Introduction
Revolutions are the great disjuncture of modern times and mark deliberate attempts at new directions. They share the common aim of breaking with the past by destroying the regimes and societies that engender them and embarking on a program of political and social transformation.

In Unit 3, *The French Revolution*, students will study key events that have shaped France and the world, including the storm of the Bastille, the Estates-General and the Tennis Court Oath. They will learn about the failures of the *ancient regime* under King Louis XVI and how his actions (and inactions) contributed to a revolutionary situation in eighteenth century France. Students will also learn about a number of important events including the proclamation of the Declaration of the Rights of Man and Citizen, the Cult of the Supreme Being and the bloody Terror under Robespierre's reign. They will learn how the revolutionaries set about creating a new society and how they ultimately failed.

In Unit 4, *The Russian Revolution*, students will learn about the revolution that sent shock waves around the world and influenced many of the key events of the twentieth century, including the Cold War. They will learn how Tsar Nicholas II failed to hold together his crumbling empire, as it was torn apart by the forces of war, starvation and that mad monk, Rasputin. Students also learn how the Bolsheviks set about creating a new political and economic order in Russia. They will learn about the Civil War and the New Economic Policy and how, ultimately, one form of autocracy was replaced with another.

Learning Focus
Topics cover revolutionary ideas, leaders, movements and events and the subsequent process of creating a new society.

Topics covered in Unit 3:
- The French Revolution from 1774 to October 1789 (Accession of Louis XVI to the throne to The October Days 1789)
- The French Revolution from October 1789 to 1795 (The October Days to the dissolution of the Convention Year III)

Topics covered in Unit 4:
- The Russian Revolution from 1896 to October 1917 (Coronation of Tsar Nicholas to the 25th October Revolution 1917)
- The Russian Revolution from October 1917 to 1927 (Early Sovnarkom decrees to the end of the NEP)

Assessment
The following four assessments are completed over the year:
- Analysis of visual and written sources
- Essay
- Historical Interpretations
- Historical Enquiry

School-assessed coursework and an examination:
- Unit 3 School-Assessed Coursework: 25%
- Unit 4 School-Assessed Coursework: 25%
- End of year examination: 50%
Global Politics - Unit 3 & 4

Pathway Requirements
It is recommended that students wishing to study Units 3 & 4 Global Politics have studied a Humanities subject in Senior School.

Units 3 & 4
Introduction
Global Politics explores contemporary international issues, and key global actors in international politics. It examines the nature of conflict in the post-Cold War world, including considerations of concepts such as ‘superpower’, ‘terror’ and ‘terrorism’ in the post September 11 world. Students develop an understanding of global actors and the way that states within the Asia-Pacific region use power in their relations with each other as they pursue their national interest. Study the ethical issues and debates surrounding global politics. An examination of crises and the evaluation of responses to problems that require multilateral resolution.

Learning Focus
Unit 3: Who are the key actors in contemporary global politics? From where does their power stem? What impact do these actors have on global politics? What challenges do these global actors face in achieving their aims? This Unit investigates the role of key global actors in international politics, including the United Nations, the International Monetary Fund and non-state actors such as human rights’ groups and terrorist organisations. It explores the relationship between Australia and other states in the Asia-Pacific region, with an in-depth study of one state

Unit 4: Do we have a responsibility to uphold the human rights of persons outside our borders? What is the best way to address people movement? What does ‘development’ look like? Can the world be rid of weapons, and if so, will it be safer? This Unit focuses on the ethical considerations in regards to issues such as refugees, weapons proliferation and global development. A detailed study of two contemporary global crises will be completed.

Assessment
The following assessments are completed over the year:

- a multimedia presentation
- a case study
- an essay
- a report
- short-answer questions
- an extended response

School-assessed coursework and an examination:

- Unit 3 School-Assessed Coursework: 25%
- Unit 4 School-Assessed Coursework: 25%
- End of year examination: 50%
VCE Extended Investigation - Units 3 & 4

Pathway Requirements
There are no pre-requisites for entry onto this course. This course is intended for students that have an inquiring mind, enjoy research and who are self-motivated. Students should discuss their intention to study this subject with the Head of Senior School or Head of Teaching & Learning in the first instance.

Introduction
The VCE Extended Investigation develops students’ understanding of what constitutes a good research question. They develop an ethical, a robust, a disciplined and a rational approach to gathering, interpreting and evaluating evidence in order to answer the research question.

Students are introduced to a broad range of research methods and explore their comparative suitability for the investigation of particular questions. The skills that students develop in this study are transferable to any higher education course or vocational education and training program.

Learning Focus
This study is designed to enable students to:
• develop and construct a rigorous research question
• understand and apply research methods
• explore a chosen area of investigation in depth
• develop as independent, critical and reflective learners
• develop research project management knowledge and skills
• analyse and evaluate findings and results
• develop skills in written and oral presentation of research findings.

Unit 3 Outline
• Designing a Research question
• Planning and commencing the investigation
• Critical thinking

Unit 4 Outline
• Presenting the final research report
• Defending research findings

Assessment
• Unit 3 School-assessed Coursework 30%
• Unit 3 Externally-assessed Critical Thinking Test 10%
• Unit 4 Externally-assessed Task: 60%
Commerce

Pathway Opportunities

**Year 10**
- Commerce (Local)
- Commerce (Global)

**Year 11**
- Accounting Units 1&2
- Business Management Units 1 & 2
- Legal Studies Units 1 & 2
- Economics Units 1&2
- Industry & Enterprise Units 1&2

**Year 12**
- Accounting Units 3 & 4
- Business Management Units 3 & 4
- Legal Studies Unit 3 & 4
- Economics Units 3 & 4
- Industry & Enterprise Units 3 & 4
Commerce - Year 10

- Local (focused on what’s happening within Australia)
- Global (focused on what is happening outside Australia)

Introduction
Year 10 commerce focuses on a number of events and issues that have helped to shape business life in Australia and around the world.

The aim of this approach is to introduce students to key concepts of commerce which underpin subjects such as economics, legal studies, accounting, business management and industry and enterprise.

Year 10 commerce will be taught in two separate stand-alone subjects and there are no prerequisites for each subject. Commerce (Local) will focus on issues confronting businesses within Australia and Commerce (Global) will focus on issues surrounding businesses globally. The structure of the courses will be relatively similar however one subject will have a local focus and the other an international focus.

Key Topic Areas
The course will cover events and issues that relate to areas such as:

**Local**
- Nature and structure of Australia’s political system
- Rights and responsibilities
- Criminal and civil law
- Population growth: impact on Australia
- The distribution of income in Australia, distribution of income in another country
- Australia and globalisation
- Industry case study within Australia for example: Australia’s car market
- Financial literacy
- Budgeting for buying your first car
- Australia’s Indigenous people
- Living on the minimum wage in Australia/living on the minimum wage in another country
- What is the poverty trap?
- Market structures - Perfect competition, pure monopolies, oligopolies and monopolistic competition
- Accounting elements and source documents
- Accounting Equation and Financial Statements
- Classification of business
- Planning and managing a small business

**Global**
- Effects of the Global Financial Crisis
- Institutions of Global Governance - UN, IMF, WTO and ICC
- Australia’s International Position - GDP, relative wealth, Balance of Payments
- The twenty first century and the growth of China, Vietnam
- What is Capitalism?
- Relationship with Capitalism and Democracy
- Role of government: why does the government have to intervene in any country?
- Advantages of trade
- Human Rights and International Law - UN’s Declaration of Human Rights
- Living conditions around the world

Assessment
- Semester examination 50%
- Written work 50% - exercises, research, assignments, topic tests, case studies.
Accounting - Units 1 & 2

Entry Requirements
Units 1 and 2 have no entry requirements. It is recommended that students satisfactorily complete at least Unit 2 Accounting before attempting Units 3 & 4.

Unit 1
Introduction
This Unit focuses on the establishment of a small business and the accounting and financial management of a service business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of accounting information by internal and external users. The cash basis of recording and reporting is used throughout this unit.

Key Topic Areas
- Going into business
- Recording financial data and reporting accounting information

Assessment
- Structured questions and quiz 20%
- Folio of exercises 30%
- End of semester examination 50%

Unit 2
Introduction
This Unit extends the accounting process from a service business and focuses on accounting for a sole proprietor of a single activity trading business. Students use a single entry recording system for cash and credit transactions and the accrual method for determining profit.

Students develop their understanding of the importance of ICT in the accounting process by using a commercial accounting software package (QuickBooks) to establish a set of accounts, record financial transactions and generate accounting reports.

Key Topic Areas
- Recording financial data and reporting accounting information.
- ICT in accounting
- Evaluation of business performance

Assessment
- Folio of exercises 20%
- Use of QuickBooks 15%
- Case Study 15%
- End of semester examination 50%
Business Management - Units 1 & 2

Entry Requirements
There are no entry requirements for Units 1, 2 & 3. Students must undertake Unit 3 prior to undertaking Unit 4. However, any Year 10 student wishing to select this subject in Year 11 (Unit 1) should have demonstrated a consistently high level of academic achievement throughout Year 9.

Unit 1
Introduction
Students learn about features and characteristics of small businesses obtaining a number of key management terms. Business environments are examined and students are able to identify reasons why some businesses succeed while others do not. Students prepare a Business Plan demonstrating entrepreneurial skill.

Key Topic Areas
- Business characteristics and environments
- Business Planning
- Day to Day Operations

Assessment
- Business Plan 10%
- Presentation 12%
- Tests 28%
- End of semester examination 50%

Unit 2
Introduction
This unit focuses on communication in a business setting. In Marketing, students learn about marketing techniques businesses use on consumers. For example, why was the Share a Coke campaign so successful? Public Relations teaches students about the importance of a business’s image and how certain events can be ‘spun’ by companies. PR stunts such as the Red Bull Stratos Jump are examined.

Key Topic Areas
- Effective communication
- Marketing
- Public Relations

Assessment
- Tests/ Case Studies 50%
- End of semester examination 50%
Economics - Units 1 & 2

Entry Requirements
For Unit 1 it is recommended that a student has completed either Year 10 Commerce Local or Global with a grade of C or better.

Unit 1 Outline
Economics is the study of how individuals and societies use resources to satisfy needs. It is central to understanding why individuals and societies behave as they do.

Students acquire an understanding of the basic concepts of economics, laying a foundation for future success. An examination of the 5 Government Goals is begun with analysis of Economic Growth and Inflation.

Key Topic Areas
- Basic concepts including relative scarcity, opportunity cost and market mechanism
- Supply and Demand
- Economic Growth
- Inflation

Assessment
- Tests/ Case Studies 50%
- End of semester examination 50%

Unit 2
Introduction
This unit looks at the effects of economic policies on people’s living standards. Unemployment and External Stability continue from Government Goals. Globalisation is also studied to determine whether it is a source of good for developing economies or merely exploitation.

Key Topic Areas
- Unemployment
- External Stability
- Globalisation

Assessment
- Tests/ Case Studies 50%
- End of semester examination 50%
Legal Studies - Units 1 & 2

Unit 1
Introduction
The course begins with a study of law in society, focusing on the need for effective rules and laws. Students investigate the process that each of the three levels of government undertake in making and changing the law, before applying their knowledge to an area of legal change that interests them. They witness law-making in action with a visit to the Victorian Parliament.

The focus then shifts to the Criminal Law, where students examine the impact of criminal activity upon individuals and society. Building a folio of real criminal cases, students apply their theoretical understanding of different crimes and their related defences, as well as appropriate criminal sanctions and their respective aims.

Key Topic Areas
- Law in Society
- Criminal Law
- The Criminal Courtroom

Assessment
- Area of Study 1 - Short Answer Test 15%
- Area of Study 2 - Law Report of Criminal Cases followed by Short Answer Test 20%
- Area of Study 3 - Create Mock Trial Video followed by Short Answer Test 15%
- Unit 1 Examination - 90 Minute Examination 50%

Unit 2
Introduction
The Civil Law makes up the first areas of study, with investigation of the principles of civil law, law-making by courts, and elements of torts. Students gain greater appreciation of theories learnt by applying their understanding to relevant cases and putting themselves into the shoes of different parties to a dispute. Students then apply their own perspectives of human and civil rights to an Australian case to illustrate the impact that the fight for rights can have on the legal system and the rights of groups as well as individuals.

The unit concludes with students’ own selection of two different areas of law, providing an opportunity to specialise in an area of law that interests them.

Key Topic Areas
- Civil Law
- The Civil Law in Action
- A question of rights
- The Law in Focus

Assessment
- Area of Study 1 - Written Test 10%
- Area of Study 2 - Create Civil Law Scenario Videos followed by Short Answer Test 10%
- Area of Study 4 - Extended Written Response 10%
- Area of Study 3 - Master Class Presentations followed by Extended Written Responses 20%
- Unit 2 Examination - 90 Minute Examination 50%
Industry and Enterprise - Units 1 & 2

Unit 1
Introduction
Industry & Enterprise Unit 1, prepares students for effective workplace participation. After completing the relevant occupational health and safety (OH&S) induction program, students demonstrate the practical application of their work-related skills by completing at least 35 hours of structured workplace learning. Students find real-life relevance via exploration of work-related skills and methods of pursuing their own individual career goals and pathways. They observe industry and employment trends and analyse current and future work options.

Key Topic Areas
- Building a Career Pathway
- Developing Work Related Skills
- Workplace Effectiveness

Assessment
- Area of Study 1 - Short Answer Test & OH&S Industry Modules 15%
- Area of Study 2 - Short Answer Test 15%
- Area of Study 3 - Workplace Report 20%
- Unit 1 Examination - 90 Minute Examination 50%

Unit 2
Introduction
Industry & Enterprise Unit 2, prepares students for effective workplace participation. After completing the relevant occupational health and safety (OH&S) induction program, students demonstrate the practical application of their work-related skills by completing at least 35 hours of structured workplace learning.

Students think about themselves as leaders by identifying the behaviours in leaders of industry as well as other enterprising individuals who inspire them, or that they have come in contact with, and explore the extent to which innovation in industry plays a part in its development.

An industry report then becomes the students’ focus, as they analyse the impact of one or more significant issue/s on an Australian industry and discuss how the industry has responded to the issue/s in an enterprising way.

Key Topic Areas
- Enterprising individuals and leadership
- Enterprise and innovation in industry
- Industry issues

Assessment
- Area of Study 1 - Leaders Presentation 15%
- Area of Study 2 - Short Answer Test 15%
- Area of Study 3 - Industry Report 20%
- Unit 2 Examination - 90 Minute Examination 50%
Accounting - Units 3 & 4

Entry Requirements
For Units 3 and 4 it is recommended that students satisfactorily complete at least Unit 2 Accounting.

Units 3 & 4
Introduction
Unit 3 focuses on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting. The perpetual method of stock recording with the First In, First Out (FIFO) method is also used.

Unit 4 provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process. The unit is based on the double entry accounting system and the accrual method of reporting for a single activity trading business using the perpetual inventory recording system.

Key Topic Areas
- Recording financial data
- Balance day adjustments and interpreting accounting information
- Extension of recording and reporting
- Financial planning and decision making

Assessment
- Unit 3 School-assessed Coursework: 25%
- Unit 4 School-assessed Coursework: 25%
- End of year examination 50%
Business Management - Units 3 & 4

Unit 3 & 4
Introduction
In Unit 3 students investigate how large-scale organisations operate. Students examine the context in which they conduct their business, focus on aspects of their internal environment and then look at the operations management function. Students develop an understanding of the complexity and challenge of managing large organisations and have the opportunity to compare theoretical perspectives with practical applications.

Unit 4 continues the examination of corporate management. It commences with a focus on the human resource management function. Students learn about the key aspects of this function and strategies used to most effectively manage human resources. The unit concludes with analysis of the management of change. Students learn about key change management processes and strategies and are provided with the opportunity to apply these to a contemporary issue of significance.

Key Topic Areas
- Large-scale organisations in context
- Internal environment of large-scale organisations
- The operations management function
- The human resource management function
- The management of change

Assessment
- Unit 3 School-assessed Coursework: 25 %
- Unit 4 School-assessed Coursework: 25 %
- End-of-year examination: 50 %
Economics - Units 3 & 4

Entry Requirements
Unit 3 & 4 Economics can be taken having not completed Units 1 & 2. However, a strong level of achievement in Units 1 & 2 of Economics or another Commerce based subject is highly recommended.

Unit 3 & 4
Introduction
The students’ understanding of basic economic concepts is broadened and deepened. Knowledge, measurement and relevance of the Government Goals is examined. Macroeconomics, through Aggregate Demand and Aggregate Supply is explored to determine the effects of differing factors on the marketplace.

The role of the Government through Aggregate Demand and Aggregate Supply Policies is assessed through the impact of policies on the Government Goals.

Key Topic Areas
- Review basic concepts
- Aggregate Demand and Aggregate Supply
- 5 Government Goals - Strong and Sustainable Economic Growth, External Stability, Low Inflation, Full Employment, Equitable Distribution of Income
- Aggregate Demand Policies - Budgetary Policy and Monetary Policies
- Aggregate Supply Policies

Assessment
- Unit 3 School-assessed Coursework 25 %
- Unit 4 School-assessed Coursework 25 %
- End-of-year examination: 50 %
Legal Studies - Units 3 & 4

Entry Requirements
For Unit 3 & 4 it is recommended that a student has achieved a C grade or better in Unit 2 Legal Studies. Units 1 & 2 Legal Studies are not prerequisites for Units 3 & 4, however, they are strongly recommended.

Unit 3 & 4
Introduction
Building upon students’ earlier understanding of the Parliament as law-maker, greater analysis is undertaken of its effectiveness as a law-making body. With a critical eye, students examine why legal change is needed, and the means by which such change can be influenced.

From a local perspective, students research global responses to the protection of human rights, to compare and contrast Australia’s approach to those of other nations. This links in with investigation of the Commonwealth Constitution in defining Australia’s federal structure.

As Unit 3 concludes with the role that courts play in developing the law, students investigate the doctrine of precedent and statutory interpretation. They evaluate the effectiveness of courts as a law-making body. Using relevant cases, students explore the relationships between courts and parliament in law-making.

Finally, all topics are drawn together, as students evaluate the overall effectiveness of the legal system.

Key Topic Areas
- Parliament and the citizen
- The Constitution and the protection of rights
- Role of the courts in law-making
- Dispute resolution methods
- Court processes and procedures, and engaging in justice

Assessment
- Unit 3 School-assessed Coursework 25 %
- Unit 4 School-assessed Coursework 25 %
- End-of-year examination 50 %
Industry & Enterprise - Units 3 & 4

Unit 3 & 4

Introduction

Unit 3 of Industry & Enterprise prepares students for effective workplace participation. After completing the relevant occupational health and safety (OH&S) induction program, students demonstrate the practical application of their work-related skills by completing at least 35 hours of structured workplace learning.

The future of Australian industry relies on the ongoing development of a successful enterprise culture. Work settings within Australian industries are continually affected by ongoing forces for change and to succeed they need to respond in enterprising ways. Integral to understanding enterprise culture is the students’ exploration of the importance of work-related skills.

Students explore the role and impact of four forces for change: the management of quality, workplace flexibility, technology, and training and workplace learning, in developing an enterprise culture within an industry.

Australian industry is faced with ongoing pressures and opportunities for change: the role of government; international competitiveness; changing societal values and attitudes; and environmental sustainability. Students investigate the enterprising responses by industry to these pressures and opportunities and how these are transforming the Australian workplace.

Finally, students investigate innovation and evaluate its importance for a selected Australian industry. They consider the role of government in supporting innovation within industry, and examine the relationships between technology, training and innovation in developing an enterprise culture.

Key Topic Areas

- Enterprise culture
- Creating an enterprise culture
- Pressures and opportunities for change
- Innovation

Assessment

- Unit 3 School-assessed Coursework 25 %
- Unit 4 School-assessed Coursework 25 %
- End-of-year examination 50 %
Health & Physical Education

Year 10
- Sport Science
- Personal Skills for Life
- Physical Health & Wellbeing (Core Subject)

Year 11
- Physical Education Units 1 & 2
- Health & Human Development Units 1 & 2
- Outdoor & Environmental Studies Unit 1 & 2

Year 12
- Physical Education Units 3 & 4
- Health & Human Development Units 3 & 4
- Outdoor & Environmental Studies Unit 3 & 4

Health & Physical Education is available to all Year 10 students with no prerequisites. The Year 10 electives include Sport Science and Personal Skills for Life, which provide a platform to increase overall knowledge and understanding within the 3 VCE HPE subjects. Year 10 students wishing to accelerate VCE subjects within HPE are highly recommended to choose Outdoor & Environmental Studies, as there is a large practical component to this subject. It is not recommended to accelerate Physical Education.

Physical Health & Wellbeing is a core Year 10 subject that all students must complete. This subject will have links to both Physical Education and Health & Human Development at VCE level.

Sport Science - Year 10

Introduction
Sport Science is a theoretical and practical course of study promoting the understanding of body systems including the structure and function and their role in exercise. The importance of building and maintaining healthy fitness levels will also be analysed, including investigating the components of fitness, training methods and various principles of training, through personalised training programs and analysing sport performance. Sport Science will involve many practical laboratory based activities that directly links curriculum content into a practical setting. Students will need to apply a vast array of physiological parameters to the practical classroom, including energy system interplay, heart rate & breathing rate responses, fatigue mechanisms and recovery strategies. It is highly recommended that students wishing to complete VCE Physical Education should study Sport Science as a prerequisite.

Learning Focus
- Systems of the Body - Cardiovascular/Respiratory/Skeletal & Muscular systems
- Building and Maintaining Health & Fitness
- Energy Systems
- Fitness Components
- Recovery & Fatigue
- Biomechanics
- Practical laboratory sessions

Assessment
- Topic tests
- Laboratory reports
- Fitness training assignment
- Examination
- Practical participation
Personal Skills for Life - Year 10

Introduction
Personal Skills for Life is a theoretical and practical course of study covering areas related to personal identity and risk taking, driver education, safety and first aid principles. A large element of the course is devoted to relevant adolescent issues that directly impact on the student’s growth and development within the community. Risk taking practices are interlinked with personal identity and the responsibilities associated with attaining a driver’s licence. Coping mechanisms and resilience are also interrelated with the ability to apply and administer first aid.

Learning Focus
Personal Identity
- Life Influences
- Peer relationships
- Support Groups
- Coping strategies & resilience
Sports Injuries and First Aid
- Students participate in basic first aid course
- All learning is applied to various scenarios and role plays set up in practical classes
- Attain knowledge of acute injuries and basic resuscitation
Risk Taking
- Harm Minimisation
- Youth Risk Factors
Driver Education
- The course is designed to allow students an opportunity to develop positive road use principles
- Students will be encouraged to develop practical on road driving skills
- Students will develop an understanding of safe road use and negative behavioural influences
- Practical Course with qualified driving instructors - METEC

Assessment
- Major Assignment
- Coursework
- Examination
- Practical participation
Health & Human Development - Units 1 & 2

Unit 1
Introduction
This unit focuses on the health and individual human development of Australia’s youth. There are many factors that influence health and development of youth, including the importance of nutrition. Students identify a major health issue that has an impact on the health of Australia’s youth.

Learning Focus
Unit 1 - The Health and Development of Australia’s Youth
- The dimensions and interrelationships of health and individual human development
- Strategies and programs that impact on Australia’s youth

Assessment
- Topic tests
- Examination

Unit 2
Introduction
This unit focuses on the health and development for the lifespan stages of prenatal, childhood, and adulthood. The prenatal stage is characterised as the most rapid time of growth and the embryo/foetus is shaped by a range of determinants, which in turn can have an impact on future health. The lifespan stage of adulthood represents a period of great diversity and students investigate a range of determinants and health issues that influence this stage.

Learning Focus
Unit 2 - Individual Human Development and Health Issues
- Childhood health and wellbeing
- Factors effecting adult health and development
- Australia’s health system

Assessment
- Topic tests
- Examination
Outdoor and Environmental Studies - Units 1 & 2

Unit 1
Introduction
This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to and experiences of outdoor environments. Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments.

Learning Focus
Unit 1 - Exploring outdoor experiences
• Types of outdoor environments
• Motivations and personal responses
• The influence of media portrayals
• Risk and strategies for planning for safe and sustainable interactions
• The factors that affect
• Technology and their effects on outdoor experiences

Assessment
• Test
• Multimedia Presentation
• Examination

Unit 2
Introduction
This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impacts on outdoor environments. Students study nature’s impact on humans, as well as the ecological, social and economic implications of human impact on outdoor environments. They develop the practical skills required to minimise human impact on outdoor environments.

Learning Focus
Unit 2 - Understanding sports coaching and physically active lifestyles
• Characteristics of outdoor environments
• Scientific understandings of specific outdoor
• Indigenous, and historical understandings
• Impact of conservation, commercial and recreational activities
• Codes of conduct
• Urbanisation and changing human lifestyles

Assessment
• Test
• Practical report
• A journal/report of outdoor experiences
• Examination
Physical Education - Unit 1 & 2

Pathway Requirements
There are no prerequisites for entry to Units 1 and 2. It is recommended that students undertake Sport Science in Year 10 prior to Unit 1 Physical Education.

Unit 1
Introduction
Physical Education examines how our body works and all the systems involved in movement patterns and function. Students will engage in a range of physical activities that will assist physiological and biological understanding of body responses to exercise and link these understandings to all aspects of Human Anatomy. Students will also investigate the legal and illegal practices to improve performances of the body systems.

Learning Focus
Unit 1 - The Human Body in Motion
- Systems of the Body - Cardiovascular, Respiratory, Musculoskeletal
- Energy Systems and Fatigue
- Harms and benefits of Ergogenic Aids
- The impact of physical activity of cardiovascular health

Assessment
- Written report
- Case Study
- Data analysis
- Examination

Unit 2
Introduction
Students will gain an understanding of the level of physical activity required for health benefits through investigating the physical activity and sedentary behaviour guidelines. Students make informed decisions about physical activity promotion by examining a variety of physical activity programs and models across multiple settings.

Learning Focus
Unit 2 - Physical activity, sport and society
- Barriers to Physical activity participation
- Physical activity promotion strategies, initiative and models
- Benefits of physical activity
- Factors influencing physical activity

Assessment
- Presentations
- Written report
- Written Plan and reflective folio
- Examination
Health & Human Development - Unit 3 & 4

Unit 3
Introduction
Students investigate a variety of ways to measure the health status of Australians and investigate differences in population groups that exist within our community. Students investigate The National Health Priority Areas initiative; a national approach that aims to improve health in Australia. Funding for the Australian health system involves a combination of both government and nongovernment sources.

Learning Focus
Unit 3 - Australia’s Health
- Australia’s health status as compared to other developed countries
- Health & Health promotion across different organisations in Australia

Assessment
- Topic tests

Unit 4
Introduction
This unit takes a global perspective on achieving sustainable improvements in health and human development. A significant focus is on the Millennium Development Goals in reducing the inequalities that result in human poverty. Students investigate The Department of Foreign Affairs and Trade (DFAT) and how it manages the Australian Government’s overseas aid program.

Learning Focus
Unit 4 - Global Health & Human Development
- Interrelationships between health, human development and sustainability
- Investigation of various programs developed by Australian organisations

Assessment
- Topic tests
- Examination
Outdoor & Environmental Studies - Unit 3 & 4

Unit 3
Introduction
This unit explores how Australians have understood and interacted with outdoor environments. Students study the role of at least one environmental movement in changing relationships with outdoor environments. They will engage in practical experiences with outdoor environments through a variety of recreation pursuits.

Learning Focus
Unit 3 - Relationships with outdoor environments
- Unique Australian environment
- Historical relationships with the natural environment
- Contemporary relationships with the natural environment
- Factors influencing contemporary relationships

Assessment
- Topic tests

Unit 4
Introduction
Students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia. Students investigate the importance of developing a balance between human needs and the conservation and look at current agreements and environmental legislation, as well as management strategies and policies for achieving and maintaining healthy outdoor environments.

Learning Focus
Unit 4 - Sustainable Outdoor Relationships
- Healthy natural environments
- Current impacts and potential threats to our natural environment
- The role of sustainability and preservation of natural ecosystems
- Management strategies and legislation relating to natural Australian environments

Assessment
- Topic tests
- Examination
Physical Education - Units 3 & 4

Unit 3
Introduction
This unit introduces students to the relevance of the National Physical Activity & Sedentary Guidelines. Outlining the impact of non-adherence to these guidelines across all age groups and genders. In addition, human physiology is examined with links between physical activity and energy system interplay, fatigue, recovery and acute cardiovascular, respiratory and muscular responses to exercise all being investigated.

Learning Focus
Unit 3
• National Physical Activity & Sedentary Guidelines
• Socio-ecological Model of Physical Activity
• Energy System Interplay
• Fatigue & Recovery
• Acute Responses to Exercise

Assessment
• Test
• Data analysis

Unit 4
Introduction
Students will focus on developing a six week training program considering all training methods and principles of training relevant to their chosen fitness components. The participation in this program will link to chronic adaptations, appropriate recovery methods and ways to enhance physiological performance and development.

Learning Focus
Unit 4
• Fitness components and fitness testing
• Training methods and principles of training
• Chronic Adaptations to exercise
• Performance enhancement
• Psychology of Sport

Assessment
• Laboratory Report
• Case Study Analysis
• Examination
Information Technology

Pathway Opportunities

Introduction
The Year 10 semester long electives deal with Key Topic Areas which cover specific content which is designed to enable students to achieve a set of outcomes. Assessments determine the knowledge and skill level of students in relation to these outcomes.

Units 3 & 4 subjects are quite different in content. Careful consideration needs to be given to which subject is more appropriate for a particular student. Advice should be sought from the ICT teaching staff, especially the Head of Faculty.
Computer Applications - Year 10

Introduction
In this semester long course, students learn the basics of software and hardware computer management. This is done through hands-on project-based tasks. Students learn how to look after computer software and hardware issues, as well as, the configuration of computer hardware and software required to build, maintain and upgrade a computer. The students also use a range of Web 2.0 and Cloud Computing technologies to make websites and multimedia presentations.

Learning Focus
- Creating a Website
- Using Web 2.0 Technologies
- Students use Web 2.0 technologies to create a website and multimedia products that is accessible on the internet.
- Managing Computer Software and Hardware
  Students learn to manage essential computer systems and utilities required to maintain software on a personal computer. They also manage the major hardware components of a computer, understand their role and how they work together with an operating system to create a functional personal computer.

Assessments
- Creating a Website - 25%
- Using Web 2.0 Technologies - 15%
- Students use Web 2.0 technologies to create a website and multimedia products.
- Managing Computer Software and Hardware - 40%
  Students complete software and hardware tasks to demonstrate their knowledge of how to maintain and manage computer software and hardware.
- End of Semester Examination - 20%
Networking and Security - Year 10

Pathway Requirements
There are no entry requirements for Computer Networking and Security.

Introduction
This semester long course provides the opportunity for students to develop a better understanding of networking concepts such as IP addressing, routing and network security. This is done through hands-on project-based tasks. In the cyber age it has become essential for people and organisations to understand how networks operate and how to protect themselves online. This elective is good for students who are interested knowing how to build and maintain networks, and deal with security issues.

Learning Focus
- Designing an Enterprise Network Using Software
  Students learn how to manage internet protocols that allow computers to communicate on a local area network and the internet.
- Configure Network Hardware
- Students learn how to configure network hardware such as: routers, switches, cables and PCs to build a fully functioning network.
- Network Security
  Students learn about network security and how to manage network security software.

Assessments
- Designing an Enterprise Network Using Software - 25%
  Using specialised software students make and configure a Local Area and Wide Area networks.
- Configure Network Hardware - 25%
- Students configure network hardware such as: routers, switches, cables and PCs students and build a fully functioning network using real network equipment.
- Network Security - 25%
  Students write a report on a network security issue and recommend solutions to manage network security problems.
- End of Semester Examination - 25%
Computing - Units 1 & 2

Pathway Requirements
For Year 11 students there is no entry requirement for this subject. Year 10 students wishing to undertake Units 1 & 2 Computing, should have demonstrated some skills using Information and Communication Technologies during their courses in Year 9 and individual projects created by the student. It is possible to select Unit 2 Computing without having completed Unit 1.

Unit 1
Introduction
In this unit, students focus on how data, information and networked digital systems can be used to meet a range of users’ current and future needs.

Learning Focus
- **Area of Study 1 - Data and graphic solutions**
  In Area of Study 1 students collect data to investigate an issue and create a digital solution that graphically presents the findings of the investigation. For example, investigating the social networking habits of people of different age groups.
- **Area of Study 2 - Networks**
  In Area of Study 2 students examine the technical underpinnings of wireless and mobile networks, and security to protect stored and transmitted data, to design a network solution that meets a need.
- **Outcome 3 - Collaboration and communication**
  In Area of Study 3 students acquire and apply their knowledge of information architecture and user interfaces to create a website to present different viewpoints on a contemporary issue.

Assessments
- **Outcome 1 - Data and graphic solutions - 25%**
  On completion of this unit the student should be able to acquire, secure and interpret data, and design and develop a graphic solution that communicates the findings of an investigation using a software tool to create a graphic solution.
- **Outcome 2 - Networks - 25%**
  On completion of this unit the student should be able to design a network with wireless capability using a graphic tool to represent a network solution.
- **Outcome 3 - Collaboration and communication - 25%**
  On completion of this unit the student should be able to design and develop a website using web authoring software collaboratively with others that presents an analysis of a contemporary issue.
- **End of Semester Examination - 25%**

Unit 2
Introduction
In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data.

Learning Focus
- **Area of Study 1 - Programming**
  In Area of Study 1 students develop their computational thinking skills using a programming language to create solutions.
- **Area of Study 2 - Data analysis and visualisation**
  In Area of Study 2 students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create data visualisations.
- **Area of Study 3 - Data management - In Area of Study 3 students create a solution using database management software and explain how they are personally affected by their interactions with a database system.**
Assessments

- **Outcome 1 - Programming - 25%**
  On completion of this unit the student should be able to design working software in response to solution requirements.

- **Outcome 2 - Data analysis and visualisation - 25%**
  On completion of this unit the student should be able to use appropriate software tools to extract relevant data and create a data visualisation that meets a specified user’s needs. They should use one data manipulation tool and one visualisation tool such as database and spreadsheet software, and data visualisation software.

- **Outcome 3 - Data management - 25%**
  On completion of this unit the student should be able to create a solution using database management software, and explain the personal benefits and risks of interacting with a database.

- **End of Semester Examination - 25%**
Informatics - Unit 3 & 4

Pathway Requirements
It is possible to select Units 3 Informatics without having completed Units 1 & 2. However, any student in this category must seek advice from the Head of Faculty. Students must undertake Unit 3 prior to undertaking Unit 4.

Unit 3 & 4 Introduction
In Unit 3 students consider data and how it is acquired, managed, manipulated and interpreted to meet a range of needs. In Unit 4 students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs.

Learning Focus
- Unit 3 Area of Study 1 - Organisations and data management
  In Area of Study 1 students investigate the way organisations acquire data using interactive online solutions, such as websites and applications (apps), and consider how users interact with these solutions. They use relational database management systems (RDBMS) to store and manipulate data.
- Unit 3 Area of Study 2 - Data analytics: drawing conclusions
  In Area of Study 2 students complete the first part of a project. In this area of study students focus on data analytics. They acquire data and manipulate it using tools such as spreadsheets or databases to help analyse and interpret it. Students complete this as the first part of a project; the other part is undertaken in Unit 4, Outcome 1.
- Unit 4 Area of Study 1 - Data analytics: presenting the findings
  In Area of Study 1 students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate an online solution that effectively communicates the conclusion and findings.
- Unit 4 Area of Study 2 - Information Management
  In Area of Study 2, students explore how different organisations manage the storage and disposal of data and information to minimise threats to the integrity and security of data and information and to optimise the handling of information.

Assessment
- Unit 3 Outcome 1 - Organisations and data management - 10%
  On completion of this unit the student should be able to design a solution, develop it using a relational database management system and a drawing or graphics software, to diagrammatically represent how users interact with an online solution when supplying data for a transaction.
- Unit 3 Outcome 2 - Data analytics: drawing conclusions - 15%
  On completion of this unit the student should be able to use a range of appropriate techniques and processes to acquire, manipulate and interpret complex data to confirm or refute a hypothesis, and formulate a project plan to manage progress.
- Unit 4 Outcome 1 - Data analytics: presenting the findings - 15%
  On completion of this unit the student should be able to design, develop and evaluate a multimodal online solution that confirms or refutes a hypothesis, and assess the effectiveness of the project plan in managing progress. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.
- Unit 4 Outcome 2 - Information Management - 10%
  On completion of this unit the student should be able to compare and contrast the effectiveness of information management strategies used by two organisations to manage the storage and disposal of data and information, and recommend improvements to their current practices. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.
- The end of year examination - 50%
Software Development Units 3 & 4

Pathway Requirements
It is possible to select Units 3 & 4; however, any student in this category must seek advice from the Head of Faculty. Students must undertake Unit 3 prior to undertaking Unit 4.

Unit 3 & 4
Introduction
In Unit 3 students use a programming language to create working software. In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions used in a networked environment. They continue to study the programming language used in Unit 3.

Learning Focus
- Unit 3 Area of Study 1 - Programming practice
  In Area of Study 1 students respond to given software designs and develop some working software modules.
- Unit 3 Area of Study 2 - Analysis and design
  In Area of Study 2 students analyse a need or opportunity, plan and design a solution and develop computational, design and systems thinking skills. This forms the first part of a project that is completed in Unit 4.
- Unit 4 Area of Study 1 - Software solutions
  In Area of Study 1 students further their computational thinking skills by transforming their detailed design prepared in Unit 3 into a software solution.
- Unit 4 Area of Study 2 - Interactions and impact
  In Area of Study 2 students apply systems thinking skills when explaining the relationship between two information systems that share data and how that dependency affects the performance of the systems.

Assessments
- Unit 3 Outcome 1 - Programming practice - 10%
  On completion of this unit the student should be able to interpret designs and apply a range of functions and techniques using a programming language to develop working software modules.
- Unit 3 Outcome 2 - Analysis and design - 15%
  On completion of this unit the student should be able to analyse and document a need or opportunity, generate alternative design ideas, represent the preferred solution design and formulate a project plan for creating the solution.
- Unit 4 Outcome 1 - Software solutions - 15%
  On completion of this unit the student should be able to create a solution using a programming language that fulfils identified requirements and assess the effectiveness of the project plan in monitoring progress.
- Unit 4 Outcome 2 - Interactions and impact - 10%
  On completion of this unit the student should be able to analyse and explain the dependencies between two information systems and evaluate the controls in place to protect data.
- The end of year examination - 50%
Languages

French - Year 10

Pathway Requirements
Must have studied Year 9 French

Introduction
Year 10 French is a full year course. At the completion of Year 10, students will have well developed listening, speaking, reading and writing skills in French through a variety of topics.

Learning Focus
Linguistic and cultural elements are taught and learned within the following topic areas:
- Buying food products, using prices and quantities
- Talking about past events
- Talking about one’s health and injuries
- Talking about problems and expressing feelings and emotions
- Constructing a narrative using a range of tenses
- Expressing desires and ambitions for the future
- Talking about jobs / professions
- Expressing probability and certainty

Assessment
Assessment will be continuous throughout the course and will consist of the following:
- Unit tests and quizzes
- Written, oral and aural examination
French Units 1 & 2

Pathway Requirements
Must have studied Year 10 French

Unit 1
Introduction
Units 1&2 French are designed to enable students to use French to communicate with others; understand and appreciate the cultural context in which French is used; understand their own culture/s through the study of other cultures; understand language as a system; make connections between French and English and/or other languages; apply French to work, further study, training or leisure.

Learning Focus
The study of French is comprised of themes and topics.
- The individual (personal world, education and aspiration, personal opinions and values)
- The French-speaking communities (lifestyles, historical perspectives, arts and entertainment)
- The changing world (social issues, the world of work, scientific and technological issues)

Assessment
Students are required to demonstrate achievement of three outcomes and four assessment tasks:
- Informal conversation; or reply to personal letter/email/fax
- Listen to spoken texts (eg. conversation, interview, broadcast) to obtain information to complete notes, charts or tables in French and English; and
- Read written texts (eg. extracts, advertisements, letters) to obtain information to complete notes, charts or tables in French and English
- Oral presentation or review or article

Unit 2
Introduction
Units 1 & 2 French are designed to enable students to use French to communicate with others; understand and appreciate the cultural context in which French is used; understand their own culture/s through the study of other cultures; understand language as a system; make connections between French and English and/or other languages; apply French to work, further study, training or leisure.

Learning Focus
The study of French is comprised of themes and topics.
- The individual (personal world, education and aspiration, personal opinions and values)
- The French-speaking communities (lifestyles, historical perspectives, arts and entertainment)
- The changing world (social issues, the world of work, scientific and technological issues)

Assessment
Students are required to demonstrate achievement of four assessment tasks:
- Formal letter/fax/email or role play or interview
- Listen to spoken texts (eg. conversation, interview, broadcast) and re-organise information and ideas in a different text type; and
- Read written texts (eg. extracts, advertisements, letters) and re-organise information and ideas in a different text type
- Journal entry or personal account or short story
French - Units 3 & 4

Pathway Requirements
Must have studied Units 1 & 2 French

Unit 3 & 4
Introduction
Units 3 and 4 French are designed to enable students to use French to communicate with others; understand and appreciate the cultural context in which French is used; understand their own culture/s through the study of other cultures; understand language as a system; make connections between French and English and/or other languages; apply French to work, further study, training or leisure.

Learning Focus
The study of French is comprised of themes and topics. These are common to all units of study in VCE French and they are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit.

- The individual (personal world, education and aspiration, personal opinions and values)
- The French-speaking communities (lifestyles, historical perspectives, arts and entertainment)
- The changing world (social issues, the world of work, scientific and technological issues)

Unit 3 Assessment
School-assessed coursework for Unit 3 will contribute 25% to the final assessment. Students are required to demonstrate achievement of three assessment tasks:
- A 250 word personal or imaginative written piece
- A response to specific questions, messages or instructions, extracting and using information requested
- A 3-4 minute role-play, focusing on the resolution of an issue

Unit 4 Assessment
School-assessed coursework for Unit 4 will contribute 25% to the final assessment. Students are required to demonstrate achievement of three assessment tasks:
- A response to specific questions, messages or instructions, extracting and using information requested
- A 250-300 word informative, persuasive or evaluative written response (e.g. report, comparison or review) and
- A 3-4 minute interview on an issue related to texts studied.
- End-of-year Examinations The level of achievement for Units 3&4 will also be assessed by two end-of-year examinations which will contribute 50% to the final assessment. They will consist of:
  - An oral examination of 15 minutes in total with general conversation about student's personal world for 7 minutes and discussion for 8 minutes
  - A written examination of 2 hours duration including listening and responding; reading and responding; and writing in French

Japanese

Senior School 2017 Subject Guide Berwick Campus
Japanese - Year 10

Pathway Requirements
Entry requirement for Year 10 is that students should have studied Japanese in Year 9.

Introduction
The study of another language has long been considered an essential ingredient in a properly balanced education and every student has much to gain from it. It introduces students to a wider linguistic and cultural environment and fosters a sense of international and multicultural understanding and tolerance. It also develops an awareness of the importance of effective communication.

With Australia's growing involvement in Asia with trade, diplomacy and tourism, there has been increasing emphasis on the development of communication skills in Asian languages other than English. To this end, the study of Japanese has become an important focus. Through their study of Japanese, students will broaden their horizons, develop an appreciation of other nationalities and learn about the rich culture of Japan.

Year 10 Japanese is a full year course and is a preparatory year for entrance into Year 11 VCE Japanese Unit 1. At the completion of Year 10, students will be able to use Japanese language communicatively as they expand their vocabulary and use grammatical structures through listening, speaking, reading and writing, and be ready to undertake Year 11 VCE Japanese.

Learning Focus
Linguistic and cultural elements are taught and learned within the following topic areas:

- Japanese food and ordering
- Japanese school/Exchange students
- Giving directions and getting around town
- Sports and Sporting heroes
- Part-time employment and job interviews
- Japanese Media

Assessment
Assessment will be continuous throughout the course and will consist of the following:

- Unit tests and vocabulary and script quizzes
- Written and aural examination
- Oral examination
- Cultural and language based assignments
Japanese - Units 1 & 2

Pathway Requirements
Entry requirement for Unit 1 is that students should have achieved a grade of D or better in Year 10.

Unit 1
Introduction
Units 1 & 2 Japanese are designed to enable students to use Japanese to communicate with others; understand and appreciate the cultural context in which Japanese is used; understand their own culture/s through the study of other cultures; understand language as a system; make connections between Japanese and English and/or other languages; apply Japanese to work, further study, training or leisure.

Learning Focus
Students are required to demonstrate achievement of three outcomes:
• To establish and maintain a spoken or written exchange related to personal areas of experience
• To listen to, read, and obtain information from written and spoken texts
• To produce a personal response to a text focusing on real or imaginary experience

The areas of study for Japanese are comprised of themes and topics. They are common to both units of study and they are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit.
• The individual (personal world, daily life, past and future)
• The Japanese-speaking communities (visiting Japan, life in Japan, getting to know people in Japan)
• The changing world (the world of work, changes in daily life, home and neighbourhood).

Assessment
Students are required to demonstrate achievement of three assessment tasks:
• Informal conversation; or reply to personal letter/email/fax
• Listen to spoken texts (eg. conversation, interview, broadcast), read written Japanese to obtain information to complete notes, charts or tables in Japanese and English
• Oral presentation or review or article
Japanese - Units 3 & 4

Pathway Requirements
Note: All students undertaking Unit 3 & 4 as a second language must apply in writing to VCAA each year. Applications usually close in mid-October every year. Forms are obtainable from the Head of Teaching & Learning.

Unit 3 & 4
Introduction
Units 1 & 2 Japanese are designed to enable students to use Japanese to communicate with others; understand and appreciate the cultural context in which Japanese is used; understand their own culture/s through the study of other cultures; understand language as a system; make connections between Japanese and English and/or other languages; apply Japanese to work, further study, training or leisure.

Learning Focus
The areas of study for Japanese are comprised of themes and topics. They are common to both units of study and they are designed to be drawn upon in an integrated way, as appropriate to the linguistic needs of the student, and the outcomes for the unit.

- The individual (personal world, daily life, past and future)
- The Japanese-speaking communities (visiting Japan, life in Japan, getting to know people in Japan)
- The changing world (the world of work, changes in daily life, home and neighbourhood)

Unit 3
For this unit, students are required to demonstrate achievement of three outcomes:

- To express ideas through the production of original texts
- To analyse and use information from spoken texts
- To exchange information, opinions and experiences

Unit 4
For this unit, students are required to demonstrate achievement of two outcomes:

- To analyse and use information from written texts
- To respond critically to spoken and written texts which reflect aspects of the language and culture of Japanese-speaking communities

Assessment
Unit 3
School assessed coursework for Unit 3 will contribute 25% to the final assessment. For this unit, students are required to demonstrate achievement of three assessment tasks:

- A 500 character personal or imaginative written piece
- A response to specific questions, messages or instructions, extracting and using information requested
- A 3-4 minute role play, focussing on the resolution of an issue.

Unit 4
School assessed coursework for Unit 4 will contribute 25% to the final assessment. For this unit, students are required to demonstrate achievement of three assessment tasks:

- A response to specific questions, messages or instructions, extracting and using information requested
- A 600 character informative, persuasive or evaluative written response (e.g. Report, comparison or review) and
- A 3-4 minute interview on an issue related to texts studied.

End of Year Examinations
The level of achievement for Units 3 & 4 will also be assessed by two end of year examinations which will contribute 50% to the final assessment. They will consist of:

- An oral examination of 15 minutes in total with general conversation about student’s personal world for 7 minutes and discussion for 8 minutes
- A written examination of 2 hours duration including listening and responding; reading and responding; and writing in Japanese (450-500 characters).
Performing Arts

Pathway Opportunities

Music

Senior Music Skills (Year 10 – Semester 1)

Music Performance (Year 10 – Semester 2)

Music Performance Units 1 & 2 (Year 10 or 11)

Music Performance Units 3 & 4 (Solo or Group specialisation) Year 11 or 12

Music Investigations Units 3 & 4 (Solo or Group specialisation) (Year 12)

Drama/Theatre Studies

Theatre Studies Unit 2 (Year 10 or 11)
Drama Unit 2 (Year 10 or 11)

Theatre Studies Units 3 & 4 (Year 11 or 12) 2018

Drama Units 3 & 4 (Year 11 or 12) 2017

Drama Units 3 & 4 (Year 12) 2019

Theatre Studies Units 3 & 4 (Year 12) 2018

Dance

Dance Units 1 & 2 (Year 10 or 11)

Dance Units 3 & 4 (Year 10 or 11)

The Performing Arts Department offers all students in Senior School a variety of challenging and exciting programs. All of these courses can commence in Year 10 provided that interested students satisfy the entrance requirements relevant to each subject. It is of utmost importance that students are currently having practical lessons in their chosen field and meet an appropriate level of performance skills.

For Drama and Theatre Studies, students are encouraged to commence Unit 1 & 2 subjects in Year 10 so they can complete both Unit 3 & 4 subjects in Year 11 and 12 as indicated above.

For Dance, students may commence Unit 1 & 2 Dance in either Year 10 or 11.

The pathway recommended for Music students is to firstly study both Year 10 Music subjects. This allows time for appropriate preparation for success in the Unit 3 and 4 sequences offered in Year 11 and/or 12.

N.B - The Performing Arts department recommend the pathways above. There are alternative options that can be discussed with the Head of Performing Arts should you seek to follow an alternative pathway.
Senior Music Skills - Year 10 (Semester 1)

Pathway Requirements
No prerequisite, however, it is recommended that students should have 1 or 2 years of prior experience of playing an instrument or voice. Students can pursue areas of interest within the discipline of music including composition and arrangement, performance or sound mixing, use of Public Address (PA) systems and recording.

Introduction
Senior Music Skills is a new subject at the school in 2017. It is designed to allow students to pursue areas of particular interest within the discipline of music such as composition and arrangement or sound mixing, use of PA systems and recording. Students will undertake structured learning activities designed to improve their skills in these areas while undertaking a common program of listening and analysis, aural and comprehension and relevant music theory. This unit is suitable for students who are intending to pursue Music at VCE level and for those who may be unsure about whether to do so.

Learning Focus
- Choice of performance skills development, composition and arrangement skills development and use of PA systems and recording
- Theory, Aural and Analysis
- Critical Listening

This course is designed to enable students to:
- Prepare a program and perform music in a solo and group setting
- Develop their aural skills and knowledge of musical theory concepts
- Develop their musical language vocabulary through listening to various styles of music
- Learn to analyse and critique music performances

Assessment
- Solo and Group Performances/successful recordings of musical performances/a portfolio of arrangement and composition exercises and completed compositions or arrangements
- Semester Examination (theory, aural comprehension, listening and analysis)
- Semester Research Task (in area of specialisation)
Music Performance - Year 10

Pathway Requirements
Students should have 1 or 2 years of prior experience of playing an instrument or voice. Students taking this course would be required to have regular instrumental lessons at the college or with a suitably qualified instrumental teacher. Completion of Senior Music Skills or a fair understanding of music theory and notation would be a considerable advantage.

Introduction
This course is aimed at providing suitable preparation for VCE.

Music Performance - Year 10 further develops previous musical knowledge and skills in preparation for VCE Music subjects. VCE Music courses are very demanding with regards to the discipline of musical performance and the theory and aural components are also advanced. This subject aims to give Year 10 students a structured pathway and relevant learning tasks to assist them with achieving the best possible results in Music Performance Unit 1 - 4.

Students’ aural, theory and written analysis skills are developed through singing, critical listening and composition. The major focus of this subject is developing the students’ instrumental technique and performance skills through group and solo performances in a variety of stylistic and historical settings.

Learning Focus
- Instrumental Performance Solo/Group
- Developing Instrumental Techniques
- Theory, Aural and Analysis
- Critical Listening and Composition
- Recording experience

This course is designed to enable students to:
- Prepare and perform in both solo and group settings.
- Develop and demonstrate technical skills on their chosen instrument
- Develop their aural skills and knowledge of musical theory concepts
- Develop their musical language vocabulary through listening to various styles of music
- Learn to analyse and critique music performances
- Experiment with compositional software and techniques

Assessment
- Semester Performances and Technique Development
- Semester Coursework including Musicianship tests
- Semester Examination
Dance - Unit 1 & 2

Pathway Requirements
It is recommended that students have three to four years dance and/or movement experience.

Unit 1
Introduction
In this unit students explore the potential of the body as an instrument of expression. They develop skills in documenting and analysing movement and develop understanding of how choreographers use these processes. Students develop and perform movement studies and dances with unified compositions created through a range of movement creation processes. They acquire the knowledge of physiology, including care and maintenance of the body.

Learning Focus
- Dance perspectives
- Choreography and performance
- Dance technique and performance
- Awareness and maintenance of the dancer’s body

Assessment
- Text analysis 10%
- Dance creation, technique and performance 50%
- Anatomy and Physiology test 10%
- End of semester examination 30%
Drama - Unit 1 & 2

Pathway Requirements
It is preferable for students to have participated in Year 9 Drama, however not essential.

Unit 1
Introduction
This Unit focuses on ‘Dramatic Storytelling’ through interpretation, collaboration, design and play-building. Students engage more deeply with stimulus materials to construct a performance, while applying both Naturalistic and Non-Naturalistic styles of theatre. Students then get to create a Mini Solo Performance based on a range of stimulus material. This enables students to engage with Unit 1 & 2 Drama which both are imperative in transitioning into Unit 3 & 4. Students get the opportunity to work in a collaborative and individual setting with an emphasis on co-operation, compromise, consultation and communication.

Learning Focus
- Ensemble/Devised Play-Building Techniques
- Non-Naturalistic Theatrical Styles
- Understanding & Application of Styles
- Professional Performance Analysis

Assessment
- Understanding of Dramatic Skills & Participation 10%
- Application of Dramatic Skills 40%
- Evaluation & Analysis of Performance Works 25%
- Semester Examination 25%

Unit 2
Introduction
This unit focuses on expanding students’ personal movement vocabulary and choreographic skills through the exploration of the elements of movement: time, space and energy and the study of form. Students apply their understanding of form and the expressive capacity of the elements of movement to the dance-making and performing processes involved in choreographing and performing their own dance works and dance works created by others.

Learning Focus
- Dance perspectives
- Choreography and performance
- Dance technique and performance

Assessment
- Text analysis 10%
- Dance creation, technique and performance 50%
- End of semester performance examination 10%
- End of semester written examination 30%
Theatre Studies - Unit 2

Introduction
Unit 2 - Modern Theatre
Students focus on theatrical styles and stagecraft through engaging with playscripts in both their written form and in performance with an emphasis on the application of stagecraft. The unit focuses on the works between 1920 to the present, however, students are exposed to a range of pre-modern theatrical movements to strengthen their understanding of Theatre History and how it has shaped contemporary forms of theatre. The unit exposes students to a range of diverse playwrights, cultural/political/social/historical contexts and confronts them with universal themes/issues that are pertinent to the human condition.

Learning Focus
- Modern Theatrical Styles (Naturalism/Non-Naturalism)
- Interpretation of Stagecraft Areas (such as costume, lighting, multi-media design and acting)
- Performance Analysis, Evaluation and Reflection.

Assessment
- Understanding of Dramatic Skills and Participation 10%
- Application of Dramatic Skills 40%
- Evaluation & Analysis of Performance Works 25%
- Semester Examination 25%
Music Performance - Units 1 & 2

Pathway Requirements
Approximately three to four years of prior instrumental music instruction is recommended, with the ability to perform at a Grade 5 or above AMEB standard (or equivalent). Approximately Grade 3 level AMEB Theory or Musicianship is also recommended. Students are expected to have regular instrumental music lessons.

Unit 1
Introduction
This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments. They also develop skills in performing previously unseen music. Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances.

Learning Focus
The study is made up of two Units. This area of study encompasses:
- Performance skill development
- Music craft & Music language for performance
- Music theory and aural comprehension
- Composition and Improvisation

Assessment
- Group and Solo Performances 40%
- Technical Performance Assessment 20%
- Theory, aural and Analysis 15%
- End of semester examination 25%

Unit 2
Introduction
In this Unit students build their performance and musicianship skills. Students study the work of other performers through listening and analysis and use specific strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practice related technical work. Students also devise and perform an original composition.

Learning Focus
- Performance skill development
- Music craft & Music language for performance
- Music theory and aural comprehension
- Composition and Improvisation

Assessment
- Group and Solo Performances 40%
- Technical Performance Assessment 20%
- Theory, Aural, Analysis and Composition 15%
- End of semester examination 25%
Dance - Units 3 & 4

Pathway Requirements
It is preferred students complete Unit 1 and 2 VCE Dance and it is recommended that students have three to four years dance and/or movement experience.

Unit 3 & 4
Introduction
For unit 3 student’s focus on choreography, rehearsal and performance of a technique solo. Students also learn a group dance work created by another choreographer. Students further develop their understanding of choreographic skills through an analysis of ways that the expressive intentions chosen by choreographers of twentieth and/or twenty-first century solo dance works selected from the prescribed list of works Units 3.

For Unit 4 students, focus on choreography, rehearsal and performance of a unified solo. Students’ understanding of choreographic skills is also developed and refined through an analysis of ways in which the choreographers’ intention can be expressed through the manipulation of different types of group structures. Students also analyse the use of the elements of spatial organisation in a group dance work by a twentieth and/or twenty-first century choreographer selected from the prescribed list of works Units 4. Influences on choices made by choreographers in both Unit 3 and 4 works are also studied.

Learning Focus
- Dance perspectives Unit 3
- Choreography, performance and dance-making analysis Unit 3 (Technique Solo)
- Dance technique, performance and analysis
- Dance perspectives Unit 4
- Choreography, performance and dance-making analysis Unit 4 (Compositional Solo)

Assessment
- Unit 3 and 4 School-assessed Coursework 25%
- End-of-year Performance Examination (Technique and Compositional Solo) 50%
- End-of-year Written Examination 25%
Theatre Studies - Units 3 & 4 (2018)

Pathway Requirements
It is recommended that a student completes Drama Unit 2 or Theatre Studies Unit 1 before undertaking Units 3 & 4 Theatre Studies.

Unit 3 & 4 Introduction
Unit 3 focuses on the interpretation and production of a play/s. It involves all aspects of production processes. Specialised areas in stagecraft are developed. Acting skills focus on specific styles used in the interpretation of the play and enable students to demonstrate knowledge of particular performance styles and theatrical conventions. Theatre history is studied in the context of a selected play/s with a focus on the playwright, traditional performance styles and conventions and the use of a range of stagecraft. Analysis of a play from a prescribed list is enhanced through the evaluation of the production.

Stagecraft includes: acting, direction, dramaturgy, stage management, set design, costume, lighting, properties, make-up, sound, Multi-media. Students should specialise in two areas of stagecraft in Unit 3.

Unit 4 focuses on a prescribed play monologue that involves individual students working in areas of text research, interpretation and performance. Each student selects a scene containing a prescribed monologue from a play and, using acting skills and other stagecraft, develops the scene. The scene interpretation involves ensemble work and duologues, as appropriate, and is accompanied by contextual analysis, which comprises the stages of development of a student’s interpretation of the scene. Acting skills focus on rehearsal of the scene with other students, culminating in the student’s performance of a monologue from that scene. Students investigate the context of the play. This research informs their work. The performance of the actors in the play selected from the prescribed play list is also analysed.

Stagecraft includes: acting, Multi-media, direction, dramaturgy, stage management, set design, costume, lighting, properties, make-up and sound.

Learning Focus
Unit 3
Production Performance and Theatre Criticism
- Using stagecraft in the production of a play/s or excerpts from play/s
- Analyse the production processes and use of stagecraft in the development of work from Outcome1
- Analyse and evaluate production values evident in a selected performance

Unit 4
Scene Interpretation, Context, Investigation and the actor
- Demonstrate an interpretation of a selected play through performance of a monologue.
- Develop an interpretation of a scene from a selected play based on an analysis of the play’s context.
- Analyse actors in performance in a selected play.

Assessment
The award of satisfactory completion for a unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for the unit. This decision will be based on the teacher’s assessment of the student’s overall performance on assessment tasks designated for the unit.

- Unit 3 school-assessed coursework: 30%
- Unit 4 school-assessed coursework: 15%
- End-of-year performance examination: 25%
- End-of-year written examination: 30%
Music Performance - Units 3 & 4

Pathway Requirements
Approximately five years of prior instrumental or vocal music instruction is recommended, with the ability to perform at a Grade 5 or above AMEB standard (or equivalent). Approximately Grade 3 level AMEB Theory or Musicianship is also recommended. It is highly recommended that a student complete Units 1 & 2 Music Performance before enrolling in Performance Units 3 & 4. Students are expected to have regular instrumental music lessons.

N.B. All students applying for this subject could be required to audition and interview with the Head of Performing Arts before entry into this course will be approved.

Unit 3 & 4
Introduction
These units prepare students to present convincing performances of group and solo works. In this unit students select a program of group and solo works representing a range of styles and diversity of character for performance. They develop instrumental techniques that enable them to interpret the works and expressively shape their performances and communicate their understanding of the music style of each work. They also develop an understanding of performance conventions they can use to enhance their performances. Students develop skills in unprepared performance, aural perception and comprehension, transcription, music theory and analysis. The focus for analysis is works and performances by Australian musicians.

Learning Focus
The study is made up of two units. This area of study encompasses:
- Performing in both solo and group contexts
- Developing optimum performance techniques
- Improvisation and sight reading
- Interpretation and development of musical language and structures
- Aural comprehension
- Music theory
- Analysis of solo and ensemble works

Assessment
- Unit 3 School-assessed Coursework: 20%
- Unit 4 School-assessed Coursework: 10%
- End-of-year Aural and Written Examination: 20%
- End-of-year Performance Examination: 50%
Music Investigation - Units 3 & 4

Pathway Requirements
Approximately five years of prior instrumental or vocal music instruction is recommended, with the ability to perform at a Grade 5 or above AMEB standard (or equivalent). Approximately Grade 3 level AMEB Theory or Musicianship is also recommended. It is recommended that a student complete Units 1 & 2 Music Performance and Music Performance Units 3 & 4 before enrolling in Music Investigation Units 3 & 4. Students are expected to have regular instrumental music lessons.

N.B. All students applying for this subject could be required to audition and interview with the Head of Performing Arts before entry into this course will be approved.

Unit 3 & 4
Introduction
Music Investigation Units 3 and 4 involves both performance research in a Focus Area selected by the student and performance of works that are representative of that Focus Area. Students' research of music characteristics and performance practices representative of the Focus Area underpins the Investigation, Composition/arrangement/improvisation and Performance areas of study. Aural and theoretical musicianship skills are developed across all areas of study.

Learning Focus
- Investigation (research)
- Performance
- Composition
- Technical Work

Assessment
- Unit 3 School-assessed Coursework: 25%
- Unit 4 School-assessed Coursework: 25%
- End-of-year Performance Examination: 50%
Drama - Units 3 & 4

Pathway Requirements
It is recommended that a student completes Drama Unit 2 or Theatre Studies Unit 1 before undertaking Units 3 & 4 Theatre Studies.

Unit 3 & 4
Introduction
The study of Drama focuses on the creation and performance of characters and stories in naturalistic and non-naturalistic ways. Students draw on a range of stimulus material and play-making techniques to develop and present devised work. Students also explore a range of performance styles and conventions, dramatic elements and stagecraft. They use performance and expressive skills to explore and develop role and character. They analyse the development of their own work and performances by other drama practitioners.

These units focus on non-naturalistic devised ensemble drama and the development and presentation of non-naturalistic devised solo performances. Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions and work collaboratively to devise, develop and present an ensemble performance. Students use and manipulate dramatic elements, conventions, performance and expressive skills, performance styles and stagecraft in non-naturalistic ways to shape and enhance the performance. Students also document and evaluate stages involved in the creation, development and presentation of the ensemble performance.

Learning Focus
- Devising and presenting non-naturalistic performances
- Responding to devised performances
- Analysing non-naturalistic performances
- Working with stimulus material

Assessment
- Development and presentation of character/s within an ensemble performance
- Analysis of the development and performance of character/s from ensemble work
- An analysis and evaluation of a play selected from the Unit 3 Playlist.
- A short written statement that identifies the non-naturalistic qualities of their response to the stimulus material and
- A one to three-minute presentation of a solo response to stimulus material
- End of year examinations
Students wishing to undertake VCE Units in any Technology subject in Year 10 should have achieved at least B+ or better grades in the Technology Courses of Year 9.

It is highly recommended that students have completed Units 1 & 2 of any of the Technology subjects before commencing Units 3 & 4, however, students may study Units 3 & 4 having achieved an A or better in Year 10, or with the recommendation of the Head of Technology Department.
Product Design and Technology - Year 10

Introduction
Without the study area of Product Design and Technology our world would not be as it is today. Every man-made object has been designed, planned and then produced, mostly to solve real problems. The aim of Product Design & Technology is to give students the experience of designing and making products used in our world and an understanding of the effects the manufacture of these products has on our society. This elective subject is designed to prepare students for entry into VCE Product Design & Technology.

Learning Focus
The Year 10 Product Design & Technology is project based. Design problems are defined and students develop suitable solutions that can be used as the basis for designing and making. Key topics are;

- Use of the design process to investigate design problems and offer solutions.
- Presentation techniques and drawing skills to enable effective communication of ideas.
- Exploring a wide range of materials (including wood, metals and plastics) and how they can be used to create effective products.
- Safe and effective use of machines, tools and processes to make products.
- Computer aided design and manufacture.

Assessment
- Design Folio 30%
- Production 50%
- Examination 20%
Systems Engineering - Year 10

Introduction
Systems Engineering is a largely hands-on subject that seeks to develop an understanding of electronics and how circuits are used in everyday life. Students follow the Systems Engineering Process to design, construct and test a personalised iPod Dock. A supplied amplifier kit forms the basis of their project. The students also complete a design folio that documents the processes used in developing and constructing their project.

Year 10 Systems Engineering leads directly to Unit 1 Systems Engineering. Some students who achieve excellent results in Technology, Mathematics and Science may seek to study VCE Systems Engineering in Year 10 and 11 without completing the Year 10 course.

Learning Focus
- Identification and function of a variety of electronic components
- Assembling and soldering components to a Printed Circuit Board
- Fault finding in a malfunctioning circuit
- Testing components
- Considering a wide range of variables in defining a design project
- Quick, freehand sketching to communicate design ideas
- Using 2D drawings to document the size and shape of product parts
- Safe and effective use of a variety of hand and power tools
- Computer aided design and manufacture

Assessment
- Design Folio 40%
- Production 40%
- Examination 20%
Food Studies - Year 10

Introduction
Food Studies is a practical based subject, it develops skills and knowledge for entry into VCE Food Studies. Students will learn how to safely and hygienically prepare key foods and learn about the characteristics of different food products. Ultimately students will gain the life skill of being able to confidently manage time and resources to create healthy meals in the contemporary Australian home.

Learning Focus
The practical skill of cookery will be linked to the following areas of knowledge:
- Hygiene and safety
- Designing solutions to real world problems
- Management of resources
- Healthy Eating

Assessment
- Practical component (continuous throughout the semester) 40%
- Practical test (Hygiene and safety) and 2 assignments 30%
- Examination 30%
Product Design & Technology (Textiles) - Year 10

Introduction
This elective subject is designed to prepare students for entry into VCE Product Design and Technology - Textiles. Design plays an important part in our daily lives. It determines the form and function of the products we use and wear. Designer-Makers use processes to develop products that fulfil human needs and wants. Students assume the role of a designer-maker and develop knowledge and skills to produce effective, creative responses to design challenges.

Learning Focus
The Year 10 Design Technology (Textiles) is project based. Design problems are defined and students develop suitable solutions that can be used as the basis for designing and making. Key topics are;

- Use of the design process to investigate design problems and offer solutions
- Presentation techniques and drawing skills to enable effective communication of ideas
- Exploring a wide range of materials and how they can be used to create effective products.
- Safe and effective use of machines, tools and processes to make products.
- An introduction to the use of computer aided design and production

Assessment
- Design Folio  40%
- Production  40%
- Examination  20%
Product Design and Technology - Units 1 & 2

Pathway Requirements
It is recommended that students have completed the Year 10 Product Design & Technology Course.

Unit 1
Introduction
Design often involves the refinement and improvement of existing products to fulfil human needs. This Unit focuses on the analysis, modification and improvement of a current product in at least three distinct ways. The work of current designers and how they work through the design process to problem solve is covered, as well as the consideration of intellectual property and its implication to designers.

Students will choose a product for modification, analyse, redesign and manufacture their own interpretation of the product. Consideration of material properties and characteristics will also be examined.

Learning Focus
- Product redesign for improvement
- Producing & evaluating a redesigned product or prototype
- Sustainability
- Product analysis
- The product design process

Assessment
- Project Folio 35%
- Project Production 35%
- Written Tasks 10%
- Examination 20%

Unit 2
Introduction
In this Unit, students work together in small groups to design and construct a three dimensional solution or range of solutions for a given problem. This Unit focuses on professional design practise where designers often work within a multi-disciplinary team. Other factors considered are the origins of products and the social and environmental constraints of the design process.

Learning Focus
- Designing within a team
- Collaboration and ICT
- Historical and/or cultural design movements or styles
- Producing & evaluating a collaboratively designed product
- The product design process & influencing factors

Assessment
- Project Folio 35%
- Project Production 35%
- Written Tasks 10%
- Examination 20%
**Systems Engineering - Units 1 & 2**

**Pathway Requirements**
It is recommended that students have completed the Year 10 Systems Engineering Course.

**Unit 1**
**Introduction**
Unit 1 Systems Engineering focuses on mechanical systems and their real world applications. Students study the purpose, function and applications of systems such as gears, pulleys, cams and levers. For their major project, students apply their knowledge of mechanical systems and use the Systems Engineering Process to design, document, build and test a small soccer-playing robot. To document the processes used in developing their projects, students also produce a design folio.

**Learning Focus**
- Understanding the purpose, function and use of a variety of mechanical systems
- Defining the requirements of a project using a design brief
- Using sketches, mock-ups and mathematical calculations to develop design ideas.
- Using Computer Aided Design (CAD) software to model and evaluate their design
- Using CAD models and the laser cutter to produce parts for their project
- Safe and effective use of hand and power tools in producing their project
- Testing, evaluating and optimising their design for best possible performance

**Assessment**
- Project Folio 40%
- Project Production 30%
- Examination 30%

**Unit 2**
**Introduction**
Unit 2 Systems Engineering focusses on electronic systems and their real world applications. Students study the purpose, function and application of a variety of electronic components and processes. For their major project, students evaluate a situation at home that would benefit from using an interactive light (E.g. A light near the toilet door that is remotely triggered and only remains on for 2 minutes). Students then apply their electronic knowledge to design, produce and test a light specifically for their defined purpose. The students also produce a design folio documenting the steps taken in developing their product.

**Learning Focus**
- Understanding the purpose, function and use of a variety of electronic components
- Defining the requirements of a project using a design brief
- Using Circuit Wizard software to develop and simulate electronic circuits
- Using CAD data to produce a custom circuit board
- Using CAD software to design, test and produce an enclosure for their electronic parts
- Safe and effective use of hand and power tools in producing their project
- Testing and evaluating their finished product.

**Assessment**
- Project Folio 40%
- Project Production 30%
- Examination 30%
**Food Studies - Units 1 & 2**

**Pathway Requirements**
It is highly recommended that students have successfully completed Food Studies (previously Food Design and Technology) in Year 10.

**Unit 1**
**Introduction**
Students focus on food from historical and cultural perspectives through investigation of the origins of food through time and across the world, they examine the general progression of food from hunter-gatherer to today’s urban living. Students look at changing Australian food patterns due to the influence of advances in food production, processing, manufacturing, technology and immigration. Students investigate cuisines that are part of Australia’s culinary identity and reflect on the concept of a modern Australian cuisine.

**Learning Focus**
- Investigate the origins of food in Australia and the changing food patterns
- Analyse Australia's culinary identity and how it has changed due to influences in society

**Assessment**
- A range of practical and theoretical based assessments 60%
- End of semester examination 40%

**Unit 2**
**Introduction**
Students investigate commercial and small-scale food production systems in contemporary Australia, they gain insight into the roles that food industries have on the Australian economy, and investigate the ability of the industry to provide safe, high-quality food in the face of rising consumer demands. Students use practical skills and evaluation measures to compare their foods to these commercial products and consider the preparation of food in the home by analysing the benefits and challenges of practical food skills in daily life.

**Learning Focus**
- Analysing the supply and preparation of food in the Australian home
- Investigating the benefits and challenges of practical food skills used in daily life
- Using evaluation techniques to compare class products to commercially prepared food products
- Investigation of food production industries in contemporary Australia

**Assessment**
- Design and develop practical food solutions in response to an opportunity or need 60%
- End of semester examination 40%
Product Design and Technology (Textiles) - Units 1 & 2

Pathway Requirements
It is recommended that students have completed the Year 10 Product Design & Technology Course.

Unit 1
Introduction
Design often involves the refinement and improvement of existing products to fulfil human needs. This Unit focuses on the analysis, modification and improvement of a current product in at least three distinct ways. The work of current designers and how they work through the design process to problem solve is covered, as well as the consideration of intellectual property and its implication to designers. Students will choose a product for modification, analyse, redesign and manufacture their own interpretation of the product. Consideration of material properties and characteristics will also be examined.

Learning Focus
- Product redesign for improvement
- Producing & evaluating a redesigned product or prototype
- Sustainability
- Product analysis
- The product design process

Assessment
- Project Folio 35%
- Project Production 35%
- Written Tasks 10%
- Examination 20%

Unit 2
Introduction
In this Unit, students work together in small groups to design and construct a three dimensional solution or range of solutions for a given problem. This Unit focuses on professional design practise where designers often work within a multi-disciplinary team. Other factors considered are the origins of products and the social and environmental constraints of the design process.

Learning Focus
- Designing within a team
- Collaboration and ICT
- Historical and/or cultural design movements or styles
- Producing & evaluating a collaboratively designed product
- The product design process & influencing factors

Assessment
- Project Folio 35%
- Project Production 35%
- Written Tasks 10%
- Examination 20%
Product Design & Technology - Units 3 & 4

Pathway Requirements
It is highly recommended that students have completed Units 1 and 2.

Unit 3 & 4
Introduction
Unit 3 concentrates on the design folio for the product manufactured in Unit 4. It is a client-focused project using the full range of design process techniques covered in Units 1 & 2. Investigation into Technology in the industrial setting also takes place. Unit 4 focuses on the manufacture of the product designed in Unit 3. Product promotion and evaluation are also undertaken.

Learning Focus
- The designer, client and/or end-user in product development
- Product development in industry
- Designing for others
- Product analysis & comparison
- Production work
- Evaluation of the product & processes
- Product presentation & care label

Assessment
- Unit 3 School-assessed coursework: 12%
- Unit 4 School-assessed coursework: 8%
- School-assessed task: 50%
- End-of-year examination: 30%
Systems Engineering - Units 3 & 4

Pathway Requirements
It is highly recommended that students have completed Units 1 and 2.

Unit 3 & 4
Introduction
In these units, students consolidate and extend their knowledge of mechanical and electronic systems by studying their purpose, function and use in integrated, electromechanical systems. Students apply this knowledge in developing an integrated, electromechanical system over the duration of the course. Possible projects include remote controlled aircraft, computer controlled power tools, robots, pinball machines and interactive lighting displays however the requirements are very broad allowing for projects that are closely aligned to students’ individual interests. Safety of the finished products is a key consideration throughout the whole project.

Learning Focus
- Functions and applications of mechanical and electronic systems.
- Renewable energy technologies.
- New and developing technologies and their potential future impacts on society.
- Using a design brief to define the requirements of a project.
- Independent research to gather project-related information.
- Use of sketches, mock-ups and computer aided simulations to develop design ideas.
- Documenting and budgeting the materials and components required to build their project.
- Producing a step-by-step process for building their project considering the safe use of the tools used in producing the project.
- Safe and effective use of a variety of hand and power tools.
- Devising and conducting testing and evaluation of their finished project.

Assessment
- Unit 3 School-assessed coursework 10%
- Unit 4 School-assessed coursework 10%
- Unit 3 & 4 School-assessed task 50%
- End-of-year examination 30%
Food and Studies - Units 3 & 4

Pathway Requirements
It is highly recommended that students have completed Units 1 & 2 of Food Studies (previously Food and Technology).

Unit 3 & 4
Introduction
Unit 3 investigates the roles and influences of food, including how eating patterns, values and behaviours develop in social environments. Students will look at the science of food and how it can both nourish and harm our bodies along with the physiology of eating food and the microbiology of digestion. Unit 4 focuses on global and Australian food systems, including an investigation on environmental issues and sustainable futures in food production. Students will assess contemporary food fads, trends and diets and interpret food labels and food marketing.

Learning Focus
- The Science of Food
- Preparation and processing of foods
- Food choice, health and wellbeing
- Food environments and ethics
- Navigating food information

Assessment
- Unit 3 School-assessed coursework: 30%
- Unit 4 School-assessed coursework: 30%
- End-of-year examination: 40%
Product Design & Technology (Textiles) - Units 3 & 4

Pathway Requirements
It is highly recommended that students have completed Units 1 and 2.

Unit 3 & 4
Introduction
Unit 3 concentrates on the design folio for the garment/textile product manufactured in Unit 4. It is a client-focused project using the full range of design process techniques covered in Units 1 & 2. Investigation into Technology in the industrial setting also takes place. Unit 4 focuses on the manufacture of the product designed in Unit 3. Product promotion and evaluation are also undertaken.

Learning Focus
- The designer, client and/or end-user in product development
- Product development in industry
- Designing for others
- Product analysis & comparison
- Production work
- Evaluation of the product & processes
- Product presentation & care label

Assessment (overall for year)
- Unit 3 School-assessed coursework: 12%
- Unit 4 School-assessed coursework: 8%
- School-assessed task: 50%
- End-of-year examination: 30%
Entry Requirements
Combinations of any of these 3 subjects would be possible into VCE (Units 1-4) as such students shouldn’t feel limited to the choice of one over the other.

Each of these subjects compliment the other depending on what sort of practical focus the student wishes to apply to their Artistic studies.

Students wishing to attempt multiple folio subjects should consult with the relevant subject teachers and the College’s Careers Counsellor first.
Art - Year 10

Pathway Requirements
Year 9 Art would be beneficial but is not essential

Introduction
The Arts are a fundamental means of expression and communication in all societies. Through the Arts we gain a sense of our social and individual identity. The focus of this Semester based subject is on the skills of Painting and Printmaking and the students’ ability to generate folio based back-up work. It is then extended into finished pieces of work. Theoretically, the student will also work towards developing an understanding of analysing artwork.

Learning Focus
• Drawing and design is the basis of all projects undertaken
• Examine the way in which art forms indicate how we see ourselves and how others see themselves
• Use art elements, skills, techniques and processes (painting, printmaking, drawing, ceramics & sculpture) to structure visual artworks appropriate to chosen styles and media e.g. Painting in oils, portraits. Intaglio printing, etching, drypoint, aquatint
• Identify, analyse and interpret visual artworks and discuss responses to these works

Assessment
• Development work 30%
• Folio of Finished Pieces 30%
• Theory work 20%
• Examination 20%
Media (Film) - Year 10

Pathway Requirements
Year 9 Media would be beneficial but is not essential

Introduction
Media products are representations of social, personal and cultural reality. The media represent the world in a way which is different from direct experience. These representations have been constructed through a process of selection, using codes and conventions. From this perspective media products can be examined as the expression of creative ideas, specific symbolic languages and the ways in which the media comment on culture and values and reflect the society in which they were created.

Learning Focus
Film Narrative - theory based workshops outlining the basic media conventions used in the narrative of a film.
- Film Analysis - watch a film, and analyse these conventions learnt in the first area of study.
- Production Planning - Script Development, Storyboards, Costume/Prop Planning, Technical Planning through light/sound.
- Short Film Production - shooting footage, recording sound.
- Post-Production - Video Editing software to complete their production.
- Production Analysis - analyzing their completed film production, revising over planning documents, scripting, storyboards, footage timelines, video editing troubleshooting etc.

Assessment
- Film Theory 15%
- Short Film Production 35%
- Production Workshops 30%
- Examination 20%
Media (Photography) - Year 10

Pathway Requirements
Year 9 Media would be beneficial but is not essential.

Introduction
Media products are representations of social, personal and cultural reality. The media represent the world in a way, which is different from direct experience. These representations have been constructed through a process of selection, using codes and conventions. From these perspective media products can be examined as the expression of creative ideas, specific symbolic languages and the ways in which the media comment on culture and values and reflect the society in which they were created.

Learning Focus
- Principles of photography - DSLR Digital Camera
- Composition / objects that tell a story about the photography studio shooting
- ‘Photoshop’ skills in graphics/retouching
- Photography and graphics combine to create a movie poster to a target audience
- Analysis of photographs

Assessment
- Folio of Finished Pieces 40%
- Development 25%
- Written Analysis 15%
- Examination 20%
Graphics - Year 10

Pathway Requirements
Year 9 Graphics would be beneficial but is not essential.

Introduction
Graphics allows students to develop their creativity, learn about the practice of designing, making informed judgements about their own and others designs and develop a range of drawing and rendering skills. Students will learn to communicate their ideas and designs through freehand drawing, instrumental drawing and use of the computer programs Adobe Photoshop and Adobe Illustrator. Students will be introduced to the specific terminology used for Graphics and Design, enabling the communication and presentation of their ideas.

Learning Focus
- Rendering of form to produce an illustration
- Drawing from observations focusing on expertise of drawing skills
- Exploration of materials and media to produce final presentations
- Development of a folio using a design brief
- Layout and design principles
- An understanding of orthogonal and isometric drawing systems
- Use of Adobe Photoshop & Illustrator to produce Artworks

Assessment
- Development work 30%
- Final Artworks 40%
- Written Reports 10%
- Examination 20%
Studio Arts - Units 1 & 2

Pathway Requirements
Year 10 Art would be beneficial but is not essential

Unit 1- Studio Inspiration & Techniques

Introduction
Studio Arts encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. The study establishes effective art practices through the application of an individual design process to assist the student’s production of a folio of artworks. The theoretical component of this study is an important basis for studio practice as it offers students a model for inquiry that can support their art making practices.

Learning Focus
This Unit focuses on using sources of inspiration, and individual ideas as the basis for developing artworks and exploring a wide range of materials and techniques as tools for communicating ideas, observations and experiences through art making. Students also explore and research the ways in which artists from different times and cultures have interpreted and expressed ideas, sourced inspiration and used materials and techniques in the production of artworks.

Assessment
- Visual Diary 25%
- Folio 25%
- Written Analysis 25%
- Examination 25%

Unit 2 - Studio Exploration and Concepts

Introduction
Studio Arts encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. The study establishes effective art practices through the application of an individual design process to assist the student’s production of a folio of artworks. The theoretical component of this study is an important basis for studio practice as it offers students a model for inquiry that can support their art making practices.

Learning Focus
This Unit focuses on students establishing and using a design process to produce artworks. The design process includes the formulation and use of an individual approach to locating sources of inspiration, experimentation with materials and techniques, and the development of aesthetic qualities, directions and solutions prior to the production of artworks. Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand the artists’ ideas and how they have created aesthetic qualities and identifiable styles.

Assessment
- Visual Diary 25%
- Folio 25%
- Written Analysis 25%
- Examination 25%
**Media - Units 1 & 2**

**Pathway Requirements**
Year 10 Media would be beneficial but is not essential.

**Unit 1 - Representation, Technologies of Representation and new media**

**Introduction**
VCE Media provides students with the opportunity to develop critical and creative knowledge and skills. Media texts, technologies and processes are considered from various perspectives including their structure and features, their industry production and distribution context, audience reception and the impact of media in society.

**Learning Focus**
The purpose of this unit is to enable students to develop an understanding of the relationship between the media, technology and the representations present in media forms. The unit involves the study of the implications of media technology for the individual and society.

**Assessment**
- Representation 25%
- Technologies of Representation 25%
- New Media 25%
- Examination 25%

**Unit 2 - Media Production and the Media Industry**

**Introduction**
VCE Media provides students with the opportunity to develop critical and creative knowledge and skills. Media texts, technologies and processes are considered from various perspectives including their structure and features, their industry production and distribution context, audience reception and the impact of media in society.

**Learning Focus**
This unit will enable students to develop their understanding of the specialist production stages and roles within the collaborative organisation of media production. The unit also introduces students to the role of important Australian Media organisations.

**Assessment**
- Media Production 25%
- Media Industry Production 25%
- Australian Media Organisations 25%
- Examination 25%
Visual Communication Design - Unit 1 & 2

Pathway Requirements
Year 10 Graphics would be beneficial but is not essential

Unit 1
Introduction
Visual Communication Design can inform people’s decisions about where and how they live and what they buy and consume. The visual presentation of information influences people’s choices on what they think they need or want. The study provides students with the opportunity to develop an informed, a critical and a discriminating approach to understanding and using visual communications, and nurtures their ability to think creatively about design solutions. Design thinking, which involves the application of creative, critical and reflective techniques, processes and dispositions, supports skill development in areas beyond design, including science, business, marketing and management.

Learning Focus
The primary focus of this unit is on students developing drawing skills as a means of communication and an understanding of how visual communications are shaped by past and contemporary factors. For this Unit students are required to demonstrate achievement of three outcomes. As a set these outcomes encompass all areas of study for the unit. On completion, students should have the ability to:
- Create drawings for different purposes using a range of drawing methods, media and materials.
- Select and apply design elements and design principles to create visual communications that satisfy stated purposes.
- Describe how a visual communication has been influenced by past and contemporary practices, and by social and cultural factors.

Assessment
- Folio of Drawings 30%
- Design Folio 30%
- Annotations and Reports 15%
- Examination 25%

Unit 2
Introduction
This unit offers a practical context for learning and applying drawing methods and an understanding and application of basic typography components. Area of Study 3 introduces students to the design process that underpins Visual Communication Design practice.

Learning Focus
For this Unit students are required to demonstrate achievement of three outcomes. As a set these outcomes encompass all areas of study for the unit. On completion, students should have the ability to:
- Communicate information and ideas for a selected design field.
- Manipulate type and images to create visual communications suitable for print and screen-based presentations, taking into account copyright.
- Engage in stages of the design process to create a visual communication appropriate to a given brief.

Assessment
- Folio of Drawings & Final Presentations 30%
- Design Folio 30%
- Annotations & Analysis 15%
- Examination 25%
Studio Arts - Unit 3 & 4

Pathway Requirements
Unit 1 & 2 Studio Arts

Unit 3 & 4
Introduction
Studio Arts encourages and supports students to recognise their individual potential as art makers and presents a guided process to assist their understanding and development of art making. Students focus on the implementation of an individual design process leading to the production of a range of potential directions and solutions. Students will also investigate and analyse the response of artists to a wide range of stimuli, and examine their use of materials and techniques. They explore professional art practices of artists in relation to particular artworks and art form/s and identify the development of styles in artworks. Students will also produce a cohesive folio of finished pieces and investigate aspects of artists’ involvement in the art industry, focusing on a variety of exhibition spaces and the methods and considerations involved in the preparation, presentation and conservation of artworks.

Learning Focus
- Prepare an exploration proposal that formulates the content and parameters of an individual studio process
- To present an individual design process that produces a range of potential directions
- Discuss art practices in relation to particular artworks of at least two artists
- Present a cohesive folio of finished artworks, based on selected potential directions
- Provide visual and written documentation that evaluates the artwork
- Examine and explain the preparation and presentation of artworks in at least two different exhibition spaces

Assessment
- Unit 3 School Assessed Task (Exploration Proposal/Studio Process) will contribute 30% to the final assessment
- Unit 3 School Assessed Coursework (Artists & Studio Practices) will contribute 5% to the final assessment
- Unit 4 School Assessed Task (Production & Presentation of Artworks/Evaluation) will contribute 30% to the final assessment
- Unit 4 School Assessed Coursework (Art Industry Contexts) will contribute 5% to the final assessment
- Units 3 & 4 Examination will contribute 30% to final assessment.
Media - Units 3 & 4

Pathway Requirements
Unit 1 & 2 Media

Unit 3 & 4
Introduction
VCE Media provides students with the opportunity to develop critical and creative knowledge and skills. Media texts, technologies and processes are considered from various perspectives including their structure and features, their industry production and distribution context, audience reception and the impact of media in society. Students will be provided with opportunities to develop their understanding of production and story elements and to recognise the role and significance of narrative organisation in fictional film, radio or television programs. They will further develop practical skills in the production of media products and to realise a final media product. The role and influence of the media is also critically analysed.

Learning Focus
- Develop practical and analytical skills
- Acquire an understanding of the contribution of codes and conventions to the creation of meaning in media products
- Understand the creative and cultural implications of new media technologies
- Develop an understanding of media industry issues and developments
- Develop practical skills through undertaking exercises related to aspects of the design and production process.
- Understand the ways in which media texts are shaped by social values and the influence of social values in the representations and structure of a media text

Assessment
- School assessed coursework for Unit 3 will contribute 6% to the final assessment.
- School-assessed coursework for Unit 4 will contribute 12% to the final assessment.
- School-assessed Task for Unit 3 & 4 will contribute 37% to the final assessment.
- Examination contributes 45% to the final assessment.
Visual Communication Design - Unit 3 & 4

Pathway Requirements
Unit 1 & 2 VCD

Unit 3 & 4
Introduction
Visual Communication Design can inform people’s decisions about where and how they live and what they buy and consume. The visual presentation of information influences people’s choices on what they think they need or want. The study provides students with the opportunity to develop an informed, a critical and a discriminating approach to understanding and using visual communications, and nurtures their ability to think creatively about design solutions. Design thinking, which involves the application of creative, critical and reflective techniques, processes and dispositions, supports skill development in areas beyond design, including science, business, marketing and management.

Learning Focus
- Create visual communications for specific contexts, purposes and audiences that are informed by their analysis of existing visual communications.
- Describe the roles of professional communicators and analyse processes and procedures used in professional practice to produce visual communications.
- Apply design-thinking skills in preparing a brief, undertaking research and generating a range of ideas relevant to the brief.
- Develop distinctly different design concepts for each need, and select and refine for each need a concept that satisfies each of the requirements of the brief.
- Produce final visual communication presentations that satisfy the requirements of the brief.
- Devise a pitch to present and explain their visual communications to an audience and evaluate the visual communications against the brief.

Assessment
- Unit 3 school assessed coursework (folio, written reports and design brief) will contribute 25% to the final assessment.
- Unit 4 school assessed task (developmental folio, two final presentations and a pitch) will contribute 40% to the final assessment.
- Units 3 & 4 examination will contribute 35% to the final assessment.
External Provider

VCE Higher Education Studies

The Higher Education Studies program provides opportunity for very able students to extend their learning in a particular subject area by completing the first year of a standard university subject as part of their Year 12 Program.

The program is offered by Monash, RMIT, Deakin and Melbourne Universities. The mode of delivery can differ between subjects. At this stage, all Higher Education Studies are offered externally from the College.

For more information and a list of subjects offered and their locations, students should speak with the Careers Counsellor, Ms Lauren Carson. Applications must be lodged by the end of October each year.

Victorian School of Languages

Students in Senior School have the opportunity to study a language not offered on our usual curriculum with the Victorian School of Languages. However, families are advised that in such instances tuition is offered either by distance learning or by attending Saturday morning classes. In both of these cases a tuition fee is payable. Any student considering this option must discuss their plans with the Head of Teaching and Learning (Years 9 - 12).

Dual Recognition for TAFE Courses and Vocational Education and Training (VET)

Vocational Education and Training (VET) courses are offered at TAFE in various specialty areas. Some areas of study are recognised by the VCE as equivalent to Units 1, 2, 3 or 4. This allows a student to work towards the VCE and a TAFE certificate at the same time. It is most important that students interested in these courses seek advice and details from the VET Co-ordinator/Careers Counsellor, Ms Lauren Carson.

Popular VET subjects in recent years have included Hospitality, Community Service and Equine Industry.

The Victorian Tertiary Admissions Centre (VTAC) has advised that existing arrangements for tertiary entrance and ATAR calculation will be modified to reflect the integration of VET programs within the VCE. Approved VCE VET Units 3 & 4 sequences will include scored assessment from which a study score for the sequence will be calculated.

Further details of VET Courses can be found in the Subject Guide. Interested families should discuss these arrangements with the Careers Counsellor, Ms Lauren Carson.
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Telephone 1300 002 225  Facsimile (03) 5940 1944

Berwick Campus 92 Kangan Drive Berwick Victoria 3806
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All information is presumed correct at the time of publication and is subject to change without prior notice.