great things come from a small package

FINTONA
Girls' School
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Fintona’s ethos is based on the ideals of inclusion and equality: to create a friendly, supportive, safe and caring learning environment. Our aim is for each student to develop a sense of self worth, enthusiasm for learning, respect for others, and to be optimistic about the future.

Fintona has developed clear educational aims in order to:

• Create an environment in which each student is assisted to understand herself and the world;
• Ensure parents are partners with teachers in the learning process, acknowledging the role of parents as the first educators of their children;
• Develop the capacity for, and skills in, analysis and problem solving, the communication of ideas and information, the planning and organisation of activities, and collaboration with others;
• Develop qualities of self confidence, optimism, high self esteem and a commitment to personal excellence as a basis for potential life roles as family and community members;
• Develop the capacity to exercise judgement and responsibility in matters of morality, ethics and social justice;
• Develop girls who are confident, creative and productive users of new technologies, particularly information and communication technologies, and who understand the impact of these technologies;
• Develop an understanding of, and concern for, the natural environment and the knowledge and skills to contribute to ecologically sustainable futures;
• Develop the knowledge, skills and attitudes necessary to establish and maintain a healthy lifestyle and to use leisure time in creative and satisfying ways;
• Foster individual resilience and a sense of engagement with change;
• Develop an understanding of the skills required to select and organise information effectively and the ability to use these skills in all areas of research;
• Develop the skills of inquiry, including the ability to apply thinking strategies.

From its commencement in 1896, the School has espoused the view that ‘girls can do anything’ and has encouraged students to be critical, independent thinkers and empowered social actors. A strong sense of social justice underpins School activities. Students are encouraged to use the benefits of education not only for personal advancement, but for the benefit of the community, society and the preservation of the planet and all living things. An emphasis is placed on social service and co-operation through the House system, and the School’s values are reflected throughout the Curriculum.

Mrs Suzy Chandler
PRINCIPAL
YEAR 9

Year 9 provides students with the opportunity to undertake guided choices in their subject selection. The opportunity exists for students to participate in, and reflect on, activities that extend their understanding of themselves and the world.

The Connections Program has been specifically designed by Fintona to allow students to develop greater awareness of learning beyond the classroom, with a focus on how communities work. Throughout the year, students focus on working together and the important contribution that individuals make to communities. One day a fortnight is devoted to the Connections Program.

A range of life skills is covered throughout the year, ensuring that students have study and self-management skills, along with an awareness of how they can work positively towards physical, emotional and social wellbeing.

YEAR 10

Students continue to develop skills and knowledge in a broad range of learning disciplines, ensuring flexible pathways are maintained to reflect our ever changing world. All students undertake a work experience placement. Students secure a five day placement for Term 4 in an area of personal interest. Students may also opt to undertake a further placement during term holidays.

Students are encouraged to avail themselves of the opportunity to try different subjects and will be guided as to how future subject choices may shape career pathways. Some students will commence a selected VCE study in Year 10, with guidance being provided through the subject selection process.

Students also become familiar with the educational pathways available beyond Year 12 and use various software programs designed to allow students to recognise the choices they will face in the near future.

Study skills are further developed, along with strategies to deal with the pressures of life in the senior years of schooling. Students are provided with the information necessary to assist in making informed decisions relating to their physical, emotional and social wellbeing.
ESSENTIAL LEARNING

The curriculum for students in Years 9 and 10 at Fintona is based on the belief that students require breadth and depth in their studies to ensure the necessary skills and understanding are developed to provide flexible options for students, within and beyond their traditional secondary schooling. The changes being undertaken at universities around the world reflect the belief that a broad base is important.

The curriculum at Fintona in Years 9 and 10 aims to:

• Provide a program framed on essential learning
• Provide students with the opportunity to select subjects of personal interest through guided choice
• Develop critical skills and an understanding of the intellectual value of all disciplines
• Provide the opportunity for students to apply concepts in new situations.

Year 9 requirements:

During Year 9, all students are required to study English, mathematics, science, physical education and at least one LOTE subject for the year. As part of Fintona’s ongoing implementation of the National Curriculum, students are also required to study at least one semester of history. With the remaining optional subjects, we encourage students to choose a range of subjects and to maintain a broad range of learning experiences.

Year 10 requirements:

During Year 10, all students are required to study English, mathematics, science, physical education and are highly recommended to continue with a LOTE subject. As part of Fintona’s ongoing implementation of the National Curriculum, students are also required to study at least one semester of history. With the remaining optional subjects, we encourage students to choose a range of subjects and to maintain a broad range of learning experiences.

Advice is available to assist students through the processes of selecting subjects that suit their individual needs.
Important learning occurs beyond the traditional classroom and Fintona offers a broad range of activities to develop student interests and talents. Students’ efforts are recognised regularly in the school community via assemblies and written publications.

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<thead>
<tr>
<th>ACTIVITY</th>
<th>YEAR LEVELS</th>
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<tbody>
<tr>
<td>Athletics (House Sport and Girls Sport Victoria [GSV])</td>
<td>5 - 12</td>
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<td>Badminton (House and GSV)</td>
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<tr>
<td>Baker Band</td>
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<td>Basketball (GSV)</td>
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<td>Boroondara Literary Award</td>
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<td>Clarinet Ensemble</td>
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<td>Creative Writing Club</td>
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<td>Cricket (GSV)</td>
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<td>Cross Country (House and GSV)</td>
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<td>Cunningham String Quartet</td>
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<td>Danila Dilba</td>
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<td>Debating (House and Inter-School [DAV])</td>
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<tr>
<td>Diving (House and GSV)</td>
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<td>Duke of Edinburgh’s Award Scheme</td>
<td>Age 14 - Yr 12</td>
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<td>Elaine Boucher Writing Award</td>
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<td>Elizabeth M. Butt Public Speaking</td>
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<td>Fintona Chorale</td>
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<td>Fintona Flutes</td>
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<td>Fintona Quintet</td>
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<td>Guitar Ensemble</td>
<td>5 - 12</td>
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<td>Hockey (House and GSV)</td>
<td>5 - 12</td>
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<td>Indoor Cricket (House)</td>
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<td>ACTIVITY</td>
<td>YEAR LEVELS</td>
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<tr>
<td>Language Based Trip (French or Japanese)</td>
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<tr>
<td>Language Exchanges (French, Indonesian or Japanese)</td>
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<tr>
<td>Netball (House and GSV)</td>
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<tr>
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<td>Poetry Competitions</td>
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<td>Ringing Voices Literary Journal</td>
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<td>Rostrum Voice of Youth Public Speaking Competition</td>
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<td>Rotary Balwyn Four Way Test Public Speaking Awards</td>
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<td>Rowing</td>
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<td>Saxophone Quartet</td>
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<td>Senior Orchestra</td>
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<td>Soccer (House and GSV)</td>
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<td>Softball (House and GSV)</td>
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<td>Stage Band</td>
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<td>Swimming (House and GSV)</td>
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<td>Symphonic Wind Ensemble</td>
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<td>Table Tennis (House)</td>
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<td>Tennis (House and GSV)</td>
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<td>Tourmont Strings</td>
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<td>Volleyball (House and GSV)</td>
<td>5 - 12</td>
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<td>World Challenge</td>
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The Arts engage students in critical and creative thinking, helping them understand themselves and the world. The Arts play a critical role in all societies, and encourage the exploration of a broad range of ideas. Two key areas frame Arts-based learning – Creating and Making, and Exploring and Responding. The study of Drama focuses on creation, performance and analysis of characters, narratives and stories.

**Acting For The Screen***
Semester 1

**Outline:** This Unit focuses on the development of skills required to produce believable and engaging performances on screen. Students examine acting styles and techniques through observing and analysing screen performances. They learn to interpret scripts and develop characters through research and rehearsal. Students develop techniques for acting in front of cameras and learn to adapt performances to comply with screen directions. They learn to creatively evaluate their own and their classmates’ onscreen performances.

**Key Skills:** Creating, sustaining and developing characters; shaping scripts and performances from stimuli and research; developing expressive skills and understanding screen conventions and styles; analytical evaluation of performances.

**Assessment:** Demonstration of acting techniques and group collaboration, performance assessment, documentation of creative processes.

**Writing For The Screen***
Semester 2

**Outline:** This Unit is an introduction to the art of screenwriting, focusing on the development of a story or theme into a script. Students examine different writing genres and styles through reading scripts and watching film and television productions. They explore visual storytelling and character development while taking an idea through the stages of plotting, editing and rewriting to a finished and formatted script.

**Key Skills:** Writing techniques to shape scripts and narratives; applying dramatic process in the development of screen work; documentation, research and interpretation; development of expressive skills and understanding screen conventions and styles; analytical evaluation of performances.

**Assessment:** Demonstration of screen-writing techniques and group collaboration, written assessment, documentation of creative processes.

**Music Performance**
Unit Length: Semester

**Outline:** Students learn how to present a performance in an effective manner, demonstrating an understanding of the stylistic conventions of the music. All styles of music and a wide range of performance levels will be catered for. Regular performances will be recorded on audio and video as a tool for feedback. Basic aural and theory skills will be strengthened.

**Key Skills:** Performance practice, analysis, self reflection, ongoing development of aural and music literacy skills.

**Assessment:** Performance assessment, research tasks, aural and analysis tasks, examination.

**Resources:** Self-reflection diary, resources provided by teacher, audio and video materials.

**PATHWAY>>**
*Year 10 students electing to study ‘Acting For The Screen’ and/or ‘Writing For The Screen’ can count each study as VCE Unit 1 and Unit 2 Drama respectively.*
**Film Music Composition**  
**Unit Length: Semester**

**Outline:** In this course, students gain insight into the processes of composing music for film. Activities include learning composition techniques in a variety of styles, composing pieces that match imagery, and producing short sequences of film that include original compositions.

**Key Skills:** Developing an understanding of various composition techniques, learning ways of creating mood through music, working constructively to devise a group composition, composing short original pieces to match accompany power point sequences and film clips.

**Assessment:** Composition for a series of visual stills, group devised minimalist composition, composition for an animated film clip

**Resources:** Keyboards, music computers, video clips, resources provided by the teacher

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**Drawing**  
**Unit Length: Semester**

**Outline:** This subject introduces the student to a variety of contexts where drawing can be found. Exploration of how illustration can be combined with graphic design or how drawing can be an expressive media within self expression are central concepts to this subject. The design process, functions of illustration, design purpose, collage and mixed media are explored within this subject.

**Key Skills:** Development of a range of drawing and illustration techniques; understanding of the purpose and function of drawing; understanding of industry processes and relationships; working with a design brief and design process.

**Assessment:** Visual Diary, folio of resolved artworks, written responses, examination.

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**Fashion and Textiles**  
**Unit Length: Semester**

**Outline:** This subject provides the opportunity to design and construct a variety of fashion and textile works. Designing, creating, consideration of materials and techniques are explored in each unit. This subject explores the reasons why we wear what we do and the aesthetic associations and choices we make with textiles as well as studying Fashion industry contexts.

**Key Skills:** Designing and creating; consideration of materials limitations; construction techniques; making personal choices about style.

**Assessment:** Visual Diary, folio of resolved artworks, written responses and examination.

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**Painting**  
**Unit Length: Semester**

**Outline:** This subject explores painting as a means of self-expression. There are opportunities to develop a wide range of painting skills in both traditional and new media in each unit of study. The structure of each unit is designed to be flexible enough to develop and encourage personal choice in the development of practical work. There is an emphasis on developing personal statements and exploring and experimenting with a range of media in each unit.

**Key Skills:** Use of traditional and new media, planning, experimentation and investigation and expression of ideas and personal statements.

**Assessment:** Visual Diary, folio of resolved artworks, written responses and examination.
Printmaking
Unit Length: Semester

Outline: This subject explores a variety of printmaking mediums used to express observations, ideas and personal responses. Traditional and contemporary approaches are explored through a range of techniques and processes. There is a strong emphasis on experimentation and the creative and innovative use of media to explore personal responses to the set units of work.

Key Skills: Use of traditional and new media; planning, experimentation and investigation; expression of ideas and observations.

Assessment: Visual Diary, folio of resolved artworks, written responses, examination.

3D Studies
Unit Length: Semester

Outline: This subject provides the opportunity to plan and construct a range of three dimensional works. These will range from functional pieces through to highly personal works that explore form and shape. The design process will guide the planning and development of each work to its resolution. Ceramics, wood, paper/card, fibre and wire are mediums explored in this subject.

Key Skills: Development of a range of sculptural techniques; materials and construction methods; working with a design brief to develop artworks; investigation and exploration of design considerations.

Assessment: Visual Diary, folio of resolved artworks, written responses, examination.

Photography
Unit Length: Semester

Outline: This subject introduces 35mm black and white photography and digital photography as a means of self expression. Photographic principles and properties are explored in order to appreciate the potential and limitations of the photographic medium. This subject is developed to challenge and provide both practical skills in the use of equipment and conceptual and aesthetic skills in image making. This subject explores different roles and conventions of the photographic medium.

Key Skills: Technical competence with cameras and darkroom procedures; technical competence with digital cameras and computer software; visual awareness and the practice of photography as an expressive art form.

Assessment: Visual Diary, folio of resolved artworks, written responses and examination.
The English curriculum is based on students continuing to develop skills in areas that are essential. Students will read and view texts that contain accessible but challenging ideas and topics of social interest. They will write responses that are imaginative, informative or argumentative, focusing on concerns that relate to their own lives, their community and the world. Students will engage in discussions or presentations that compare ideas, build on the ideas of others, provide other points of view, and reach conclusions that recognise the diverse aspects of a given debate.

Year 9: Shakespeare
Term 1

Outline: Students are introduced to the world of William Shakespeare. Through the classroom reading of a comedy, students explore and analyse how the playwright develops themes and characterisation. Students also develop awareness of literary techniques, and how such techniques contribute to meaning. The unit encompasses a range of research-based and analytical writing tasks, and students participate in a performance of a selected scene from the play. The students are encouraged to maintain learning journals with descriptive and reflective writing entries.

Key Skills: Comprehension, listening, speaking, analysis, interpretation, note-taking, essay writing.

Assessment: Research project, character profiles, scene analysis, essay.

Resources: Shakespeare: Much Ado About Nothing.

Year 9: Newspaper Studies
Term 2

Outline: With every student receiving her own copy of the Herald Sun, students will become familiar with articles written for a range of purposes and audiences. In this study, they will learn how to both recognise and formulate different styles of writing, including informative pieces (reportage), opinion pieces, features, editorials, letters and reviews. Students will also learn to understand the ways in which images and illustrations can be equally political and persuasive.

Key Skills: Comprehension, research, analysis, use of English grammatical conventions, writing for a range of purposes and audiences.

Assessment: Analysis tasks, point of view writing.

Resources: Herald Sun

Year 9: Public Speaking
Semesters 1 and 2

Outline: Building on skills from previous year levels, students participate in oral performance (Shakespeare), presentations to class, and in the Elizabeth M. Butt Public Speaking event. Based on the concept of ‘The Balloon Debate’, students research the biography of a famous person, and deliver a speech to the class, speaking in the identity of their chosen subject.

Key Skills: Interpreting Shakespeare through performance, biographical research, writing an argumentative and persuasive speech, delivery of a speech.

Assessment: Oral presentations.

Resources: Library and internet resources.
Year 9: Poetry
Semester 2

Outline: Students are introduced to a range of poetry, particularly poems that reflect different facets of Australian life. Students, through classroom teaching and guest authors, are encouraged and taught to draft and write poems that are meaningful and convey a specific idea. They also learn to identify particular genres and literary devices in given poems.

Key Skills: Poetry appreciation, interpretation, analysis, literary devices, creative writing.

Assessment: Close reading of a poem, creative writing, examination.

Resources: Handbook of teacher’s selection of poetry, Resource Centre, visiting poets.

Year 9: Australian Literature Past and Present
Semester 2

Outline: The primary literature study will be ‘True Blue’ edited by Peter Goldsworthy. This is a collection of Australian writing past and present. Students will read the writing of novelists, poets, historians and other commentators depicting and examining their nation and its people. The attributes of both prose and poetry, the literary devices employed, and their relevance to the themes and ideas being investigated will provide a rigorous but enjoyable study of Australian literature.

Key Skills: Reading a 19th century novel, comprehension, listening, speaking, analysis, interpretation, appreciation of film and literary techniques.

Assessment: Extended textual responses, creative writing, oral presentation.

Resources: True Blue edited by Peter Goldsworthy; selected readings and art references.
Year 10: Issues
Semesters 1 and 2

Outline: Various studies of persuasive language in the mass media and advertising are used to investigate the use of English to influence the reader. Students are encouraged to become aware of such language and to become more astute readers.

Key Skills: Comprehension, critical reading, analysis of language, use of rhetoric, annotation and persuasive writing.

Assessment: Written and oral analyses of authentic media and advertising material, creation of similar material in both written form.

Resources: Print media, multimodal texts, podcasts, guest speakers.

Year 10: Literature
Semesters 1 and 2

Outline: Through the study of language, students explore how authors use the novel as a vehicle to explore ideas and understandings, as well as the narrative of everyday life.

Key Skills: Critical reading, contextual reading, interpretation, analysis, writing for different audiences and purposes, correct English conventions.

Assessment: Visual representations, essays, character profiles, thematic analysis, creative writing.

Resources: Harper Lee, *To Kill a Mockingbird*, supplementary readings and art references, documentaries and background information, including the American Civil Rights Movement and racial segregation.

Year 10: Poetry
Semesters 1 and 2

Outline: Students are introduced to a range of poetry, including works by significant poets. Students explore how to read a poem, are encouraged and taught to draft and write poems that are meaningful and convey a specific idea. They also learn to identify particular genres and literary devices in given poems.

Key Skills: Poetry appreciation, interpretation, analysis, literary devices, creative writing.

Assessment: Close reading of poetry, creative writing.

Resources: Handbook of teacher’s selection of poetry, Resource Centre, visiting poets.

Year 10: Shakespeare
Semester 1

Outline: Students continue to develop an understanding of complex literary techniques, which are then transferred to stage performances.

Key Skills: Comprehension, listening, speaking, analysis, interpretation, dramatic performance, referencing, expository essay writing.

Assessment: Performance, character profiles, essays, class discussion, creative response.


Year 10: Multimodal Text
Semester 2

Outline: A single Australian film or two contrasting films are used to study filmic techniques. This medium is used to explore life in various contexts.

Key Skills: Interpretation of film, analysis of filmic techniques, discussion of findings orally and in essay form, writing of reviews using appropriate language, comparison of films studied.

Assessment: Written responses in review and essay format, group discussions.

Resources: *Muriel’s Wedding*
**Year 10: Public Speaking**
Semester 2

**Outline:** The Elizabeth M. Butt Public Speaking Competition begins in Term 2 and the finals are held in Term 3. In Year 10, students create a speech based on an interpretation of a selected quotation. Every student participates; the competition promotes the development of polished oratory skills, poise and confidence when speaking to an audience.

**Key Skills:** Interpretation, writing a persuasive speech, revision and editing, delivery of a speech.

**Assessment:** Content and delivery of a speech to peers and adjudicators.

**Resources:** Resource Centre and internet sources as required.

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**LITERATURE ELECTIVES**

**Year 9 & 10**

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**Please Sir ... I want some more!**
Unit Length: Semester

**Outline:** Why did Oliver want some more? More importantly, what happened when he asked for it? How were children treated in this Golden Age of British Empire, and could a work of fiction possibly cause enough public outrage to cause social reform? In this unit of study, students study one of Charles Dickens most famous novels, and acquire an understanding of what exactly made the author a superstar in his own day. We learn about his amazing gift for characterisation, through figures as diverse as the evil Bill Sikes, to the eccentric Miss Havisham, who stops the clocks from the day her lover jilts her at the altar. Through the novel Oliver Twist, selected artworks, 19th century philosophy and a film study of Great Expectations, students learn what life was like in the mid-Victorian age. In studying Dickens, students are taught how to approach the writing and analysis of a text from a literary perspective.

**Key Skills:** Developing an understanding of the 19th century Victorian age; appreciating the novel as a social artefact that may reflect or actively challenge the ideologies and social construction of the age in which it was written; to develop awareness and appreciation of the writings of Charles Dickens; to develop new approaches to literary analysis.

**Assessment:** Maintaining a study Journal and completing selected short projects; essay and examination.

**Resources:** Charles Dickens’ Oliver Twist; selected readings, art references, feature film and documentaries.

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**Seven Secrets of Literature**
Unit Length: Semester

**Outline:** Do you know that there is a theory that every novel ever written and every story ever told can only come from one or more of seven plots? In this elective we will explore the monsters and the heroes, the villains and the victims and the quests and the returns. We look at comedy and tragedy and we ask if they are really so different from one another. This elective will give you the experience of literature across time, including everything from Anglo Saxon to Shakespeare and then onwards to the present day. We will look at characters as diverse as Heathcliff and Hercules and as famous as Dracula and Harry Potter. Students will learn about the importance of plot and will understand how to write about literary texts in an analytical and insightful manner.

**Key Skills:** Develop an understanding of the tradition of literature; learn to read and translate selected passages of mediaeval and Anglo-Saxon writing; to have a sense of the social and historical contexts of literature; to develop new approaches to literary analysis.

**Assessment:** maintaining a study Journal and completing selected short projects and translations; essay and examination.

**Resources:** There is no text book for this subject, extracts from novels, plays and poems will be provided by the teacher. Some use of online resources and documentaries.
HEALTH & PHYSICAL EDUCATION

Students develop the knowledge, skills and behaviour to maintain physical health. Engaging in physical activity contributes to a sense of community and social connectedness which is vital for personal well-being. Through the provision of health knowledge, students develop an understanding of the importance of the stages in human development and factors required to develop a healthy life.

Year 9 Physical Education (Undertaken by all Year 9 students)
Unit Length: Full Year

Outline: Students have the opportunity to consolidate their skills in traditional sports such as volleyball and netball. They will also develop their knowledge about a range of non-traditional sports, such as touch football and aerobics. Students will learn rules, strategies and tactics for the sports covered, particularly through game situations.

Key Skills: Catching, throwing, dribbling, striking, fielding, movement, correct technique and timing.

Assessment: Major skills checklist for each sport.

Year 10 Physical Education (Undertaken by all Year 10 students)
Unit Length: Full Year

Outline: Students are provided with the opportunity to experience a variety of team games and movement activities. They will participate in skills sessions, game situations and competitions to gain an understanding of correct technique, rules and tactics. Students experience a range of coaching clinics and recreational activities; these include indoor cricket, fitness circuits, dance, self-defence and handball. During the unit they are also required to create their own unique and original game. Students develop the game, create rules and then teach it to their peers.

Key Skills: Catching, throwing, striking, fielding, co-ordination, timing to music, teamwork, fair play, sportsmanship and sports administration.

Assessment: Active participation, Skills Checklist, Group Assessment.

Your Body, Your Temple
Unit Length: Semester

Outline: Students will explore the human body systems that are most relied upon during physical activity. These include the muscular, skeletal, cardiovascular, respiratory and nervous systems. They will focus on the three energy systems which allow us to do exercise, as well as the short- and long-term changes that result from exercise.

Key Skills: Use correct terminology to describe the role of the body systems at rest and when undertaking physical activity; observe and record how the body systems function during physical activity; identify and discuss the range of effects that physical activity has on the body; identify the energy pathways used in a variety of activities.

Assessment: laboratory reports, assignments, tests and examination

Resources: Work booklets, DVDs, on-line resources, heart rate monitors

Food For Thought
Unit Length: Semester

Outline: This unit will focus on nutritional requirements for optimal health and good food sources. Students learn about a range of nutrients, with particular focus on the function of these nutrients. They will also investigate potential risk factors associated with having a dietary imbalance.

Key Skills: collect, analyse and interpret data relating to nutritional requirements for optimal health; communicate health and development information; identify the nutrient content in a range of foods; identify potential risk and protective factors for some of the National Health Priority Areas.

Assessment: Tests, case studies, data analysis, assignments, examination.

Resources: Work booklets, DVDs, on-line resources
HEALTH AND PHYSICAL EDUCATION ELECTIVES

SEMESTER 1, 2013
• YOUR BODY, YOUR TEMPLE
  • musculoskeletal system
  • cardiorespiratory system
  • nervous system
  • energy systems
  • acute & chronic responses to exercise

SEMESTER 2, 2013
• FOOD FOR THOUGHT
  • what is a healthy diet?
  • macronutrients
  • micronutrients
  • diet-related diseases

SEMESTER 1, 2014
• CASUALTY: PREVENTION OR RESPONSE
  • First Aid
  • Sports Injuries
  • Prevention of Injuries
  • Students will receive a first aid qualification at the conclusion of this course

SEMESTER 2, 2014
• FROM CRADLE TO THE GRAVE
  • development across the lifespan from prenatal to late adulthood
  • health issues at different lifespan stages
  • comparison with developing countries

PLEASE NOTE: These electives are optional and independent of each other. Furthermore, they are not prerequisites for Units 3 & 4 study. They are designed to provide students with an introduction and some background to some content that is covered in Units 3 & 4 Physical Education and Health & Human Development.
Through Humanities, students study human societies and environments, and people and their cultures in the past and present. Humanities provide a framework for exploring key ideas and concepts that shape the world. Human behaviour is central to a curriculum that encourages research and inquiry.

**China Rising**  
Unit Length: Semester

**Outline:** This unit examines key features of Chinese history during the 19th and 20th centuries. The central questions are: how and why did China evolve from a traditional Imperial society to a Communist superpower in the second half of the 20th century? It includes analysis of the influence of the West on China and the Opium Wars, the Revolution of 1911, war with Japan, civil war between the Nationalists and Communists, the establishment of a Communist regime, the Cultural Revolution and development of China as an economic superpower.

**Key Skills:** Research skills, analysis of written and visual primary and secondary sources, evaluating material to use as evidence, extended responses.

**Assessment:** Document and graphic exercises, research tasks, extended responses, examination.

**Resources:** No textbook required. Students use film, DVDs, class sets, the Resource Centre, online resources.

**Ideas That Changed the World**  
Unit Length: Semester

**Outline:** This Unit will look at the emergence of important ideas during the 19th and early 20th centuries. These could include capitalism, socialism and communism, Chartism or imperialism. It will also examine the role of those most closely associated with these ideas, including Karl Marx, Charles Darwin etc. It will also explore the impact that these new ideas had, particularly in Australia.

**Key Skills:** Research skills, analysis of written and visual primary and secondary sources, evaluating material to use as evidence, extended responses.

**Assessment:** Document and graphic exercises, research tasks, extended responses, examination.

**Resources:** No textbook required. Students use film, DVDs, class sets, the Resource Centre, online resources.

**World War II**  
Unit Length: Semester

**Outline:** This unit will focus on the role of Australia, during the Second World War. It will begin by looking at the causes of the war and Australia’s place in the world in the 1930s. It will explore the reasons why Australia became involved in the war, in particular its involvement in the Pacific War and how the war reached Australia with the bombing of Darwin and other towns. It will also examine the Home Front in Australia and the impact the war had on Australians and the shape of Australia after the war.

**Key Skills:** Research skills, analysis of written and visual primary and secondary sources, evaluating material to use as evidence, extended responses.

**Assessment:** Document and graphic exercises, research tasks, extended responses, examination.

**Resources:** No textbook required. Students use film, DVDs, class sets, the Resource Centre, online resources.
## YEAR 9 – VCE SUBJECT OFFERINGS AND PATHWAYS

* Indicates subject may be studied in Year 10

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3D Studies  
Drawing  
Fashion & Textiles  
Film Music Composition  
Music Performance  
Painting  
Photography  
Print Making  
Writing For The Screen  
Refer to Multi-Disciplinary Offerings | | Art  
Music Performance *  
Studio Arts | Art  
Theatre Studies (2013)  
Drama (2014)  
Music Performance: Solo  
Studio Arts |
| **ENGLISH & LITERATURE** | English  
Please Sir... I want some more  
Seven Secrets of Literature  
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ESL  
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Literature | |
| **HEALTH & PHYSICAL EDUCATION** | Physical Education (Compulsory)  
No Pain, No Gain  
From Cradle to the Grave | Sport (Compulsory) | Sport (Compulsory)  
Health and Human Development (2013)  
Physical Education (2014) | |
| **HUMANITIES/COMMERCE** | China Rising  
Dollars and Sense  
Ideas That Changed the World  
Going Green  
Mind Your Own Business  
Money Makes the World Go Round  
Philosophy  
Populate or Perish?  
Terror and Compassion  
Year 10 Foundation Accounting  
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Refer to Multi-Disciplinary Offerings | Accounting  
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## YEAR 9 – VCE SUBJECT OFFERINGS AND PATHWAYS

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Terror and Compassion
Unit Length: Semester

Outline: An exploration of the human capacity for good and evil, focusing on how terrorism has evolved through history and then contrasting this with the good deeds that are performed by heroes in society.
Key Skills: Note-taking, independent research, reading and analysing written and visual material, interpreting material, synthesising ideas from a range of material and drawing conclusions.
Assessment: Research tasks, analytical exercises, film study, oral presentations, examination.
Resources: Handouts, film and video, written and visual media.

Going Green
Unit Length: Semester

Outline: Global climate change, renewable energy sources, the debate concerning nuclear energy, forest and coastal management are some of the environmental issues explored in this elective. You also have the opportunity to conduct individual research into a current environmental issue and further develop your fieldwork skills, as a fieldwork trip is part of this elective.
Key Skills: Research, presenting and interpreting data such as maps and graphs, conducting fieldwork.
Assessment: Research report, fieldwork report, data presentation and analysis tasks, examination.
Resources: Atlas, class sets, online resources, resource centre, audio visual material, fieldwork site.

Populate and Perish?
Unit Length: Semester

Outline: The world's population has reached 7 billion. This elective examines a number of important questions concerning global population growth. Why is India's population growing while the populations of Japan and Italy are falling? How will these changes affect the quality of life for people in these countries in the future? What pressures will the growing population place on the natural environment? Closer to home, we also examine what is being done to plan for Melbourne's future growth. You will also have the opportunity to participate in a fieldwork trip and further develop your skills in geographical investigation.
Key Skills: Research, presenting and interpreting data such as maps and graphs, conducting fieldwork.
Assessment: Research, fieldwork report, data presentation and analysis tasks, examination.
Resources: Atlas, class sets, online resources, resource centre, audio visual material, fieldwork site.

Philosophy
Unit Length: Semester

Outline: How should I live? What is a good life? What is fate? What is truth? Students examine life's big questions, and are introduced to the philosophical ancestry of western culture. Students are introduced to the ideas and learn the historical significance of key thinkers such as Socrates, Epicurus, Nietzsche and Peter Singer, and debate the role that philosophy plays in modern society. They also study the role that both faith and reason play in creating our understanding of the world.
Key Skills: Conceptual understanding, analysis, application of philosophical arguments to practical life.
Assessment: Research, oral presentations, class discussion, examination.
Resources: Alain de Botton The Consolation of Philosophy, selected readings, film and art references.
HUMANITIES (COMMERCE)

Year 10 Foundation Accounting
Unit Length: Semester

Outline: Students will learn to record and report accounting transactions for a business.
Key Skills: Recording transactions into journals and ledgers, preparing reports for profit, cash flow and the financial position of the small business.
Assessment: A range of tests, examination.
Resources: Class exercises developed by the teacher, textbook.

Money Makes the World Go Round
Unit Length: Semester

Outline: Students learn the impact of global poverty and offer solutions to these problems. How do we interact with our worldwide neighbours, and trade with third world countries to help solve their problems? We look at creating a balance between economic growth and saving the planet, and discuss the economic issue of demand and supply.
Key Skills: Research and analyse data from countries around the world, understand and evaluate the importance of trade and its impact.
Assessment: Tests, assignments, research tasks, examination.
Resources: Teacher generated, online, guest speakers, film, textbook.

Dollars and Sense
Unit Length: Semester

Outline: Students explore the world of money and investments. What is money, where does it come from, how do we make it, and just as importantly, how do we keep it? Topics include budgeting, currency, the share market and property.
Key Skills: Budgeting, decision making, planning for long term investing, evaluation of the share market and property market, income tax calculations.
Assessment: Tests, assignment, share market report and the final examination.
Resources: Resources provided by the classroom teacher, guest speakers, textbook.

Mind Your Own Business
Unit Length: Semester

Outline: This subject examines how to establish a new business and list it on the stock exchange. Students will create their own business and elect to run the company as a management team. They look at how the business will react to the issues that confront management throughout the life of the business, develop an idea for a product/service, market, advertise, hire and fire employees, and take responsibility for decision making. This subject includes input from local business leaders.
Key Skills: Decision making, research, presenting and analysis of information.
Assessment: Success of the product/service, tests, research and analysis task, examination.
Resources: Class sets, online resources, Resource Centre, audiovisual material, local business.

PATHWAY>>>
Some students may be eligible to move from Year 10 Foundation Accounting to VCE Units 3 and 4 Accounting. This decision will be made by the Year 10 Foundation Accounting teacher, and will be based on work completed.
Learning a Language Other Than English (LOTE) contributes to the development of inter-culturally aware citizens through an understanding of languages, culture and humanity. Learning languages promotes and develops reflective, deep and creative thinking.

**French**

**Year 9 French**  
Unit Length: Full Year

**Outline:** Students develop their ability to speak, write and understand French through investigating a variety of French regions; their traditions, music, cuisine, landscapes and other aspects of culture which make each region so uniquely different. Students learn how to talk about their hometown, relationships with their family, professions, part-time jobs, and exchange programs.  
**Key Skills:** Speaking, listening, reading, and writing.  
**Assessment:** Oral presentations, tests, examination.  
**Resources:** Oxford School French Dictionary, Equipe Nouvelle 3 (Student Book and Workbook).

**Year 10 French**  
Unit Length: Full Year

**Outline:** Students develop their ability to speak, write and understand French through exploring France and the French speaking world. Students are involved in a range of activities, dealing with diverse topics including leisure activities, health and fitness, holidays, jobs, shopping and fashion.  
**Key Skills:** Speaking, listening, reading, and writing.  
**Assessment:** Oral presentations, tests, examination.  
**Resources:** Oxford School French Dictionary (Retain from Year 9), Equipe Dynamique – Higher (Student Book and Workbook).

**Indonesian**

**Year 9 Indonesian**  
Unit Length: Full Year

**Outline:** Students develop their ability to speak, write and understand Indonesian through learning how to order food at an Indonesian restaurant and describing leisure activities, the home and daily chores. This unit also involves becoming a fashion commentator, along with describing fashion trends and the weather.  
**Key Skills:** Speaking, listening, reading, and writing.  
**Assessment:** Oral presentations, tests, examination.  
**Resources:** Bagus Sekali! 2 Student Book and Workbook.

**Year 10 Indonesian**  
Unit Length: Full Year

**Outline:** Students develop their ability to speak, write and understand Indonesian through visiting the zoo and writing a report on the elephant village, which reflects the diversity of Indonesian wildlife. Students also explore the streets of Indonesia as a tourist, recognising key landmarks and then talking with their friends about the holiday.  
**Key Skills:** Speaking, listening, reading, and writing.  
**Assessment:** Oral presentations, tests, examination.  
**Resources:** Bagus Sekali! 2 Student Book and Workbook (Retain from Year 9).
Year 9 Japanese
Unit Length: Full Year

Outline: Students develop their ability to speak, write and understand Japanese through activities associated with travelling, fashion, shopping at a department store, eating out at a restaurant, karaoke, phone conversations, going on a date, and exploring traditions and festivals.

Key Skills: Speaking, listening, reading, and writing.
Assessment: Oral presentations, tests, examination.
Resources: *Ima! 2* Student Text and Workbook.

Year 10 Japanese
Unit Length: Full Year

Outline: Students develop their ability to speak, write and understand Japanese through investigating popular professional sports, personality traits, teenage interests, high tech Japan, popular trends, tourist resorts around Japan and Hiroshima.

Key Skills: Speaking, listening, reading, and writing.
Assessment: Oral presentations, tests, examination.
Resources: *Ima! 2* Student Text and Workbook (retain from Year 9); *Hai Ima!* Textbook and Workbook.

*Resources: In addition to the prescribed textbooks listed, CDs, videos, DVDs, worksheets, workshops, outside performances, etc. are used in LOTE subjects at Years 9 and 10.

PATHWAY>>
Language studies are sequential by nature; therefore, students are required to complete a full year of study in both Year 9 and Year 10 to establish the necessary skills to undertake a VCE language.
MATHEMATICS
YEAR 9

The following areas of study are the focus for the curriculum: Statistics and Probability, Number and Algebra, Measurement and Geometry. Emphasis is placed on the development of algebraic and graphing skills and there is a more formal approach to mathematical proof. Students carry out investigations and solve problems in familiar and unfamiliar contexts. The use of a CAS calculator is integrated into the course. Students will follow the course described by the National Curriculum.

Year 9 Mathematics
Unit Length: Full Year

Outline: Students develop their ability to use symbols to represent variables, to solve linear and simultaneous equations and to graph linear functions. They study expansion and factorisation and use the latter to solve quadratic equations. Pythagoras’ theorem and trigonometry are used to solve right-angled triangles. Students are introduced to, and manipulate expressions with, negative indices and surds. They investigate the measurement of complex shapes, including spheres, cones and pyramids. Tree diagrams and Venn diagrams are used to find the probability of compound events. Financial mathematics and their applications are explored. In Geometry, congruency and similarity of triangles is studied. Ways of using the graphing and algebraic capacity of CAS calculators to enhance understanding are investigated.

Key Skills: Knowledge and understanding of basic facts in routine and non-routine problems, communicating mathematical understanding, using a CAS calculator appropriately and efficiently.

Assessment: Application and analysis tasks, topic tests, examinations.

Resources: Essential Mathematics for the Australian Curriculum, Year 9, Casio Class Pad 330 calculator, worksheets.

Year 9 Accelerated Mathematics
Unit Length: Full Year

Outline: Students complete the standard Year 9 and Year 10 courses. They use Pythagoras’ theorem and trigonometry to solve right-angled triangles, and investigate the measurement of complex shapes, including spheres, cones and pyramids. They develop their ability to solve linear equations and to graph linear, quadratic and exponential functions, and study the expansion and factorisation of expressions. Quadratic functions, including those with irrational roots, are solved. The application of matrices to mathematical situations, the use of Venn and tree diagrams to find the probability of compound events, and negative and fractional indices are all introduced.

Key Skills: Knowledge and understanding of basic facts in routine and non-routine problems, communicating mathematical understanding, using a CAS calculator appropriately and efficiently.

Assessment: Application and analysis tasks, topic tests, examinations.

Resources: Essential Mathematics for the Australian Curriculum, Year 10 & 10A, Casio Class Pad 330 calculator, worksheets.

PATHWAY>>
A selection process exists for involvement in the Year 9 Accelerated Mathematics program. A specialised test, along with data from Year 8 tests and classwork, is used to determine which students are invited to participate in this course. Students are able to study VCE Mathematical Methods Units 1 and 2 as an area of study in Year 10 if the Year 9 Accelerated Mathematics program is completed at a high level.
Year 10 Mathematics
Unit Length: Full Year

Outline: The ability to solve linear equations and to graph linear functions is consolidated. Ideas of expansion and factorisation are extended and quadratic equations, including those with irrational roots, are solved. In trigonometry, students discover and prove identities and are introduced to the unit circle. The study of graphs is extended by the introduction of quadratic and exponential functions and Statistics, with an emphasis on continuous data and measures of spread. Fractional indices, the application of matrices to mathematical situations, and ideas concerning conditional probability are all introduced.

Key Skills: Knowledge and understanding of basic facts in routine and non-routine problems, communicating mathematical understanding, using a CAS calculator appropriately and efficiently.

Assessment: Application and analysis tasks, topic tests, examinations.


VCE Unit 1 & 2 Mathematical Methods (CAS)
Refer to Fintona VCE Handbook

VCE Unit 1 & 2 Foundation Mathematics
Unit Length: Full Year

Outline: In the unit Space, Shape and Design, students investigate the properties of two and three dimensional shapes and their representations. Patterns and Number covers the consolidation of mathematical operations with a focus on estimation, level of accuracy and rounding. In the unit of Handling Data, students study presenting and analysing statistical data, while the unit of Measurement investigates appropriate use and application of units of measurement.

Key Skills: Knowledge and understanding of basic facts, including measurement, estimation and calculation, identification of how mathematics can be used in everyday life, communication of mathematical ideas, use of technology to illustrate mathematical ideas.

Assessment: Application tasks, assignments, topic tests, examination.

Resources: Maths Quest VCE Foundation Mathematics, Casio Class Pad 330 calculator, worksheets, computer applications including Mathletics and Microsoft Excel.

MATHEMATICS PATHWAYS

YEAR 8  YEAR 9  YEAR 10  YEAR 11  YEAR 12
YEAR 8 MATHS  YEAR 9 MATHEMATICS  VCE FOUNDATION MATHS 1/2  GENERAL MATHS 1/2  FURTHER MATHS 3/4
ACCELERATED MATHEMATICS (YR 9/10)  YEAR 10 MATHEMATICS  VCE MATHS METHODS 1/2  MATHEMATICS METHODS 1/2  MATHEMATICS METHODS 3/4
MATHEMATICS PATHWAYS
VCE Units 1 & 2 Foundation Mathematics
In this course there is a strong emphasis on using mathematics in practical contexts which relate to everyday life as well as the needs and interests of the students. Students choosing this course are unable to complete Mathematical Methods (CAS) in Years 11 and 12.
Students continue their study of Science, exploring Science as a human endeavour and a way of understanding and explaining the world. They further hone their science inquiry skills and focus on strengthening their foundation in Biological, Chemical and Physical Science.

**Biological Sciences: Co-ordination of body systems**

**Outline:** Students study how multi-cellular organisms rely on coordinated and interdependent internal systems to respond to changes in their environment. The structure and function of the nervous and endocrine systems is explored in a bid to aid the investigation into the nature of responses to various stimuli. Special mention is made of the response of the body to changes as a result of the presence of micro-organisms. Modern medical diagnostic and treatment regimens are incorporated in the study the effects of exposure to electromagnetic radiations such as X-rays and microwaves.

**Key Skills:** Interpretation, observation, safe laboratory techniques, dissection, research, analysis, classification, evaluation, problem-solving, scientific report writing, digital technology use.

**Assessment:** Topic test, assignment, practical work and reports.

**Resources:** Prescribed textbook, Science Dimensions 3, Science Quest 3, Nature of Biology, Biology Two, Science Links 3, Science Dimensions 3, internet, body models, work sheets, DVDs, computer simulations, materials and equipment.

**Biological Sciences: Ecosystems**

**Outline:** Students use scientific concepts and models to explain the interdependence of populations of organisms and the environment. They investigate how ecosystems change as a result of events such as bushfires, drought and flooding and examine the effect of independent and dependent factors on population size. Students focus on how energy flows into and out of an ecosystem via the pathways of food webs, and how it must be replaced to maintain the sustainability of the system.

**Key Skills:** Observation, prediction, identification, analysis synthesis, evaluation, classification, research, interpretation, scientific report writing, use of digital media, fieldwork.

**Assessment:** Topic test, practical work and reports.

**Resources:** Prescribed textbook, Science Dimensions 3, Science Quest 3, Nature of Biology, Biology One, Science World 9, Science for Life 9, text questions, DVDs, internet, worksheets, materials and equipment, field excursion, computer simulation.

**Chemical Sciences**

**Outline:** Students are introduced to the Periodic Table, the atomic structure of the first 20 elements and natural radioactivity. The mass and charge of sub-atomic particles is compared. Students investigate factors that affect chemical changes and relate these to everyday situations. The significance of chemical reactions, including combustion and the reactions of acids, in both non-living and living systems is studied. A comparison of respiration and photosynthesis as biological processes is drawn. Energy transfer in terms of exothermic and endothermic reactions and the effect of combustion products on the environment is researched. A practical analytical project is undertaken, and chemical equations in words and symbols are completed.

**Key Skills:** Observation, record-keeping, making inferences, safe laboratory techniques, classification, manipulation, hypotheses, experimentation, research, analysis, synthesis, developing a flow chart, processing and analysing data, evaluating, scientific report writing, digital technology use.

**Assessment:** Topic test, practical work and reports, presentation of a project.

**Resources:** Prescribed Textbook, Science Dimensions 3, Science Quest 3, Beginning Chemistry, safety posters, DVDs, worksheets, materials and equipment, internet, computer modelling.
Earth and Space Sciences: Plate Tectonics

Outline: The theory of plate tectonics explains global patterns of geological activity and continental movement recognizing the major plates on a world map. Students research and relate the occurrence of earthquakes and volcanic activity to constructive and destructive plate boundaries and are required to model the sea-floor spreading. They consider the role of heat energy and convection currents in the movement of tectonic plates and relate the extreme age and stability of a large part of the Australian continent to its plate tectonic history.

Key Skills: Observation, record-keeping, making inferences, hypotheses, experimentation, research, manipulation of data, analysis, synthesis, processing and analysing data, evaluating, scientific report writing, digital technology use.

Assessment: Topic test, practical work and reports, presentation of a project.


Physical Sciences: Energy transfer by Waves, (sound and light) and electric circuits

Outline: Students explore the properties of waves, and situations where energy is transferred in the form of waves, such as sound and light. Using inquiry skills they study how and why the movement of energy varies according to the medium through which it is transferred; the structure and functions of the mammalian eye and ear are considered. Discussions of wave and particle models are employed to enhance an understanding of aspects of these phenomena. Furthermore, students investigate the transfer of heat in terms of convection, conduction and radiation, identify situations in which each occurs and discuss these phenomena in terms of the particle model. Factors that affect the transfer of energy through an electric circuit are introduced at this year level.

Key Skills: Spatial awareness, Observation, dissection, hypotheses, experimentation, research, manipulation of data, analysis, synthesis, processing and analysing data, evaluating, problem solving, manipulation of electrical circuitry, making inferences, scientific report writing, digital technology use, mathematical calculations.

Assessment: Test, problem-solving, experimental reports, notes, assignment.


Biological Sciences: Genetics

Outline: Students explore the genetic basis of heritance. This will involve comparing processes and outcomes, predicting offspring, and explaining pedigrees. First and second-hand data will be evaluated. Mutations as changes in DNA or chromosomes and the factors that contribute to causing mutations are described.

Key Skills: Observation, interpretation, evaluation, research, problem solving, application of knowledge to everyday situations, use of digital technologies.

Assessment: Test, chapter questions, practical work and reports, problem solving, written responses, oral presentation, assignment.

Resources: Prescribed Textbook, Science Quest 4, Nature of Biology Book 2, Life Study, Nature of Biology One, Nature of Biology 2, Genetics (Burns), guest speaker (Thalassemia Society), computer simulations, DVDs, worksheets, digital applications, internet, computer simulations, materials and equipment.
Biological Sciences: Evolution

Outline: The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence. Students investigate the theories of evolution. This will includes explaining the process of Natural Selection, evaluating evidence about the evolution of species, including fossil record, chemical and anatomical similarities, and geographical distribution of species. They investigate changes caused by natural selection in a particular population as a result of a specified selection pressure and relate genetic characteristics to survival and reproductive rates.

Key Skills: Concept mapping, research, problem solving, analysis, making inferences, use of digital technologies.

Assessment: Test, research work, poster, written responses.

Resources: Prescribed Textbook, Science Quest 4, Nature of Biology Book 1 & 2, Life Study, Biology 2, Genetics (Burns), computer simulations, DVDs, worksheets, internet, computer simulations, digital applications, materials and equipment.

Biological Sciences: Microbiology

Outline: Students will acquire knowledge and investigate types of micro-organisms, disease and decay, and infectious diseases (including the spread and prevention of diseases). The role of antibiotics and the immune system will be investigated.

Key Skills: Research, concept mapping and visual representation, classifying, problem solving, predicting, experimenting, observation, applying knowledge to everyday situations, scientific report writing.

Assessment: Test, research work, poster, practical work and reports, problem solving activities, written reports, oral presentation, assignment.

Resources: Science Quest 4, Nature of Biology Book 2, Biology 3&4, Biology 2, DVD’s, excursion (Yakult factory or Domain Chandon or Carlton Brewery), materials and equipment, internet.

Chemical Sciences

Outline: Students continue to develop their knowledge of chemistry, including atoms and ions, and the characteristics of groups of elements in the Periodic Table, along with the table's structure. The mass and charge of sub-atomic particles is compared and natural radioactivity is explored. Students investigate factors that affect chemical changes and relate these to everyday situations. The significance of chemical reactions, including combustion and the reactions of acids, in both non-living and living systems is studied. The chemical activity of metals is researched. Students explore the benefit of chemistry to society when producing a range of substances such as pharmaceuticals, fuels and metals. A comparison of respiration and photosynthesis as biological processes is drawn. Energy transfer in terms of exothermic and endothermic reactions and the effect of combustion products on the environment is researched. A practical analytical project is undertaken, and the ability to represent and interpret chemistry through symbols and words is developed.

Key Skills: Observation, record-keeping, making inferences, safe laboratory techniques, classification, manipulation, hypotheses, experimentation, research, analysis, synthesis, developing a flow chart, processing and analysing data, evaluating, scientific report writing, digital technology use.

Assessment: Test, model, problem solving activities, oral presentation, experimental projects, assignment.

Resources: Prescribed textbook, Science Quest 4, Beginning Science, Chemistry for Year 11, online resources, computer simulations, DVDs, materials and equipment.
Earth and space sciences: The Universe

Outline: The universe contains features including galaxies, stars and solar systems and the Big Bang theory can be used to explain the origin of the universe. Students identify the evidence supporting the Big Bang theory, such as Edwin Hubble’s observations and the detection of microwave radiation. They learn that the age of the universe can be derived using knowledge of the Big Bang theory and aim to become proficient at describing how the evolution of the universe, including the formation of galaxies and stars, has continued since the Big Bang.

Key Skills: Modelling, observation, research, concept mapping, problem solving, interpretation, evaluation, scientific report writing, use of digital technologies.

Assessment: Test, assignment.

Resources: Prescribed textbook, Science Quest 4, Beginning Science, Chemistry for Year 11, Resource Centre, online resources, computer simulations, DVDs.

Physical sciences: Energy Conservation including Electricity

Outline: Students are familiarised with the Law of Conservation of Energy which explains that total energy is maintained in energy transfer and transformation. They use models to describe how energy is transferred and transformed within systems and recognise that in energy transfer and transformation, a variety of processes can occur, so that the usable energy is reduced and the system is not 100% efficient. A comparison of energy changes in interactions such as car crashes, pendulums, lifting and dropping is made. Factors that affect the transfer of energy through an electric circuit are introduced at this year level.

Key Skills: Experimentation, observation and analysis, applying knowledge, evaluation, numerical modelling, modelling, use of digital technologies, report writing.

Assessment: Topic test, practical work and reports.


Physical Sciences: Waves (sound and light)

Outline: Students explore the properties of waves, and situations where energy is transferred in the form of waves, such as sound and light. Using inquiry skills they study how and why the movement of energy varies according to the medium through which it is transferred; the structure and functions of the mammalian eye and ear are considered. Discussions of wave and particle models are employed to enhance an understanding of aspects of these phenomena. Furthermore, students investigate the transfer of heat in terms of convection, conduction and radiation, identify situations in which each occurs and discuss these phenomena in terms of the particle model.

Key Skills: Spatial awareness, Observation, dissection, hypotheses, experimentation, research, manipulation of data, analysis, synthesis, processing and analysing data, evaluating, problem solving, manipulation of electrical circuitry, making inferences, scientific report writing, digital technology use, mathematical calculations.

Assessment: Test, problem-solving, experimental reports, notes, assignment.

Physical Sciences: Motion

Outline: Students study inertia, velocity and acceleration, both graphically and using formulae. The effects of different forces in collisions and when driving a car are investigated and analysed. Students are required to apply Newton's second and Third Laws of Motion to everyday phenomena. From this information, the safety features of a car can be understood. The different forces required for flight are also studied.

Key Skills: Safe experiment techniques, collecting and recording data, drawing and interpreting graphs, problem solving, applying knowledge and performing mathematical calculations.

Assessment: Test, experimental reports, notes.

Resources: Prescribed textbook, Science Quest 4, provided notes, DVDs, experimental and demonstration equipment, digital technologies, internet, computer simulations.

Earth and Space Sciences: Plate Tectonics

Outline: The theory of plate tectonics explains global patterns of geological activity and continental movement recognising the major plates on a world map. Students research and relate the occurrence of earthquakes and volcanic activity to constructive and destructive plate boundaries and are required to model the sea-floor spreading. They consider the role of heat energy and convection currents in the movement of tectonic plates and relate the extreme age and stability of a large part of the Australian continent to its plate tectonic history.

Key Skills: Observation, record-keeping, making inferences, hypotheses, experimentation, research, manipulation of data, analysis, synthesis, processing and analysing data, evaluating, scientific report writing, digital technology use.

Assessment: Topic test, practical work and reports, presentation of a project.


PATHWAY>>

A selection process exists for involvement in the Year 9 Advanced Science curriculum. Assessment data from Year 7 and 8 Science studies, ICAS testing and STS results are used to determine which students are suited to involvement in this course. Students study VCE Biology in Year 10 once the Year 9 Advanced Science curriculum is successfully completed.
Biological Sciences: Genetics

Outline: Students explore the genetic basis of heritance. This will involve comparing processes and outcomes, predicting offspring, and explaining pedigrees. First and second-hand data will be evaluated. Mutations as changes in DNA or chromosomes and the factors that contribute to causing mutations are described.

Key Skills: Observation, interpretation, evaluation, research, problem solving, application of knowledge to everyday situations, use of digital technologies.

Assessment: Test, chapter questions, practical work and reports, problem solving, written responses, oral presentation, assignment.

Resources: Prescribed Textbook, Science Quest 4, Nature of Biology Book 2, Life Study, Nature of Biology One, Nature of Biology 2, Genetics (Burns), guest speaker (Thalassemia Society), computer simulations, DVDs, worksheets, digital applications, internet, computer simulations, materials and equipment.

Biological Sciences: Evolution

Outline: The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence. Students investigate the theories of evolution. This will include explaining the process of Natural Selection, evaluating evidence about the evolution of species, including fossil record, chemical and anatomical similarities, and geographical distribution of species. They investigate changes caused by natural selection in a particular population as a result of a specified selection pressure and relate genetic characteristics to survival and reproductive rates.

Key Skills: Concept mapping, research, problem solving, analysis, making inferences, use of digital technologies.

Assessment: Test, research work, poster, written responses.

Resources: Prescribed Textbook, Science Quest 4, Nature of Biology Book 1 & 2, Life Study, Biology 2, Genetics (Burns), computer simulations, DVDs, worksheets, internet, computer simulations, digital applications, materials and equipment.

Biological Sciences: Science: Microbiology

Outline: Students will acquire knowledge and investigate types of micro-organisms, disease and decay, and infectious diseases (including the spread and prevention of diseases). The role of antibiotics and the immune system will be investigated.

Key Skills: Research, concept mapping and visual representation, classifying, problem solving, predicting, experimenting, observation, applying knowledge to everyday situations, scientific report writing.

Assessment: Test, research work, poster, practical work and reports, problem solving activities, written reports, oral presentation, assignment.

Resources: Science Quest 4, Nature of Biology Book 2, Biology 3&4, Biology 2, DVDs, excursion (Yakult factory or Domain Chandon or Carlton Brewery), materials and equipment, internet.
Chemical Sciences

Outline: Students continue to develop their knowledge of chemistry, including atoms and ions, and the characteristics of groups of elements in the Periodic Table, along with the table's structure. The chemical activity of metals is researched. Students explore the benefit of chemistry to society when producing a range of substances such as pharmaceuticals, fuels and metals. They investigate the effect of a range of factors, such as temperature and catalysts, on the rate of chemical reactions. The ability to represent and interpret chemistry through symbols and words is developed.

Key Skills: Modelling, experimentation, research, flow charts, concept mapping, problem solving, record keeping, scientific report writing, observation, interpretation and evaluation, use of digital technologies.

Assessment: Test, model, problem solving activities, oral presentation, experimental projects, assignment.

Resources: Prescribed textbook, Science Quest 4, Beginning Science, Chemistry for Year 11, online resources, computer simulations, DVDs, materials and equipment.

Earth and space sciences: Evolution of the Universe

Outline: The universe contains features including galaxies, stars and solar systems and the Big Bang theory can be used to explain the origin of the universe. Students identify the evidence supporting the Big Bang theory, such as Edwin Hubble's observations and the detection of microwave radiation. They learn that the age of the universe can be derived using knowledge of the Big Bang theory and aim to become proficient at describing how the evolution of the universe, including the formation of galaxies and stars, has continued since the Big Bang.

Key Skills: Modelling, observation, research, concept mapping, problem solving, interpretation, evaluation, scientific report writing, use of digital technologies.

Assessment: Test, assignment.

Resources: Prescribed textbook, Science Quest 4, Beginning Science, Chemistry for Year 11, Resource Centre, online resources, computer simulations, DVDs.

Earth and space sciences: Global systems

Outline: Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere. Students investigate how human activity affects global systems. They are required to model one of the biogeochemical cycles, such as water, carbon, nitrogen or phosphorus cycle within the biosphere. Climate change and the effect on sea levels and long-term effect of biodiversity loss are considered. Current changes to permafrost and sea ice and the impacts of these changes are debated. Students are required to explain the causes and effects of the greenhouse effect. The factors that drive deep ocean currents, their role in regulating global climate and their effects on marine life are researched.

Key Skills: Modelling, observation, research, concept mapping, problem solving, interpretation, evaluation, scientific report writing, use of digital technologies.

Assessment: Test, assignment.

Resources: Prescribed textbook, Science Quest 4, Beginning Science, Nature of Biology Book 2, Resource Centre, online resources, computer simulations, DVDs, materials.
Physical sciences: Energy Conservation

Outline: Students are familiarised with the Law of Conservation of Energy which explains that total energy is maintained in energy transfer and transformation. They use models to describe how energy is transferred and transformed within systems and recognise that in energy transfer and transformation, a variety of processes can occur, so that the usable energy is reduced and the system is not 100% efficient. A comparison of energy changes in interactions such as car crashes, pendulums, lifting and dropping is made.

Key Skills: Experimentation, observation and analysis, applying knowledge, evaluation, numerical modelling, modelling, use of digital technologies, report writing.

Assessment: Topic test, practical work and reports.


Physical Sciences: Electricity

Outline: Students construct series and parallel circuits and explore the function of different electrical and electronic components. Current, voltage, resistance and power are defined. Calculations involving these quantities are performed using Ohm’s Law and the power formula. Examples of household electricity use and electricity bills are considered which inform ways to conserve electrical energy. Students learn about electrical safety and the effects of electric shocks. Electromagnets and the links between electricity and magnetism are studied.

Key Skills: Experimentation (including the use of digital multimeters), observation and analysis, numerical modelling.

Assessment: Topic test, practical work and reports, assignment, examination.

Resources: Prescribed textbook, Science Quest 4, provided notes, DVDs, experimental and demonstration equipment, digital technologies, internet, computer simulations.

Physical Sciences: Motion

Outline: Students study inertia, velocity and acceleration, both graphically and using formulae. The effects of different forces in collisions and when driving a car are investigated and analysed. Students are required to apply Newton’s first and second Laws of Motion to everyday phenomena. From this information, the safety features of a car can be understood. The concepts of power, work and energy transformations in motion are studied so that students can distinguish between the scientific definitions of these terms and their colloquial use. The formulae connecting these concepts are applied to energy changes in interactions and the rate at which these changes occur.

Key Skills: Safe experiment techniques, collecting and recording data, drawing and interpreting graphs, problem solving, applying knowledge and performing mathematical calculations.

Assessment: Topic test, practical work and reports, assignment, examination.

Resources: Prescribed textbook, Science Quest 4, provided notes, DVDs, experimental and demonstration equipment, digital technologies, internet, computer simulations.
We live in a technological world where information and communication technologies are fundamental to many activities. Technology involves the application of knowledge, experience and resources to create products and processes. Students are required to conceptualise, build and problem solve as they design and create.

**Challenge 20/20**
Unit Length: Semester

**Outline:** Students will connect, collaborate and work with students from schools in America and other countries to collect, research, collaborate, understand and search for local solutions to one of 20 global problems. Blogs, wikis discussion boards, Skype, social media and multimedia will be used to communicate with other students and as a forum for communication with a wider audience.

**iBiz**
Unit Length: Semester

**Outline:** In this unit students learn the skills required to successfully run an online business. They will be involved in product selection and website creation. Following this, students will study a variety of online channels to sell and distribute their products and select an appropriate channel to sell their products. Assessment is based on practical work including website design and operability, successful business plan and distribution. There is no exam in this subject.
MULTI-DISCIPLINARY

The Multi-Disciplinary curriculum offerings aim to allow students to explore a unit from a range of perspectives. The units have been designed to ensure students develop core knowledge and skills, whilst providing the opportunity to understand that events and issues are not isolated, but rather are interconnected and can be viewed in different ways.

Forensic Science
Unit Length: Semester

Outline: Students explore the work of a forensic scientist, learn how scientific evidence utilising psychology, biology, chemistry, physics and mathematics is gathered, and are given the opportunity to use forensic techniques in the classroom. The legal process is introduced using real crimes as case studies.

Key Skills: To gather data, think critically and logically about evidence, construct and analyse alternative explanations, communicate scientific arguments.

Assessment: Topic tests, practical work, extended project, worksheets, examination.

Resources: Computer programs, DVDs, internet, guest speakers and books pertaining to Forensics.

PATHWAY>>
Forensic Science extends student knowledge in the areas of Science and Legal studies.

Year 10 Psychology
Unit Length: Semester

Outline: Students will develop an understanding of themselves and their relationship with others and their society through the study of this unit. Human behaviour will be explored from biological, cognitive and social perspectives. Students will examine and apply the ethical principles of scientific research by examining significant psychological case studies and by designing and conducting their own research.

Key Skills: Developing hypotheses, conducting psychological research, thinking critically, concept mapping and visual representations, applying knowledge to everyday situations.

Assessment: Topic tests, practical work, research reports, extended investigation, examination.

Resources: Computer programs, DVDs, internet, books pertaining to Psychology, guest speakers.

PATHWAY>>
Year 10 Psychology extends student knowledge in the Humanities, Health and Science areas, and provides a valuable background for students considering VCE Psychology.