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Introduction
Welcome to the VCE Subject Information Guide 2016 and welcome to another point in the process of selecting and undertaking your VCE program to access your career pathways.

Whether you are currently in Year 10 and are choosing the next two years of your VCE program or in Year 11 and refining your choices for your Year 12 program we remind you of some important considerations.

- Revisit advice given in sessions with Mr Maughan our Careers Counsellor. Choose subjects and areas that you are good at and that you enjoy.
- Consider any prerequisite studies or recommended studies for courses to access your career pathways. Do your homework with research into those career pathways.
- Talk to and seek advice from your parents and adult friends, teachers and careers counsellor and students who have undertaken subjects you are thinking about. This is one of the best ways to clarify your thinking and make a good decision.

A VCE Beyond Boundaries
At Cornish College we aim to tailor individual courses for each student in order to meet the needs of their career pathway choices. This may mean students accessing face to face style delivery of curriculum on campus, or accessing courses at other educational institutions, or undertaking courses online or through Distance Education with the support of a Learning Coach here at school, or participating in a blended learning environment of face to face and online learning under the guidance of a Cornish teacher.

As much as possible our students are not restricted by timetable constraints, course restrictions, mode of delivery, or other boundaries. Cornish College delivers a VCE Beyond Boundaries.

VCE – an Introduction
The Victorian Certificate of Education (VCE) is the certificate that the majority of students in Victoria receive on satisfactory completion of their secondary education. The VCE provides diverse pathways to further study or training at university or TAFE or private providers and to employment.

Structure of the Certificate
Studies are made up of units numbered 1, 2, 3 or 4. Each unit is taken over a semester.

Units 1 and 2 are designed at a Year 11 standard but they can be taken by students in Years 10, 11 or 12. They may be taken separately or in sequence. Currently, all our Year 10 students undertake Units 1 & 2 Australian and Global Politics as part of their Global Sustainability studies in Year 10.

Units 3 and 4 are designed to be at a Year 12 standard but they may also be taken by students in Year 11. Units 3 and 4 must be taken as a sequence.

To complete the Victorian Certificate of Education students are required to satisfactorily complete at least:

- 16 units of study
- three units of English or Literature (with at least one unit at 3 and 4 level)
- 3 sequences of Unit 3 and 4 studies (6 units) in addition to English/Literature.

Over the senior school years, most students will study 22 - 26 units. In general the 24 units will consist of 2 units taken in Year 10, 12 units taken in Year 11 followed by 10 units in Year 12. This includes the compulsory English/Literature units.

All units are designed to take the same amount of study time which is one semester or approximately 50 to 60 hours of class time plus 40 to 50 hours of out of class time.

Students may enter studies at Units 1, 2 or 3. Students must undertake Unit 3 of a study before entering Unit 4 of that study.

Assessment in the VCE
Unit Outcomes form the basis for satisfactory completion of VCE units. Each VCE unit includes a set of Outcomes. All Outcomes must be achieved for satisfactory completion of the given unit.

At Units 1 and 2 level the Victorian Curriculum and Assessment Authority (VCAA) requires the school to only report on the satisfactory (S) or not satisfactory (N) completion of units undertaken by each student.

At Units 3 and 4 level all studies have both school based assessment (either School Assessed Coursework (SAC) or School Assessed Tasks (SAT)) as well as external examinations. The VCAA require schools to report on the S or N status of each unit completed as well as results for SACs and/or SATs.

SACs are tasks written by the classroom teacher, taken over a short timeframe with classroom supervision. They can include a range of tasks including essays, reports, tests and case studies. Marks for SACs are moderated against external examination results and the General Achievement Test (GAT). SATs are usually practical tasks in the Arts and Technology subjects completed over a longer period of time.

External examinations for Unit 3 and 4 are conducted under rules of the VCAA in October and November each year.
VETiS - Vocational Education and Training in Schools

VETiS programs are vocational training programs approved by the VCAA and lead to nationally recognised qualifications. Students undertaking a VETiS program have the opportunity to receive both a senior secondary qualification (VCE) and a nationally portable VET qualification. The following table lists the VETiS Programs available.

All VETiS programs provide credit towards the VCE. Most VETiS programs provide credit at Units 1 to 4 level. However, some programs provide credit at Units 1 and 2 level only. Some VETiS programs allow students at the end of the course to undertake an assessment set by the VCAA which allows for provision of a Study Score.

| Agriculture, Horticulture, Conservation and Land Management | Certificate II in Agriculture  
| Certificate II in Conservation and Land Management  
| Certificate II in Horticulture |
| Animal Studies | Certificate II in Animal Studies |
| Applied Fashion Design and Technology | Certificate II in Applied Fashion Design and Technology |
| Automotive | Certificate II in Automotive Technology Studies |
| Building and Construction | Certificate II in Building and Construction |
| Business* | Certificate II in Business |
| Community Services* | Certificate II in Community Services |
| Dance* | Certificate II in Dance |
| Engineering Studies* | Certificate II in Engineering Studies |
| Equine Studies* | Certificate II in Equine Studies |
| Furnishing* | Certificate II in Furniture Making |
| Health | Certificate II in Health Support Services  
| Certificate III in Allied Health Assistance  
| Certificate III in Health Support Assistance |
| Hospitality* | Certificate II in Hospitality  
| Certificate II in Hospitality (Kitchen Operations)  
| Certificate III in Catering Operations |
| Information and Communications Technology* | Certificate II in Information Digital Media and Technology |
| Integrated Technologies* | Certificate II in Integrated Technologies |
| Interactive Digital Media* | Certificate II in Creative Industries (Media)  
| Certificate III in Media |
| Laboratory Skills* | Certificate III in Laboratory Skills |
| Music* | Certificate II in Music  
| Certificate III in Music  
| Certificate III in Technical Production |
| Small Business | Certificate II in Small Business |
| Sport and Recreation* | Certificate II in Sport and Recreation  
| Certificate II in Outdoor Recreation  
| Certificate III in Sport and Recreation |

* indicates scored VCE VETiS Program

Please speak with Mr Maughan to explore specific courses and possibilities, if you are interested.

VETiS courses attract additional student fees.
Cross Year Studies and Enhancement Studies

Cross Year Studies are those where a student studies a subject at a higher or lower level than their normal year. As part of their Global Sustainability subject, all Year 10 students have undertaken a cross year study of Australian and Global Politics Units 1 and 2. The timetable structure in 2016 for Years 11 and 12 enables cross year studies. A Year 11 student may study one unit 3 and 4 sequence while all other subjects are at the unit 1 and 2 level. The decision to study at another level needs to be taken carefully and only after appropriate processes are followed. Students interested in this option should consult their teachers, speak with their parents and obtain and complete an Expression of Interest for Cross Year Studies form from the VCE Coordinator. Factors to be considered include attitude, behavior, academic results, time management skills, maturity, past experiences, work habits, career pathway and future course needs.

Units 3 and 4 available for study at Year 11 are:

- Business Management
- Global Politics
- Biology
- Legal Studies
- Health and Human Development
- History
- Outdoor and Environmental Studies
- Psychology
- Theatre Studies

VCE Enhancement Studies provide highly able students with the opportunity to extend their interest in a subject by undertaking the study of a first year University subject in Year 12. This can be intellectually rewarding and will count as a VCE study.

Enhancement Studies are equivalent in content and assessment to one first year university study in that discipline and will allow the successful student to proceed to second year study in that discipline at university. Students are selected by the School to participate in an Enhancement Studies program. To be eligible a student must:

- be judged as an excellent student having demonstrated exceptional achievement in Units 1 and 2 of the selected discipline.
- be assessed as being likely to achieve a VCE study score greater than 40 in Units 3 and 4 of the selected discipline.
- take Units 3 and 4 of the selected discipline at the same time as the university study, or in some cases in the previous year.
- demonstrate the ability to undertake the study without adversely affecting their other VCE work.

Please speak with the VCE Coordinator or Senior Years Team Leader if you are interested in either Cross Year Studies or Enhancement Studies.

Blended Learning Units

In 2014 Cornish College, in partnership with Kingswood College and Billanook College began developing material for the blended learning mode of delivery of VCE Units 1&2 Biology, Business Management and Physics. In 2015 the pilot program is being delivered to students across the three schools providing students with experience in a flexible learning environment, similar to what is often offered by tertiary institutions. A blended learning approach will continue into 2016 for Units 1&2 Biology, Business Management and Physics.

Blended learning provides for a combination of face to face learning and online learning during the 11 periods with the teacher in the classroom environment across our two week timetable cycle. The formalised development of resources and learning experiences at this VCE level provides for a well-supported and differentiated learning experience.

The learning model sees a focus on

- individual support and personalisation,
- increased teacher facilitation and hands-on learning and
- increased flexibility in the way students receive direct instruction and learning activities
- developing online learning competencies for future studies

The blended learning experience across three schools has the potential to not only extend student access to resources, teachers and students across the three schools but also extend learning opportunities with peers outside of school.

Please speak with Dr Peter Morgan (Biology), Mrs Nancye Banks (Business Management) or Mr Mark Byrne (Physics) for more information.
VCE Course Selection

Pre-requisite studies are subjects that must be completed at VCE before you can be considered for entrance to certain university courses. Pre-requisite studies for all Victorian university courses are set out in Victoria Tertiary Admissions Centre’s *Victorian Tertiary Entrance Requirements (VicTER)* 2017 or 2018 publications, depending on when you are applying for tertiary courses – follow the link on the VTAC website at www.vtac.edu.au. It is a good idea to register for *CoursesLink* on the VTAC website to assist you in keeping track of tertiary courses you are interested in.

Make sure you have checked all the prerequisite and recommended studies for your career options and include them in your program. If unsure, seek advice.

You may select a program that has a specific orientation (eg. Sciences, Arts, Business), or one of a more general nature. It is strongly recommended that you select at least two units of Mathematics where possible as this maintains the widest range of future course options.

Course Selection Process

- Read this Guide.
- Attend Information Evening on 21 May 2015 and speak with teachers.
- Consult with Mr Maughan and explore career options through the Job Guide (available online to students or hard copy), CoursesLink (on the VTAC website) and the VICETER website for tertiary entry.
- Make choices and check with teachers and VICETER required studies.
- Submit your proposed choices by Friday 29 May 2015.
- Individual student consultation on subjects chosen with Mr Maughan (Year 10 students 9-12 June, Year 11 students 15-19 June)
- Blocking of subjects for the timetable in order to minimise clashes between classes (22 June – 14 July).
- Individual consultation is held between 15 July and 31 July to find solutions to any clashes.
- Confirmation letter of individual student course for 2016 by Friday 7 August 2015.

More information on the VCE with details on areas such as assessment, attendance, rules and regulations will be available in the *Student VCE Information Booklet* later this year.

This guide contains an outline of all units offered to students for 2016. Please note that there may not be a class on campus for all units in 2016. Student choice and available resources will determine the combination of units conducted on campus.

We wish you well in this process and encourage you to speak with many people to find out more about the courses you may choose and the options you have in order to make the best choice for you.

Mark Byrne  
Senior Years Team Leader

Deborah Jones  
VCE Coordinator
English

Introduction
The VCE English course aims to enable all students to develop their critical understanding and control of the English language so that they can use it in a wide range of situations, from the personal and informal to more public and formal contexts. Students will develop competence in written and spoken English that is adequate for the demands of post-school employment, further education, and participation in a democratic society. Classroom activities in English are designed to advance students' skills of reading, writing, speaking, listening and thinking. Study of literary and media texts forms the basis of all four VCE units, including two set texts in each semester and additional independent reading. Correct use of the conventions of spelling, punctuation and syntax of Standard Australian English is essential to success in Units 1 to 4 VCE English.

In 2016 there will be a change to the study design for English. The new study design will be phased in with Units 1 and 2 beginning in 2016 and Units 3 and 4 beginning in 2017. Students undertaking Units 3 and 4 in 2016 will use the current study design.

Units 1 and 2 (new study design commences in 2016)
Unit 1 emphasises students' reading of a range of texts with comprehension, enjoyment and discrimination, the development of their competence and confidence in writing, and the use of and responses to oral language in different contexts. Unit 2 exposes students to an expanded range of text types and extends written communication skills across a variety of genres.

Areas of Study
Unit 1 Reading and creating texts: In this area of study students explore how meaning is created in a text. Students identify, discuss and analyse decisions authors have made. The texts set as the focus of this area of study may be fiction or non-fiction and presented in written, spoken or multimodal forms. Students consider the similarities and differences between texts, developing awareness that some features are specific to texts, while others are similar across texts.

Students develop the ability to respond to texts in written and spoken and/or multimodal forms. They develop analytical responses dealing with the ways in which texts convey meaning and various points of view on key issues. They use planning and drafting to test and clarify their ideas, and editing for clear and coherent expression. They include textual evidence appropriately and craft their writing for convincing and effective presentation.

In developing creative responses to texts, students explore how purpose and audience affect the choices they make as writers in developing ideas and planning work, making choices about structure, conventions, and language to develop voice and style. They practise the skills of revision, editing and refining for accuracy and stylistic effect.

Analysing and presenting argument: In this area of study students focus on the analysis and construction of texts that attempt to influence an audience. Students read a range of texts that attempt to position audiences in a variety of ways. They explore the use of language for persuasive effect and the structure and presentation of argument. They consider different types of persuasive language, including written, spoken, and visual, and combinations of these, and how language is used to position the reader.

In considering the presentation of arguments in oral form, students also learn about the conventions of oral communication for persuasive purposes. Students consider the persuasive impact of tone, diction and audience engagement in the presentation of a viewpoint. They practise their listening and speaking skills through discussion and debate, developing their own arguments and critiquing the arguments of others.

Students practise written analysis of the presentation of argument and the use of language to position the intended audience. They craft and present reasoned, structured and supported arguments and experiment with the use of language to position audiences. In developing an argument or analysis, they draft, revise and edit to clarify and critique their thinking, and for technical accuracy, coherence, persuasive effect and quality of evidence.

Unit 2:
Reading and comparing texts: In this area of study students explore how comparing texts can provide a deeper understanding of ideas, issues and themes. They investigate how the reader's understanding of one text is broadened and deepened when considered in relation to another text. Students explore how features of texts, including structures, conventions and language convey ideas, issues and themes that reflect and explore the world and human experiences, including historical and social contexts.

Students produce a written comparison of selected texts, discussing important similarities and differences, and exploring how the texts deal with similar or related ideas, issues or themes from different perspectives. They develop an understanding of the choices available to writers and creators of texts, and the ways in which comparing texts can offer an enriched understanding of ideas, issues or themes. They use the features of written analysis and textual evidence soundly and appropriately, dealing in detail with the ideas
encountered in the texts. They draft, revise, edit and refine for technical accuracy, and for clear, coherent and effective presentation of the insights gained through comparison.

**Analyzing and presenting argument:** In this area of study students build on their understanding of argument and the use of persuasive language in texts that attempt to influence an audience. Students consider a range of texts where the primary purpose is to convince an audience to share a point of view. They develop an understanding of how texts are constructed for specific persuasive effects by identifying and discussing the impact of argument and persuasive language used to influence an audience.

In addition to developing critical analysis of the use of language and the presentation of argument in texts, students practise presenting arguments and points of view in writing. They draft, revise and edit their writing to clarify and critique their thinking, and for precision and coherence in argument and quality of evidence. They craft for persuasion using a range of language features intended to position an audience to share the point of view expressed. They use the features of texts appropriately and include accurate referencing and acknowledgment.

**Assessment**

The award of satisfactory completion for Units 1 and 2 is based on a decision that the student has demonstrated achievement of the above outcomes specified for the unit. This decision is based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit. Assessment tasks are graded on an A+ to UG scale. Further assessment occurs through the mid-year and end of year examinations.

**Units 3 and 4 (new study design commences in 2017)**

In order to satisfy the requirements of Year 12 VCE English, students must complete Units 3 and 4. In these units assessment is supervised by the VCAA and is more structured than for Units 1 and 2. For school-assessed coursework, assessment tasks are prescribed. The contribution that each task makes to the total school-based coursework is also stipulated. The three-hour examination at the end of the year contributes 50% of the student's score for the subject.

In Units 3 and 4, students extend on the competencies of writing, reading, speaking and listening developed in Year 11. They read and respond both orally and in writing to a range of texts, analysing how authors create meaning and the different ways in which texts can be interpreted. Students develop their writing skills by exploring ideas suggested by their reading within the chosen context, and the ability to explain choices they have made as authors in relation to form, purpose, language, audience and context.

**Areas of Study Units 3 and 4**

**Reading and creating texts:** In this area of study students identify, discuss and analyse how the features of selected texts create meaning and how they influence interpretation. In identifying and analysing explicit and implied ideas and values in texts, students examine the ways in which readers are invited to respond to texts. They develop and justify their own detailed interpretations of texts.

Students prepare sustained analytical interpretations of selected texts, discussing how features of the texts create meaning and using textual evidence to support their responses. They use planning and drafting to test and clarify their ideas, and editing to produce clear and coherent expression. They craft their writing for convincing and effective presentation.

Students present sustained creative responses to selected texts, demonstrating their understanding of the world of the texts and how texts construct meaning. In developing a creative response they explore issues of purpose and audience and make key choices about structure, conventions and language. They develop a credible and effective voice and style and use the chosen features of the selected text, for example characters, narrative or dialogue, to offer an interpretation of the selected text. They produce and share drafts, practising the skills of revision, editing and refining for stylistic and imaginative effect.

**Analyzing argument:** In this area of study students analyse and compare the use of argument and language in texts that debate a topical issue. The texts must have appeared in the media since 1 September of the previous year. Students read and view media texts in a variety of forms, including print, non-print and multimodal, and develop their understanding of the way in which language and argument complement one another in positioning the reader.

Considering information about the purpose, audience and context of a text, students explore the argument of a persuasive piece, and the way written, spoken and visual language is used. In considering these, students examine the ways that persuasive language is used to express an argument and how this may strengthen or detract from the intended impact of a text.

Students develop written and spoken critical analyses of the use of argument and language in written, spoken, and/or multimodal texts, including analysis of the quality of the reasoning presented and the use of features intended to position audiences. They compare different written texts presenting argument on similar ideas or issues, considering different ways authors use language to express arguments. They produce drafts and practise the skills of revision and editing for clarity and coherence in analysis and accuracy in the use of language.

**Assessment**

<table>
<thead>
<tr>
<th>Units 1 and 2</th>
<th>A variety of work related to outcomes is assessed by the school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 3</td>
<td>School assessed coursework</td>
</tr>
<tr>
<td>Unit 4</td>
<td>School assessed coursework</td>
</tr>
<tr>
<td>Units 3 and 4</td>
<td>Examination</td>
</tr>
</tbody>
</table>
Literature

Introduction

In VCE Literature students undertake close reading of the texts and analyse how language and literary elements and techniques function within a text. Emphasis is placed on recognition of a text’s complexity and meaning, and on consideration of how that meaning is embodied in its literary form. The study provides opportunities for reading deeply, widely and critically, responding analytically and creatively, and appreciating the aesthetic merit of texts.

VCE Literature enables students to examine the historical and cultural contexts within which both readers and texts are situated. It investigates the assumptions, views and values which both writer and reader bring to the texts and it encourages students to contemplate how we read as well as what we read. It considers how literary criticism informs the readings of texts and the ways texts relate to their contexts and to each other.

VCE Literature provides opportunities for students to develop their awareness of other people, places and cultures and explore the way texts represent the complexity of human experience. Students examine the evolving and dialogic nature of texts, the changing context in which they were produced and notions of value. They develop an understanding and appreciation of literature, and an ability to reflect critically on the aesthetic and intellectual aspects of texts.

The study of Literature enables students to consider the power and complexity of language, the ways literary features and techniques contribute to meaning and the significance of form and structure.

Units 1 and 2

New Study Design for Literature Units 1 and 2 commences in 2016

Unit 1: Approaches to Literature

In Unit 1, students focus on the ways interaction between text and reader creates meaning. Students will analyse the features and conventions of texts and this will help them develop responses to a range of literary forms and styles. Students will also develop an awareness of how the views and values that readers hold may influence the reading of a text.

Unit 2: Context and connections

In Unit 2, students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Students consider the relationships between authors, audiences and contexts and analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based.

Units 3 and 4

New Study Design for Literature Units 3 and 4 commences in 2017

Unit 3: Form and transformation

In this unit students consider how the form of a text affects meaning, and how writers construct their texts. They investigate ways writers adapt and transform texts and how meaning is affected as texts are adapted and transformed. They consider how the perspectives of those adapting texts may inform or influence the adaptations. Students develop creative responses to texts and their skills in communicating ideas in both written and oral forms.

Unit 4: Interpreting texts

In this unit students develop critical and analytic responses to texts. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis.

Assessment

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<td>Unit 4</td>
<td>School assessed coursework                                   25%</td>
</tr>
<tr>
<td>Units 3 and 4</td>
<td>Examination                                                   50%</td>
</tr>
</tbody>
</table>

Literature may be particularly useful for:

- Directing and producing
- Film and television occupations
- Journalism
- Law
- Librarianship
- Literary/film criticism
- Publishing
- Visual and performing arts
- Writing
Field of Study: Arts - Visual

Media

Introduction
The study of media includes:

- media forms such as the press, radio, film, television and photography;
- media processes such as publishing, broadcasting, advertising, news and current affairs production, popular music, popular culture, information dissemination and retrieval technologies and multimedia.

This study is designed to enable students to:

- investigate and analyse their own and others experiences of media
- analyse media products to understand how meaning is constructed, and to develop an understanding of the range of meanings carried by media texts
- develop an understanding of production processes involved in the construction of media product
- examine the relationship between the media, media products and society
- develop an awareness of media policies and issues within Australian society
- develop and refine skills in the areas of production and critical analysis
- develop the ability to present coherent analysis of media texts.

Students need to be aware that a large area of the study of Media comprises of written responses, essays, research, discussion and working from textbooks. It is advisable that students have a sound capacity to demonstrate a good level of written skills in order to successfully complete a range of written tasks and formal examinations. Students intending to do Media need to know that the practical component represents only a small percentage of the course and theory based classes are the dominant format. The small practical component concentrates on video production techniques and not on photography.

Students attempting Units 1 and 2 are strongly advised to have successfully completed Year 10 Media, whilst students attempting Units 3 and 4 Media should have successfully completed Units 1 and 2 Media. Students who follow this pattern tend to have better levels of skills and knowledge to do well in their Year 12 Media results.

Unit 1: Representation and technologies of representation
This unit involves the study of the implications of media technology for the individual and society and how codes, conventions and selection processes create meanings in media products. For this unit, students must complete three outcomes.

Unit 2: Media production and the media industry
Students develop practical skills through undertaking assigned roles during their participation in specific stages of a media production and analyse issues concerning the stages and roles in the media production process. For this unit students must complete three outcomes.

Unit 3: Narrative and media production design
Students develop an understanding of production and story elements in narrative texts and consider how these are constructed to engage an audience. Students also develop practical skills through designing media productions. Three outcomes must be completed by students in this unit.

Unit 4: Media: process, influence and society’s values
Students develop an awareness of the role of social values in media texts and critically analyse issues raised about the role and influence of the media. The main purpose of this unit is to further develop practical media production skills. Students need to complete three outcomes which include the use of a range of technical equipment, processes and applications.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school
Units 3 and 4 School assessed coursework 20%
School assessed task 35%
Examination 45%

Media may be useful in the fields of:

Creative arts
Electronic design and multimedia
Film and television careers
Journalism
Media arts
Media studies
Performing arts
Public relations
Sound production
Video production

Media may be useful in the fields of:

Creative arts
Electronic design and multimedia
Film and television careers
Journalism
Media arts
Media studies
Performing arts
Public relations
Sound production
Video production
Studio Arts

Introduction
At Year 11 students undertake units of study in Studio Arts Units 1 and 2. To undertake a unit of study in Studio Arts students are strongly recommended to have satisfied the requirements of successfully completing a Year 10 unit of study in Fine Art. Students who do not have the appropriate background studies in art at Year 10 level must consult with the Head of Visual Arts before electing to study at Year 11.

Unit 1: Artistic inspiration and technique
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 artmaking. 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.

Unit 2: Design exploration and concepts
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.

Unit 3: Studio production and professional art practices
This unit focuses on the implementation of an individual design process leading to the production of a range of potential directions and solutions. Students develop and use an exploration proposal to define an area of creative exploration. They plan and apply a design process to explore and develop their individual ideas. Analysis of these explorations and the development of the potential directions is an intrinsic part of the design process to support the making of finished artworks in Unit 4.

Unit 4: Studio production and art industry contexts
This unit focuses on the production of a cohesive folio of finished artworks. To support the creation of the folio, students present visual and written documentation explaining how selected potential directions generated in Unit 3 were used to produce the cohesive folio of finished artworks. These artworks should reflect the skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities. This unit also investigates 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.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school
Unit 3 School assessed Task 33%
Unit 4 School assessed Task 33%
End of year examination 34%

Studio Arts may be useful in the fields of:
Advertising
Animation
Arts
Administration
Art Dealership
Cultural Planning
Architecture
Cartography
Costume / Theatre Design
Fashion
Fine Art
Graphic design
Gallery & Museum Curation/Directing
Industrial design
Interior Design
Photography, Film and Television
Multimedia Design
Publishing
Landscape Design & Architecture
Occupational Therapy
Teaching – Early Learning, Primary, Secondary, TAFE, University
**Visual Communication Design**

**Introduction**
The Visual Communication Design study examines the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design, architecture, engineering, graphic design, multimedia design, interior design, advertising and fashion all depend on graphics to develop and communicate ideas and information.

**Unit 1: Introduction to visual communication design**
This unit focuses on using visual language to communicate messages, ideas and concepts. This involves acquiring and applying design thinking skills as well as drawing skills to make messages, ideas and concepts visible and tangible. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students develop an understanding of the importance of presentation drawings to clearly communicate their final visual communications.

**Unit 2: Applications of visual communication design**
This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet specific purposes in designated design fields. Students use presentation drawing methods that incorporate the use of technical drawing conventions to communicate information and ideas associated with the environmental or industrial fields of design. They investigate how typography and imagery are used in visual communication design. They apply design thinking skills when exploring ways in which images and type can be manipulated to communicate ideas and concepts in different ways in the communication design field. Students develop an understanding of the design process as a means of organising their thinking about approaches to solving design problems and presenting ideas. In response to a brief, students engage in the stages of research, generation of ideas and development of concepts to create visual communications.

**Unit 3: Design thinking and practice**
In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. Through practical investigation and analysis of existing visual communications, students gain insight into how the selection of methods, media, materials and the application of design elements and design principles can create effective visual communications for specific audiences and purposes. They investigate and experiment with the use of manual and digital methods, media and materials to make informed decisions when selecting suitable approaches for the development of their own design ideas and concepts.

**Unit 4: Design development and presentation**
The focus of this unit is the development of design concepts and two final presentations of visual communications to meet the requirements of the brief. This involves applying the design process twice to meet each of the stated needs. Having completed their brief and generated ideas in Unit 3, students continue the design process by developing and refining concepts for each need stated in the brief. They utilise a range of digital and manual two- and three-dimensional methods, media and materials. They investigate how the application of design elements and design principles creates different communication messages with their target audience.

**Assessment**
- Units 1 and 2 A variety of work related to outcomes is assessed by the school
- Units 3 and 4
  - School assessed Coursework 25%
  - School assessed Task 40%
  - End of year examination 35%
Theatre Studies

Introduction
Theatre Studies focuses on the interpretation of playscripts and the production of plays from the pre-modern era to the present day. Students apply stagecraft including acting, to study the nature, diversity and characteristics of theatre as an art form. Throughout the study students work with playscripts in both written form and in performance. They learn about the times, places and cultures of key theatrical developments and develop awareness of the traditions and histories of theatre.

Unit 1: Theatrical styles of the pre-modern era
This unit focuses on the application of acting and other stagecraft in relation to theatrical styles of the pre-modern era. Students work with playscripts from the pre-modern era of theatre, focusing on works prior to the 1920s in both their written form and in performance. They also study theatrical and performance analysis and apply these skills to the analysis of a play from the pre-modern era in performance.

Periods from the pre-modern era of theatre include Ancient Greek theatre, Roman theatre, Liturgical drama such as morality/miracle/mystery plays, Italian theatre and the Commedia Dell’Arte, Elizabethan and Shakespearean theatre, Restoration comedies and dramas, Neoclassical theatre, Spanish and French theatre and non-western theatre such as Beijing Opera, Noh theatre, Bunraku, Kabuki and other traditional indigenous theatre forms.

Unit 2: Theatrical styles of the modern era
This unit focuses on studying theatrical styles and stagecraft through working with playscripts in both their written form and in performance with an emphasis on the application of stagecraft. Students work with playscripts from the modern era focusing on works from the 1920s to the present. Students study theatrical analysis and production evaluation and apply these skills to the analysis of a play in performance from the modern era.

Theatrical styles in the modern era include naturalism/realism, expressionism, theatre of the absurd, epic theatre, physical theatre, political theatre, feminist theatre and eclectic theatre (contemporary theatre that crosses traditional boundaries). Modern theatre has been influenced by practitioners such as Ibsen, Strindberg, Stanislavsky, Chekhov, Brecht, Jarry, Pinter, Beckett, Anouilh, Grotowski, Artaud, Craig, Churchill, Hewitt, Kane, Cusack and Rayson.

Unit 3: Production development
This unit focuses on an interpretation of a playscript through the three designated stages of production: planning, development, and presentation. Students specialise in two areas of stagecraft, working collaboratively in order to realise the production of a playscript. They analyse the influence of stagecraft on the shaping of the production. Students also attend a performance selected from the prescribed Theatre Studies Unit 3 Playlist published annually in the VCAA Bulletin, and analyse and evaluate the interpretation of the playscript in the performance.

Unit 4: Performance interpretation
In this unit students study a scene and associated monologue from the Theatre Studies Performance Examination (monologue list) published annually by the VCAA, and develop a theatrical treatment that includes the creation of a character by an actor, stagecraft possibilities and appropriate research. Students interpret a monologue from within a specified scene through acting and other appropriate areas of stagecraft. Students attend a performance selected from the prescribed Theatre Studies Unit 4 Playlist published annually in the VCAA Bulletin and analyse and evaluate acting in the production.

Assessment
Units 1 and 2

A variety of work related to outcomes is assessed by the school

School assessed Coursework 45%

End of year performance examination 25%

End of year written examination 30%

Units 3 and 4

School assessed Coursework 45%

End of year performance examination 25%

End of year written examination 30%
Dance

Introduction

Dance is the language of movement. It is the realisation of the body’s potential as an instrument of expression. Throughout history and in different cultures, people have explored the dancer’s ability to communicate and give expression to social and personal experience. This study provides the opportunity to explore the potential of movement as a medium of creative expression through practical and theoretical approaches.

VCE Dance is designed to develop students’ understanding and appreciation of dance as an art form that is based on innovation, creativity and spontaneity, as well as the investigation and communication of ideas, themes and concepts. Students will use sources of inspiration to generate, choreograph and present performances, working with and have direct access to Australia’s leading professional choreographers.

Unit 1:

In this unit students explore the potential of the body as an instrument of expression. They learn about and develop physical skills and commence the process of developing a personal movement style. They also begin to develop skills in documenting and analysing movement and develop an understanding of how choreographers use these processes. Knowledge of physiology, including care and maintenance of the body, is applied through the safe application of dance skills. Students develop and perform movement studies and dances with themes created through a range of movement processes. They discuss influences on their own dance backgrounds and on the themes and movement style in their own dances.

Unit 2:

This unit focuses on expanding students’ personal movement style and choreographic skills through the exploration of various forms. Students apply their understanding of form, dance making and performing processes involved in choreographing and performing their own dance works and dance works created by others. Students are also introduced to dance traditions, styles and works. Dance traditions, styles and works selected for study might encompass dance traditions of indigenous cultures or other culturally specific dance through to the works of ballet choreographers, modern dance, early musical theatre/film choreography and the work of tap/jazz or street performers. Students also analyse and discuss the communication of their own and other choreographers’ ideas.

Unit 3:

This unit focuses on choreography, rehearsal and performance of a solo dance work. Students also learn a group dance work created by a professional choreographer. The dance making and performance processes involved in choreographing, rehearsing and performing the solo dance work, and learning, rehearsing and performing the learnt group dance work are analysed. This analysis connects each student’s own work as a choreographer to the work of professional choreographers. Students analyse the dance design and use of movement style of selected works, as well as consider influences on the choreographers’ choice of theme, and production aspects of the dance works.

Unit 4:

This unit focuses on choreography, rehearsal and performance of a solo dance work. Students document and analyse the dance making and performance processes involved in the choreography, rehearsal and performance of the solo dance work. Students’ understanding of choreographic skills is also developed and refined through an analysis of ways in which the choreographers’ intention can be expressed through different types of group structures. Students analyse the group dance work by a twentieth and/or twenty first century choreographer. Influences on choices made by choreographers in these works are also studied.

Assessment

Units 1 and 2

A variety of work related to outcomes is assessed by the school

Units 3 and 4

School assessed coursework: 25%
End of year performance examination: 50%
End of year written examination: 25%
Music Performance

Introduction
Music is an integral part of all cultures and societies, both contemporary and historical. The study of music develops students’ understanding of artistic processes. VCE Music Performance offers students opportunities to engage in the practice of performing, creating and studying music that is representative of diverse genres, styles and cultures.

VCE Music offers students opportunities for personal development and to make an ongoing contribution to the culture of their community through participation in life-long music.

Unit 1
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 study the work of other performers and explore strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works that are preparing for performance and practice technical work to address these challenges. 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.

Unit 2
This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments. Students study the work of other performers through listening and analysis and use specific strategies to optimise their own approach to performance. They also study strategies for developing technical and expressive performance skills. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practice-related technical work. They develop skills in performing previously unseen music and study specific concepts to build their musicianship knowledge and skills. Students also devise an original composition or improvisation.

Unit 3
This unit prepares students to present informed 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. 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.

Unit 4
In this unit students refine their ability to present convincing and informed performances of group and solo works. Students select a group or solo works that complement works selected in Unit 3. They further develop and refine instrumental and performance techniques that enable them to expressively shape their performance and communication their understanding of the music style of each work. Students continue to develop skills in aural perception and comprehension, transcription, theory, analysis and unprepared performance.

Assessment
Units 1 and 2     A variety of work related to outcomes is assessed by the school
Unit 3          Music Performance school-assessed course work     20%
Unit 4          Music Performance school-assessed course work     10%
Units 3 and 4  Music Performance aural and written examination     20%
Units 3 and 4  Music Performance Solo OR Group Performance     50%

Music may be useful in the fields of:
   - Choreography
   - Film and television careers
   - Music directing
   - Music performing
   - Music therapy
   - Music teaching
   - Sound and lights
   - Instrument maker or repairer
   - Arts Administration (manager, booking agent, critic, festival director)
Accounting

Introduction

VCE Accounting focuses on the financial recording, reporting and decision-making processes of a small business. Students will study both theoretical and practical aspects of accounting. Financial data and information will be collected, recorded and reported using both manual and information and communications technology (ICT) methods. Many students will go on to further studies in business and finance, and other students will go on to become small business owners. The study of Accounting will enable them to develop their financial knowledge and skills. There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. It is advisable that students complete Unit 2 before undertaking Units 3 and 4.

Unit 1: Establishing and operating a service business

This unit focuses on the establishment of a small business and the accounting and financial management of the business. Students are introduced to the processes of gathering and recording financial data and the reporting and analysing of financial information by internal and external users. The cash basis of recording and reporting is used throughout this unit. Using single entry recording of financial data and analysis of accounting information, students examine the role of accounting in the decision-making process for a sole proprietor of a service business.

Unit 2: Accounting for a trading business

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 of determining profit. They analyse and evaluate the performance of the business using financial and non-financial information. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business. Students develop their understanding of the importance of ICT in the accounting process by using a commercial accounting software package to establish a set of accounts, record financial transactions and generate accounting reports.

Unit 3: Recording and reporting for a trading business

This unit 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: Control and analysis of business performance

This unit 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. Students investigate the role and importance of budgeting for the business and undertake the practical completion of budgets for cash, financial profit and financial position. Students interpret accounting information from accounting reports and analyse the results to suggest strategies to the owner on how to improve the performance of the business.

Assessment

Units 1 and 2  A variety of work related to outcomes is assessed by the school
Units 3 and 4  School assessed coursework  50%
                      Examination  50%
Business Management

Introduction
Business Management examines the ways in which people at various levels within a business organisation manage resources to achieve the objectives of the organisation. Students develop an understanding of the complexity, challenges and rewards that come from Business Management and gain an insight into the various ways resources can be managed in small, medium and large-scale organisations.

The study recognises that there is a range of management theories. In each unit students examine some of these theories and, through exposure to real business scenarios and direct contact with business, compare them with management in practice.

In studying VCE Business Management, students develop knowledge and skills that enhance their confidence and ability to participate effectively, as socially responsible and ethical members of the business community, and as informed citizens, consumers and investors.

Unit 1: Small business management
Small rather than large businesses make up the large majority of all businesses in the Australian economy. It is the small business sector that provides a wide variety of goods and services for both consumers and industries, such as manufacturing, construction and retail. This, combined with employment opportunities, makes the small business sector a vital component in the success, growth and stability of Australia. Small businesses are tangible to students as they are visible and accessible in daily life. This unit provides an opportunity for students to explore the operations of a small business and its likelihood of success.

Unit 2: Communication and management
This unit focuses on the importance of effective communication in achieving business objectives. Students investigate communication both internal and external to the business. They develop knowledge of aspects of business communication and are introduced to skills related to its effective use in different contexts. The vital functions of marketing and public relations are considered, with students developing an understanding of the important role these functions play in the ultimate success of a business.

Unit 3: Corporate Management
In this unit students investigate how large-scale organisations operate. Students examine the environment (both internal and external) in which large-scale organisations conduct their business, and then focus on aspects of individual business’ internal environment and how the operations of the business are managed. Students develop an understanding of the complexity and challenge of managing large-scale organisations and have the opportunity to compare theoretical perspectives with practical applications.

Unit 4: Managing People and Change
This unit 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.

Assessment

<table>
<thead>
<tr>
<th>Units 1 and 2</th>
<th>A variety of work related to outcomes is assessed by the school.</th>
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<tbody>
<tr>
<td>Units 3 and 4</td>
<td>School assessed coursework 50%</td>
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<td>Examination 50%</td>
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Business Management may be useful in the fields of:
- Advertising
- Finance
- Marketing manager
- Health services
- Small business operator
- Banking
- Computing
- Human resources
- Sales
- Public relations
Field of Study: Commerce

### Economics

**Introduction**

There are no prerequisites for entry to Units 1, 2 and 3. Students who intend to undertake Units 3 and 4 however, are strongly encouraged to undertake Unit 1.

**Unit 1: Economics: Choices and Consequences**

The focus of this unit is the study of markets, economic decision-making and issues of importance to the Australian economy and its people in the 21st Century. Students will study the economic problem of limited means and unlimited wants. They will complete a detailed study into the goals of strong and sustainable economic growth and low inflation.

**Unit 2: Economic Change: Issues and Challenges**

This unit examines two major issues and challenges. The first is population, employment and change, which focuses on the changing nature of population and demographics, the labour market and other related factors influencing the level of economic prosperity in the country. The second is global economic issues, which exist in economies that have an impact on living standards and on the stability of the economy.

**Unit 3: Economic Activity**

The Australian economy is a contemporary market capitalist economy. This unit allows students to develop their understanding of how markets operate. They explore the difference between microeconomics and macroeconomics. Students consider the factors that influence the buying decisions made by consumers in conjunction with the production and supply decisions made by businesses. They gain an appreciation of the way in which the market system operates in the Australian economy and evaluate the effectiveness of the market system in achieving an efficient allocation of resources.

**Unit 4: Economic Management**

In this area of study, students develop a detailed knowledge of how the federal government can use budgetary policy and monetary policy to achieve its economic goals, and examine how the policies have been implemented over the past four years. Students develop an understanding about how these aggregate supply policies operate to achieve desired outcomes in relation to the achievement of key economic goals. They also examine the role of aggregate demand and aggregate supply policies in the current government policy mix.

**Assessment**

Units 1 and 2  A variety of work related to outcomes is assessed by the school
Units 3 and 4  School assessed coursework 50%
             Examination 50%

Economics may be useful in the fields of:

- Accounting
- Actuarial studies
- Business
- Banking & finance
- Business management
- Commerce
- Commercial law
- Economics
- Hotel management
- Industrial relations
- International trade
- Marketing
- Teaching
- Tourism
Legal Studies

Introduction
Legal Studies exposes students to the features and operation of the legal system as well as allowing them to investigate some specific laws. It focuses on the way in which law is created and applied. At the end of the four units, students should have a broad general understanding of the justice system and the skills required to continue their study of law in the future.

Units 1 and 2 expose students to the fundamentals of law in our society, criminal law, the courtroom, civil law, issues for the law and individual rights protection. Upon completing these subjects, students should be able to reflect upon the legal system in an informed manner; understand and evaluate criminal cases, including the aims of criminal sanctions; evaluate the effectiveness of criminal courtroom procedures, describe aspects of civil law-making processes and procedures; pursue of individual rights through the court system and be able to apply legal theory to relevant cases.

Unit 1: Criminal law in action
Students examine the need for laws in society. They investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts of crime. Through a consideration of contemporary cases and issues, students learn about different types of crimes and explore rights and responsibilities under criminal law. Students also consider the role of parliament and subordinate authorities in law-making, as well as the impact of the Victorian Charter of Rights and Responsibilities on law enforcement and adjudication in Victoria. Students investigate the processes and procedures followed by courts in hearing and resolving criminal cases. They explore the main features and operations of criminal courts and consider the effectiveness of the criminal justice system in achieving justice.

Unit 2: Issues in civil law
Students examine the rights that are protected by civil law, as well as obligations that laws impose. They investigate the types of civil laws and related cases and issues and develop an appreciation of the role of civil law in society and how it affects them as individuals. The unit also focuses on the resolution of civil disputes through judicial determination and alternative methods in courts, tribunals and independent bodies. Students examine these methods of dispute resolution and evaluate their effectiveness. Students focus on cases that have had a broader impact on the legal system and on the rights of individuals.

Unit 3: Law-making
Students develop an appreciation of the complex nature of law-making by investigating the key features and operation of parliament, and influences on law-making, with a focus on the role of the individual. Students develop an understanding of the importance of the Constitution in their lives and on society as a whole, and undertake a comparative analysis with another country. They learn of the importance of the role played by the High Court of Australia in interpreting and enforcing the Constitution, and ensuring that parliaments do not act outside their areas of power nor infringe protected rights. Students investigate the nature and importance of courts as law-makers and undertake an evaluation of their effectiveness as law-making bodies. They also investigate the relationships that exist between parliaments and courts.

Unit 4: Resolution and justice
Students examine the institutions that adjudicate criminal cases and civil disputes. They also investigate methods of dispute resolution that can be used as an alternative to civil litigation. Students investigate the processes and procedures followed in courtrooms and develop an understanding of the adversary system of trial and the jury system, as well as pre trial and post trial procedures that operate in the Victorian legal system. Using the elements of an effective legal system, students consider the extent to which court processes and procedures contribute to the effective operation of the legal system. They also consider reforms or changes that could further improve its effective operation.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school
Units 3 and 4 School assessed coursework 50%
Examination 50%
Health and Human Development

Introduction
The study of Health and Human Development aims to enable students to:

- Develop an understanding of individual human development (physical, social, emotional and intellectual) that occurs through the lifespan stages of childhood, youth and adulthood.
- Develop an understanding of the physical, mental and social dimensions of health and the interrelationship between health and individual human development.
- Understand that variations in health and human development are influenced by a range of determinants including biological and behavioural factors, as well as physical and social environments.
- Critically examine health and human development from an individual, community, national and global perspective.
- Develop an understanding of the interdependencies between health, human development and sustainability.
- Identify, develop and evaluate behaviours and strategies that promote health and human development.
- Analyse the role of governments and non-government agencies in achieving sustainable improvements in health and human development in Australia and globally.

Unit 1: Health and development of Australia’s youth
This unit focuses on the health and individual development of Australia’s youth. Individual human development is defined as a lifelong continuous process beginning at conception and ending with death. It involves a series of orderly, predictable changes that can be classified as physical, social, emotional and intellectual. Students are introduced to key health and individual human development concepts. They study nutrition and food intake as they relate to youth as well as the determinants of youth health and development. Students investigate one health issue in detail and analyse personal, community and government strategies or programs that affect youth health and individual human development.

Unit 2: Individual human development and health issues
This unit focuses on the health and individual human development throughout the lifespan, looking at an individual’s human development from conception to ageing. Factors that influence health and individual human development including biological, behavioural, physical environment and social environment are addressed. Students then investigate one health issue that impacts on Australia’s health system.

Unit 3: Australia’s health
This unit focuses on Australia’s health and health care system and the role of nutrition on Australia’s health is included. Students learn how health status is measured and study variations in health status of specific population groups. The health status of Australia compared to other developing countries and uses of determinants of health to explain variations in health status. Australia’s National Health Priority Areas are investigated. Models for health and health promotion, the Australian health system as well as the role of government and non-government agencies in promoting healthy eating are included as well as the role of VicHealth.

Unit 4: Global health and human development
This unit focuses on global health and human development. The United Nations definition of the term ‘human development’ is explored with a particular focus on sustainability and sustainable human development. Investigation of the similarities and differences in the health status of Australia compared to developing countries is included using the United Nations Millennium Development Goals. This unit also explores the interrelationship between health, human development and sustainability. The role of the United Nations and types of aid are studied. Students are required to analyse and evaluate programs related to literacy, food security, HIV/AIDS, malaria and safe water and sanitation.

Assessment
Units 1 and 2  A variety of work related to outcomes is assessed by the school
Units 3 and 4  School assessed coursework  50%
                   Examination  50%
Outdoor and Environmental Studies

Introduction
VCE Outdoor and Environmental Studies is concerned with the ways humans interact with and relate to outdoor environments. ‘Outdoor environments’ include environments that have minimum influence from humans, as well as those environments that have been subject to different levels of human intervention. The study enables students to make critically informed comments on questions of environmental sustainability and to understand the importance of environmental health, particularly in local contexts. It provides students with the skills and knowledge to safely participate in activities in outdoor environments and to respect and value diverse environments. The blend of direct practical experience of outdoor environments with more theoretical ways of knowing, enables informed understanding of human relationships with nature.

In this study both passive and active outdoor activities provide the means for students to develop experiential knowledge of outdoor environments. Such knowledge is then enhanced through the theoretical study of outdoor environments. The study also examines the complex interplay between human impacts on outdoor environments and nature’s impact on humans.

Activities
Outdoor experiences in this study include small groups of students undertaking self-sufficient experiences in more remote outdoor settings and may include bushwalking, cross-country ski touring, sea kayak touring, mountain biking, naturalist activities, conservation activities and surfing. Students will need to be highly organised and self-motivated as this study will involve them undertaking outdoor adventure activities (1 to 2 trips of 3 to 5 days per unit). Such activities may involve:

- travel into terrain in which contact is restricted in comparison to day to day life
- exposure to the natural elements with less protection than is provided in day to day life
- natural environmental challenges requiring greater reliance on personal resources than required in day to day life.

Unit 1: Exploring outdoor experiences
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. Students are provided with the opportunity to explore the many ways in which nature is understood and perceived.

Unit 2: Discovering outdoor environments
This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impacts on outdoor environments. In this unit students study nature’s impact on humans, as well as the ecological, social and economic implications of human impact on outdoor environments. Students develop a clear understanding of the impact of technologies and changing human lifestyles on outdoor environments.

Unit 3: Relationships with outdoor environments
The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Case studies of impacts on outdoor environments are examined in the context of the changing nature of human relationships with outdoor environments in Australia. Students examine the dynamic nature of relationships between humans and their environment.

Unit 4: Sustainable outdoor relationships
In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues in relation to the capacity of outdoor environments to support the future needs of the Australian population. Students examine the importance of developing a balance between human needs and the conservation of outdoor environments and consider the skills needed to be environmentally responsible citizens. They investigate current agreements and environmental legislation, as well as management strategies and policies for achieving and maintaining healthy and sustainable environments in contemporary Australian society.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school
Units 3 and 4 School assessed coursework 50% Examination 50%
Physical Education

Introduction
Physical Education examines the many influences on performance and participation in physical activity.

Physical Education focuses on the complex interrelationship between motor learning and psychological, biomechanical, physiological and sociological factors that influence physical performances, together with the wider social attitudes to, and understanding of, physical activity.

A theoretical and practical approach towards physical activity is taken in this subject. It provides the means by which theory and practice are integrated. Participation in physical activity and development of performance skills provide opportunities for students to reflect on factors that affect performance and participation in physical activity, as well as improve their own performance.

Unit 1: Bodies in Motion
In this unit students explore how the body systems work together to produce movement and analyse this motion using biomechanical principles. Through practical activities students explore the relationships between the body systems and physical activity. They are introduced to the aerobic and anaerobic pathways utilised to provide the muscles with the energy required for movement and the basic characteristics of each pathway. Students apply biomechanical principles to improve and refine movement. They use practical activities to demonstrate biomechanical principles and how the correct application of biomechanics can lead to improved performance in sport and physical activity.

Unit 2: Sports coaching and physically active lifestyles
This unit explores a range of coaching practices and their contribution to effective coaching and improved performance of an athlete. The approach a coach uses, the methods applied and the skills used will have an impact on the degree of improvement experienced by an athlete. By studying various approaches and applying this knowledge to a practical session, students gain a practical insight into coaching.

Students are introduced to physical activity and the role it plays in the health and wellbeing of the population. Through a series of practical activities, students gain an appreciation of the level of physical activity required for health benefits and investigate how participation in physical activity varies across the lifespan. They explore a range of factors that influence participation in regular physical activity, and collect data to identify perceived barriers and the ways in which these barriers can be overcome.

Unit 3: Physical activity participation and physiological performance
This unit introduces students to an understanding of physical activity and sedentary behaviour from a participatory and physiological perspective. Students apply various methods to assess physical activity and sedentary levels, and analyse the data in relation to adherence to the National Physical Activity Guidelines. Students study and apply the social-ecological model to identify a range of Australian strategies that are effective in promoting participation in some form of regular activity.

Students investigate the contribution of energy systems to performance in physical activity. In particular, they investigate the characteristics of each system and the interplay of the systems during physical activity. Students explore the many causes of fatigue and consider different strategies used to delay and manage fatigue and to promote recovery.

Unit 4: Enhancing performance
Improvements in performance, in particular fitness, depend on the ability of the individual or coach to gain, apply and evaluate knowledge and understanding of training. Students undertake an activity analysis. Using the results of the analysis, they then investigate the required fitness components and participate in a training program designed to improve or maintain selected components. Athletes and coaches aim to continually improve and use nutritional, physiological and psychological strategies to gain advantage over the competition. Students learn to critically evaluate different techniques and practices that can be used to enhance performance, and look at the rationale for the banning or inclusion of various practices from sporting competition.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school
Units 3 and 4 School assessed coursework 50%
Units 3 and 4 Examination 50%
Global Politics

This is a Units 3 and 4 level subject offered in Year 11. At Cornish College, students complete Units 1 and 2 Australian and Global Politics in preparation for this subject.

Introduction

In the twenty-first century, political decisions and actions taken by individuals, groups, organisations and governments are increasingly global in their impact. Units 3 and 4 Global Politics will enable students to understand and reflect on contemporary international political issues, problems and events, and the forces that shape them.

The study provides a framework to help students develop an understanding of the exercise of international political power. Consideration is given to the values and motivations that drive the exercise of political power, and the ways in which this power can benefit or undermine the welfare of individuals, groups and states.

Unit 3: Global actors

In this unit students investigate the key global actors in twenty first century Global Politics. They develop an understanding of the key actors through an in depth examination of the concepts of national interest and power as they relate to the state, and the way in which one Asia Pacific state uses power within the region to achieve its objectives. Students will consider the role of non-government organisations (NGOs), for example, Amnesty International and Greenpeace, organised religions, terrorist movements and organised crime syndicates. This unit looks at contemporary issues and events in a global situation. The case studies and examples studies will be contemporary to the twenty first century.

Unit 4: Global challenges

In this unit students investigate key global challenges facing the international community in the twenty-first century. They examine and analyse the debates surrounding two ethical issues, which are underpinned by the contested notion of global citizenship. They then evaluate the effectiveness of responses to these issues. Students also explore the context and causes of global crises, and consider the varying effectiveness of responses and challenges to solving them. Again, the focus is on twenty-first century issues and events.

Assessment

<table>
<thead>
<tr>
<th>Unit 3</th>
<th>School assessed coursework 25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 4</td>
<td>School assessed coursework 25%</td>
</tr>
<tr>
<td>Units 3 and 4</td>
<td>Examination 50%</td>
</tr>
</tbody>
</table>

Global Politics may be useful in the fields of:

- Business executive
- Diplomat
- Economist
- Financial advisor
- International trader
- Journalist
- Management executive
- Marketing executive
- Media executive
- Politician
- Writer
**History**

**Introduction**
The past makes a fascinating curriculum, and understanding it helps us to understand some of the issues we face in our own time and place.

**Unit 1: Twentieth Century History  1918 –1939**

In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars. World War One is regarded by many as marking the beginning of twentieth century history since it represented such a complete departure from the past and heralded changes that were to have an impact for decades to come. The post-war treaties ushered in a period where the world was, to a large degree, reshaped with new borders, movements, ideologies and power structures. These changes affected developments in Europe, the USA, Asia, Africa and the Middle East. Economic instability caused by the Great Depression also contributed to the development of political movements. Despite ideals about future peace, reflected in the establishment of the League of Nations, the world was again overtaken by war in 1939.

The period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarised and anti-western. In the USA, the Great Crash of 1929 tempered the consumerism and material progress of the 1920s. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

**Unit 2: Twentieth Century History  1945 –2000**

In Unit 2 students explore the nature and impact of the Cold War and challenges and changes to existing political, economic and social arrangements in the second half of the twentieth century.

The establishment of the United Nations in 1945 was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. The Universal Declaration of Human Rights adopted in 1948 was the first global expression of human rights. Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War.

The period also saw challenge and changes to the established order in many countries. The continuation of moves towards decolonisation led to independence movements in former colonies in Africa, the Middle East, Asia and the Pacific. New countries were created and independence was achieved through both military and diplomatic means. Old conflicts also continued and terrorism became increasingly global. The second half of the twentieth century also saw the rise of social movements that challenged existing values and traditions, such as the civil rights movement, feminism and environmental movements.

**Units 3 and 4: Revolutions**

In Units 3 and 4 Revolutions we will look in depth at two major revolutions that have shaped the world as we know it, the French Revolution (1781-1795) and the Russian Revolution (1917 - 1991). These were moments of radical social and political change where deliberate attempts were made to break with past traditions and ruling regimes in order to transform both society and government.

Each unit will focus on one of the revolutions, and will start by examining the different theories and ongoing arguments about how these revolutions came about. We will consider the role that different ideas, leaders, movements and events might have had in creating a revolutionary situation.

We will then focus on how the revolutionaries went about trying to create a new society. We will consider how the new regimes were both threatened and radicalised by factors such as political dissent, civil war, economic breakdown and wars of foreign intervention. We will finally evaluate the extent of the transformation achieved by the revolutionaries and investigate if the revolution achieved anything more for people than was offered under the old regime?

The study of a revolution should consider differing perspectives and the reasons why different groups have made different judgements of the history of the revolution.

### Assessment

<table>
<thead>
<tr>
<th>Units 1 and 2</th>
<th>A variety of work related to outcomes is assessed by the school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units 3 and 4</td>
<td>Internal assessment tasks 50%</td>
</tr>
<tr>
<td></td>
<td>Examination 50%</td>
</tr>
</tbody>
</table>
Philosophy

Introduction

Philosophy is the oldest academic discipline. It is broadly concerned with ethics, epistemology (philosophy of knowledge) and metaphysics. It is the founding discipline of logic, and continues to develop and refine the tools of critical reasoning, influencing approaches in Mathematics, Science and the Humanities.

Philosophers grapple with the most profound questions, such as: What is the nature of reality? Is it possible to attain certainty about anything? Is there a common human nature? What is meant by the expression, to live a good life? Philosophy is therefore not only concerned with issues of public debate such as artificial intelligence, justification for a charter of human rights or censorship of speech or art, but with the problems that lie at their foundation.

Unit 1: Existence, knowledge and reasoning

What is the nature of reality? How can we achieve certain knowledge? These are some of the questions that have challenged humans for millennia and underpin ongoing endeavours in areas as diverse as science, justice and the arts. This unit engages students with fundamental philosophical problems through active, guided investigation, and critical discussion of two key areas of philosophy, epistemology and metaphysics.

Unit 2: Questions of value

This unit invites students to explore these questions in relation to different categories of value judgment within the realms of morality, political and social philosophy and aesthetics. Students also explore ways in which viewpoints and arguments in value theory can inform and be informed by contemporary debates.

Unit 3: Minds, bodies and persons

This unit considers basic questions regarding the mind and the self through two key questions.
1. Are human beings more than their bodies?
2. Is there a basis for the belief that an individual remains the same person over time?

Students critically compare the viewpoints and arguments put forward in set texts from the history of philosophy to their own views on these questions and to contemporary debates.

Unit 4: The good life

This unit considers the crucial question of what it is for a human to live well. What does an understanding of human nature tell us about what it is to live well? What is the role of happiness in a well-lived life? Is morality central to a good life? How does our social context impact on our conception of a good life? In this unit, students explore texts by both ancient and modern philosophers that have had a significant impact on contemporary western ideas about the good life.

Assessment

<table>
<thead>
<tr>
<th>Unit</th>
<th>Assessment Type</th>
<th>Marks (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>A variety of work related to outcomes is assessed by the school</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>School assessed Coursework</td>
<td>25%</td>
</tr>
<tr>
<td>4</td>
<td>School assessed Coursework</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Examination</td>
<td>50%</td>
</tr>
</tbody>
</table>
French

Introduction
While any foreign language will be useful for some jobs or for some regions, French is the only one that can be useful throughout the world as well as in Australia. French as a foreign language is the second most frequently taught language in the world after English. There are 28 countries, which have French as an official language. It is the only language other than English spoken on five continents and French and English are the only two global languages.

When deciding on a foreign language for work or school, consider that French is the language that will give you the most choices later on in your studies or your career.

The study of VCE French continues the development of the skills of listening, speaking, reading and writing. Students will gain a greater appreciation of France, its history, traditions and peoples. The course will vary slightly each year to respond to the needs and interests of students in the class. To enter the Year 11 course students need to have successfully completed Year 10 French.

Units 1-4 are yet to be confirmed and will be dependent upon the students’ interests and the availability of resources. They will, however, explore the three prescribed themes of:

- The Individual
- The French-speaking communities
- The changing world

Below are some suggested topics and sub-topics.

<table>
<thead>
<tr>
<th>The individual</th>
<th>The French-speaking communities</th>
<th>The changing world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal world</td>
<td>Lifestyles</td>
<td>Social issues</td>
</tr>
<tr>
<td>For example, personal details and qualities, relationships with family and friends, daily life, making arrangements, free time and leisure activities.</td>
<td>For example, lifestyles in France and francophone countries, lifestyles of French speakers in Australia, tourism and travel, migration.</td>
<td>For example, modern youth, issues of gender, economic crises, the Global Village, environmental issues.</td>
</tr>
<tr>
<td>Education and aspirations</td>
<td>Historical perspectives</td>
<td>The world of work</td>
</tr>
<tr>
<td>For example, student exchanges, tertiary options, job applications and interviews, work experience and vocational pathways.</td>
<td>For example, the influence of the past on the present, famous people and historical turning points, traditions and customs.</td>
<td>For example, people at work, different types of work, vocational pathways, and unemployment</td>
</tr>
<tr>
<td>Personal opinions and values</td>
<td>Arts and entertainment</td>
<td>Scientific and technological issues</td>
</tr>
<tr>
<td>For example, personal priorities, student’s view of an ideal world and views on an issue.</td>
<td>For example, art, literature, music, theatre, cinema and the media.</td>
<td>For example, famous inventors and their contribution, technology and innovation, great scientific inventions, the expansion of new horizons.</td>
</tr>
</tbody>
</table>

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school

<table>
<thead>
<tr>
<th>Unit 3:</th>
<th>School assessed coursework</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 4:</td>
<td>School assessed coursework</td>
<td>25%</td>
</tr>
<tr>
<td>Examinations: Oral component (held in October)</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>Written component (held in November)</td>
<td>37.5%</td>
<td></td>
</tr>
</tbody>
</table>
Japanese

Introduction

Japanese is a language which opens doors to an Asian culture and society with which Australia has established lasting contacts. The culture introduces students to a new way of life and a different perspective on world issues. The language is useful in many professions but also introduces students to a different mode of expression and social nuances. The study of the language reveals the workings of language in general and imparts strategies of learning that can be applied in further language studies. Japanese studies at VCE continue the development of the skills of listening, speaking, reading and writing. Students will recognise a wider range of kanji in reading and also actively use more kanji in writing. With more knowledge students will gain a greater appreciation of Japan, its traditions and people.

Courses will vary slightly each year to respond to the needs and interests of students in the class. To enter the Year 11 course students must have completed Year 10 Japanese.

Every year we will offer opportunities for Year 10 and 11 students studying Japanese at the College, to visit Japan as part of a Study Tour. Students may also be given the opportunity to take part in a longer immersion experience in Japan.

Unit 1

Students are introduced to ways of socialising in Japan by conversing about themselves, their family and friends in a more natural way using more sophisticated vocabulary and expressions. Japanese housing and home life, both modern and contemporary, are also introduced. Students learn the language necessary to express their opinion, make comparisons, express preferences, indicate change, as well as explain reasons and consequences.

Unit 2

The focus in the second half of the Year 11 Japanese course is on travelling to Japan. Students are therefore introduced to the language and cultural information needed to engage in and obtain maximum benefit out of their trip. They will learn to shop and order meals independently, ask directions, share experiences and make decisions and suggestions. They will also learn and reinforce the unique etiquette of visiting and staying in a Japanese home and visiting a Japanese school.

Unit 3

Students are introduced to the many traditions and annual celebrations of the Japanese people, as well as how life and leisure has changed through the years. They will also learn the language necessary to express intentions and plans for the future including study, travel and career. The language of persuasion is developed, as well the skills necessary to support decisions through analysing the benefits and limitations of a given situation.

Unit 4

Language necessary to discuss issues related to the environment, society and technology will be introduced in preparation for the Detailed Study – an in depth study of a current issue in Japan. Topics will vary from year to year, dependent on the interests of a particular cohort. Through various texts, videos and articles students research their topic to successfully engage in a discussion about the topic in their VCE Oral Examination in October each year.

Assessment

Units 1 and 2  A variety of work related to outcomes is assessed by the school
Unit 3: School assessed coursework  25%
Unit 4: School assessed coursework  25%
Examinations: Oral examination (held in October)  12.5%
Written Examination (includes Listening)  37.5%

Languages such as Japanese may be useful in the fields of:

Anthropologist
Archaeologist
Architect
Diplomat
Editor
Employment officer
Game designer
Interpreter/translator
Hospitality
Hotel management
Human resources
Journalist
Lawyer
Linguist
Marketer
Media analyst
Social worker
Teaching
Travel and tourism
Mathematics

Introduction
Mathematics is the study of function and pattern in number, logic, space and structure. It provides both a framework for thinking and a means of symbolic communication that is powerful, logical, concise and precise. It also provides a means by which people can understand and manage their environment. Essential mathematical activities include calculating, computing, abstracting, proving, applying, investigating, modelling and problem posing and solving.

This study is designed to provide access to worthwhile and challenging mathematical learning in a way which takes into account the needs and aspirations of a wide range of students. It is also designed to promote students’ awareness of the importance of mathematics in everyday life in a technological society, and confidence in making effective use of mathematical ideas, techniques and processes.

This study is designed to enable students to:
- develop mathematical knowledge and skills;
- apply mathematical knowledge to analyse, model and solve problems in a variety of situations, ranging from well-defined and familiar situations to unfamiliar and open-ended situations;
- to use technology as an effective support for mathematical activity.

Structure
The following units of study are offered:

<table>
<thead>
<tr>
<th>Units 1 and 2 (Year 11)</th>
<th>Units 3 and 4 (Year 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Mathematics</td>
<td>Further Mathematics</td>
</tr>
<tr>
<td>General Mathematics</td>
<td>Mathematical Methods (CAS)</td>
</tr>
<tr>
<td>Mathematical Methods (CAS)</td>
<td>Specialist Mathematics</td>
</tr>
<tr>
<td>Specialist Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

Entry into Units 1 and 2
This requires satisfactory completion of Year 10 Mathematics.

Entry into Units 3 and 4
Entry into Mathematical Methods 3 and 4 requires Mathematical Methods 1 and 2. Specialist Mathematics Units 3 and 4 are normally taken in conjunction with Mathematical Methods Units 3 and 4. Mathematical Methods Units 3 and 4 contains assumed knowledge for Specialist Mathematics.

Technology
Students are required to have a CAS calculator for all mathematics subjects. At Cornish College the students use the TInspireCX.

Course Combinations
The following table gives possible combinations of units for students who choose to continue with Mathematics at Units 3 and 4 levels.

<table>
<thead>
<tr>
<th>Units 1 and 2</th>
<th>Units 3 and 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Mathematics *</td>
<td>Further Mathematics</td>
</tr>
<tr>
<td>Foundation Mathematics</td>
<td>-</td>
</tr>
<tr>
<td>Mathematical Methods **</td>
<td>Mathematical Methods and Specialist Mathematics</td>
</tr>
<tr>
<td>General Mathematics</td>
<td>Further Mathematics</td>
</tr>
<tr>
<td>Mathematical Methods</td>
<td>Mathematical Methods</td>
</tr>
<tr>
<td>General Mathematics</td>
<td>Mathematical Methods alone or with Specialist Mathematics</td>
</tr>
<tr>
<td>Specialist Mathematics</td>
<td></td>
</tr>
<tr>
<td>Mathematical Methods 1</td>
<td>Further Mathematics</td>
</tr>
<tr>
<td>General Mathematics 2</td>
<td></td>
</tr>
<tr>
<td>Mathematical Methods</td>
<td>Further Mathematics</td>
</tr>
<tr>
<td>Mathematical Methods and Specialist Mathematics</td>
<td>Mathematical Methods and Specialist Mathematics</td>
</tr>
</tbody>
</table>

* For this combination of units, students wishing to proceed to Further Mathematics 3 and 4 will need to undertake some supplementary study with respect to assumed knowledge and skills from Area of Study.

** For this combination of units, students will need to undertake some supplementary study with respect to assumed knowledge and skills for Specialist Mathematics 3 and 4.
Foundation Mathematics

Units 1 and 2

Foundation Mathematics provides for the continuing mathematical development of students entering VCE and who do not necessarily intend to undertake Unit 3 and 4 studies in VCE Mathematics in the following year.

In Foundation Mathematics there is a strong emphasis on the use of Mathematics in practical contexts encountered in everyday life in the community, at work and at study.

The content should be developed using contexts present in students’ other studies, work and personal or other familiar situations.

Students are expected to be able to apply techniques, routines and processes involving arithmetic, sets, lists and tables, diagrams and geometric constructions, equations and graphs with and without the use of technology. They should have facility with relevant mental and by hand approaches to estimation and computation. The use of numerical graphical, geometric, symbolic and statistical functionality of technology is required.

Area of Study 1
Space, shape and design

In this area of study students cover the geometric properties of lines, curves and shapes and objects, and their graphical and diagrammatic representations with attention to scale and drawing conventions used in domestic societal, industrial and commercial plans, maps and diagrams.

Area of Study 2
Patterns and number

In this area of study students cover estimation, the use and application of different forms of numbers and calculations, and the representation of patterns and generalisations in number including formulas and other algebraic expressions in everyday contexts.

Area of Study 3
Data

In this area of study students cover collection, presentation and analysis of gathered and provided data from community, work, recreation and media contexts, including consideration of suitable forms of representation and summaries.

Area of Study 4
Measurement

In this area of study students cover the use and application of the metric system and related measurement in a variety of domestic, societal, industrial and commercial contexts, including consideration and accuracy.

Assessment

Units 1 and 2  A variety of work related to outcomes is assessed by the school
### General Mathematics

**Units 1 and 2**

General Mathematics Units 1 and 2 is designed for students who would like to continue onto a Year 12 Mathematics, but who find the abstract nature of the Mathematical Methods course difficult to manage. Students will develop the skills to analyse and interpret statistical data with and without technology. They will establish an understanding of how to use the CAS calculator efficiently and accurately. Four topics will be selected from at least three areas of study.

- Algebra and structure
- Arithmetic and number
- Matrices, discrete mathematics, graphs and networks
- Geometry, measurement and trigonometry
- Graphs of linear and non-linear relations
- Statistics

There are no prerequisites for this subject, but it is strongly recommended that students enrolling in VCE Units 1 and 2 General Mathematics have achieved satisfactory grades in Year 10 Mathematics.

**Assessment**

Units 1 and 2  
A variety of work related to outcomes is assessed by the school

### Further Mathematics

**Units 3 and 4**

Further Mathematics is designed to equip students with the confidence, understanding, skills and strategies to apply mathematical techniques to the analysis and solution of problems. Students will develop their skills to analyse and interpret statistical data with and without technology.

**Topics**

There will be two areas of study

In Unit 3, there is a compulsory core area of study based on Data Analysis and Regression (40%) and Financial Modelling (20%).

In Unit 4 there is a compulsory core area of study based on Applications. These applications consist of two modules chosen from:

- Matrices
- Networks and decision mathematics
- Geometry and measurement
- Graphs and relations

Each module comprises 20% of the covered content.

There are no prerequisites for this subject but it is strongly recommended that students enrolling in VCE Units 3 and 4 Further Mathematics undertake either VCE Units 1 and 2 General Mathematics or VCE Units 1 and 2 Mathematical Methods (CAS) prior to undertaking this course.

**Assessment**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 3 School assessed coursework</td>
<td>20%</td>
</tr>
<tr>
<td>Unit 4 School assessed coursework</td>
<td>14%</td>
</tr>
<tr>
<td>Examination Technology Free</td>
<td>33%</td>
</tr>
<tr>
<td>Examination Technology assisted</td>
<td>33%</td>
</tr>
</tbody>
</table>
Mathematical Methods (CAS)

Units 1 and 2
Mathematical Methods (CAS) Units 1 and 2 provides an introductory study of simple elementary functions of a single real variable, algebra, calculus, probability and statistics. Students will require and establish strong algebraic skills. They will apply techniques, routines and processes with and without the use of technology as applicable. Students will develop an understanding of the power of the CAS calculator and an ability to use it efficiently and accurately. The units are designed as preparation for Mathematical Methods Units 3 and 4.

Areas of study:
1. Functions and Graphs
2. Algebra
3. Calculus
4. Probability and statistics

Outcomes:
1. Skills
2. Applications
3. Use of technology across all areas of study.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school

Units 3 and 4
Mathematical Methods Units 3 and 4 is the study of functions and graphs, algebra, calculus and probability. Assumed knowledge from Mathematical Methods Units 1 and 2 will be drawn upon. The selection of content from the areas of study is constructed so that there is a development in the complexity and sophistication of problem types and mathematical processes used. Students also develop rigorous mathematical reasoning skills and apply them appropriately to analytical tasks.

Areas of Study
1. Functions and Graphs
2. Algebra
3. Calculus
4. Probability and statistics

Outcomes
1. Skills
2. Applications
3. Use of technologies

Assessment
Unit 3 School assessed coursework 17%
Unit 4 School assessed coursework 17%
Examination Technology Free 22%
Examination Technology Assisted 44%

Mathematical Methods may be useful in the fields of:
- Aerospace engineering
- Biological sciences
- Commerce
- Computer science
- Corporate finance
- Economics
- Engineering
- Forensic science
- Health sciences
- Information technology
- Law
- Mechatronics engineering
- Medicine
- Pharmaceutical science
- Physiotherapy
- Software engineering
- Veterinary science
Specialist Mathematics

This subject is new in 2016.

Units 1 and 2

Specialist Mathematics Units 1 and 2 provides a course of study for students who wish to undertake an in-depth study of Mathematics. The emphasis will be on concepts, skills, processes related to mathematical structure, modelling problem solving and reasoning.

There is a strong emphasis on algebra and rigorous mathematics. Taken in conjunction with Mathematical Methods (CAS) Units 1 and 2, will allow for comprehensive preparation for Specialist Mathematics Units 3 and 4.

Two topics are chosen from the four prescribed topics
- Number systems and recursions
- Vector in the plane
- Geometry in the plane and proof
- Geometry, measurement and trigonometry
- Graphs of non-linear functions

Other topics will be selected from the following areas of study:
- Area of Study 1 : Algebra and Structure
- Area of Study 2 : Arithmetic and Number
- Area of Study 3 : Discrete Mathematics
- Area of Study 4 : Geometry, measurement and trigonometry
- Area of Study 5 : Graphs of linear and non-linear relations
- Area of Study 6 : Statistics

Some topics may also be selected from the General Mathematics study design.

Assessment

Units 1 and 2  A variety of work related to outcomes is assessed by the school

Units 3 and 4

Specialist Mathematics assumes concurrent or previous study of Mathematical Methods Units 3 and 4. This course allows students to develop an understanding of mathematical structure and proof and establish fluency in the application of techniques, routines and processes in each of the topic areas. They will further develop rigorous mathematical reasoning skills and understand the power of mathematics to model situations. Students will continue to identify when the use of the CAS calculator is the preferred method of solving a particular problem and use that technology efficiently and accurately.

Areas of study:
1. Functions and graphs
2. Algebra
3. Calculus
4. Vectors
5. Mechanics
6. Probability and statistics

Outcomes
1. Skills
2. Applications
3. Use of technologies

Assessment

Unit 3 School assessed coursework  17%
Unit 4 School assessed coursework  17%
Examination Technology Free  22%
Examination Technology Assisted  44%
Biology

Introduction

Biology is the study of living organisms, of life processes and of the different levels of organisation from the cell to the biosphere. Advances in technology, and in particular biotechnology, have presented society with the need to make decisions about a range of public issues such as conservation, genetic engineering and medical research. There is a development of concepts and ideas through and the opportunity to acquire knowledge and skills of inquiry that will help you to examine critically issues that arise in your own lives and in the public domain, to contribute to debate and to take part in making decisions about your own health and wellbeing and that of society.

Unit 1: How do living things stay alive? (2016)

What are some of the challenges to an organism in sustaining life? You will examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. Organisms have a range of adaptations that enhance their survival in a particular environment and you will investigate how a diverse group of organisms form a living interconnected community that is adapted to its habitat and the importance a keystone species in maintaining the structure of an ecosystem.. The Unit concludes with a significant practical investigation related to the survival of an organism or species.

Unit 2: How is continuity of life maintained? (2016)

In this unit you will focus on cell reproduction and the transmission of biological information from generation to generation. All cells are derived from pre-existing cells and the process of DNA replication and cell division is fundamental to maintaining this continuity. You will explore the mechanisms, advantages and disadvantage of different reproductive strategies, and the role of stem cells and their potential use in medical therapies. You will investigate the inheritance of characteristics, and explore the relationship between genes, the environment and the regulation of genes in giving rise to these characteristics. You will then consider the role of genetic knowledge, social norms and ethics in decision making about the inheritance of a range of genetic conditions. The Unit concludes with a student-directed research investigation into an issue related to genetics and/or reproductive science.

Unit 3: Signatures of life (2016)

How do cells function at the molecular level? How do cells conduct the myriad of chemical reactions necessary to sustain life? You will investigate the role of enzymes in cellular processes, energy transformations in cells and the processes of photosynthesis and cellular respiration. You will also look at DNA investigating its structure and function, and the applications of molecular biology in medical diagnosis and the design of new pharmaceuticals. You will also examine how cells communicate with other cells by examining the signalling molecules and their role in regulating activities of organisms such as hormones and neurotransmitters in organisms as well as examining how cells detect biomolecules as self or non-self and how pathogenic organisms and agents attempt to evade the defences of the immune system.

Unit 4: Continuity and change (2016)

The DNA in the majority of your 100 trillion cells is fundamentally important in understanding your history as an individual and as a member of the human race. In the first area of study there is a focus on molecular genetics and the investigation of individual units of inheritance and the interplay between genotype and environmental factors. Recent advances in biotechnology allow us to better understand the significance of mutations in DNA and to profile and manipulate the genetic code. The second area of study builds on this understanding by focusing on change in genetic material that occurs over time and the changing nature and reliability of evidence that supports the concept of evolution of life. You will investigate changes to species, the process of natural selection as a mechanism for evolution, and the technological advances that have increased understanding of the evolutionary process.

Units 3 and 4 Biology (2017)

There is a new study design that takes effect in 2017. There are some minor changes to the content and structure described above. The most significant change is that students will design and undertake a significant practical investigation.

Assessment

<table>
<thead>
<tr>
<th>Units</th>
<th>Assessment Type</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>School assessed coursework</td>
<td>40%</td>
</tr>
<tr>
<td>3 and 4</td>
<td>Examination</td>
<td>60%</td>
</tr>
</tbody>
</table>

Biology may be useful in the fields of:
- Agricultural scientist
- Biochemist
- Botanist
- Chiropractor
- Ecologist
- Food technologist
- Forensic scientist
- Geneticist
- Horticulturist
- Marine scientist
- Medical practitioner
- Physiotherapist
- Psychologist
- Sports scientist
- Veterinarian
- Zoologist
Chemistry

Introduction

Chemistry is the study of matter. Its behaviour and interactions are studied through a thematic approach. Students have opportunities to investigate, explore and solve qualitative and quantitative problems and discuss chemical concepts and issues. Together, the four units of study provide a comprehensive coverage of chemistry at this level.

There are no prerequisites for entry to Units 1 and 2 but students are strongly advised that they should have performed well in Chemistry at Year 10 to have likelihood of success at Years 11 and 12. In view of the sequenced nature of the study it is advisable that students undertake Units 1 to 4. Each Area of Study involves the design and performance of experiments, including the generation, collection and evaluation of experimental data.

Unit 1: How can the diversity of materials be explained?

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles. Students are introduced to quantitative concepts in chemistry including the mole concept. Throughout the Unit, students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena. The Unit concludes with students carrying out a significant Research investigation.

Unit 2: What makes water such a unique chemical?

Water is the most widely used solvent on Earth. In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. They explore the polar nature of a water molecule and the relationship between this and the bonding forces and the physical and chemical properties of water. In this context students investigate solubility, concentration, pH and reactions in water including precipitation, acid-base and redox. Students are introduced to stoichiometry and to analytical techniques and instrumental procedures, and apply these to determine concentrations of different species in water samples, including chemical contaminants. Students explore the solvent properties of water in a variety of contexts and analyse selected issues associated with substances dissolved in water. The Unit concludes with students carrying out a significant practical investigation into an aspect of water quality.

Unit 3: Chemical pathways (2016)

This unit focuses on techniques of analysis with an emphasis on how properties (structure and bonding) influence choice of analyses. There are two Areas of Study: Chemical Analysis focuses on a variety of analytical techniques to analyse products in the laboratory including instrumental analytical techniques of spectroscopy and chromatography. The other Area of Study: Organic Chemical Pathways focuses on organic chemistry including production of starting materials for particular reaction pathways. Students investigate how forensic analysis relies on the use of organic chemicals (including DNA) and the role of organic chemicals (including proteins) in the development of medicines.

Unit 4: Chemistry at work (2016)

What are the factors that affect production of chemicals? What is the role of waste management, health and safety and sustainability of energy sources (fuels) on these chemical processes? Emphasis on energy transformations is maintained with a focus on the principles of redox reactions. The first Area of study is Industrial Chemistry in which you will explore the production and uses of chemicals and explore how knowledge of equilibrium and factors affecting rate achieve optimum reaction conditions and yield. The Supplying and Using Energy Area of Study focuses on our use of different energy resources such as simple galvanic and electrolytic cells with a focus on renewable energy sources.

Units 3 and 4 Chemistry (2017)

There is a new study design that takes effect in 2017. There are some minor changes to the content and structure described above. The most significant change is that students will design and undertake a significant practical investigation.

Assessment

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<thead>
<tr>
<th>Units 1 and 2</th>
<th>A variety of work related to outcomes is assessed by the school</th>
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<tbody>
<tr>
<td>Units 3 and 4</td>
<td>School assessed coursework 40%</td>
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<td>Examination 60%</td>
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Environmental Science

Introduction

Environmental science is an interdisciplinary science that explores interactions and interconnectedness between humans and their environments. It analyses the functions of both living and non-living elements that sustain Earth systems. The study includes how the relationships between the atmosphere, biosphere, hydrosphere and lithosphere produce environmental change over a variety of time scales. Students investigate how humans modify their environments and how the consequences of these changes affect local and global contexts. Pollution, biodiversity, energy use and climate change are studied. Case studies, research and modeling as well as frameworks and theories are examined to help understand how environmental science has evolved and how it continues to evolve.

Students engage in a variety of inquiry based tasks which link theory, knowledge and practice. Methodologies can include laboratory investigations, fieldwork, the use of technologies, simulations, case studies, animations and literature reviews. Students hypothesise, collect and analyse data, make recommendations and communicate. They will investigate and evaluate changes. Knowledge of safety considerations and ethical standards is imperative.

Unit 1: How are Earth’s systems connected?

In this Unit, students examine the 4 interacting systems of the Earth and explore the physical requirements for life. How the physical environment functions, how local ecosystems and interactions over time and how biotic and abiotic components of local ecosystems can be monitored are discussed in depth. A practical investigation is completed.

Unit 2: How can pollution be managed?

In this Unit, students explore changes over time. They investigate cyclical patterns and their causes. Students examine the flow of matter and energy and they learn how environmental changes can be monitored and measured. Data is collected to determine patterns and students learn to explain the interactions between environmental processes.

Unit 3: How can biodiversity and development be sustained?

In this Unit, students examine ecosystems. It is done by a practical investigation, developing a question, planning a course of action, collecting data, analyzing and inferring.

Unit 4: How can the impacts of human energy use be reduced?

In this Unit, students analyse social and environmental impacts of energy production and use on society and the environment. They explore the complexities of interacting systems of water, air, land and living organisms that influence climate. Renewable and non-renewable energy sources are examined, distinguishing between natural and greenhouse effects on climate change. Students interpret data, test, and recognize limits of incomplete data. They also look for correlation, cause and effect and make judgements on reliability and validity.

There are no prerequisites for students undertaking Units 1, 2 or 3. Students must undertake Unit 3 before Unit 4.

Assessment

Units 1 and 2 A variety of work related to outcomes is assessed by the school

Unit 3 School assessed coursework 20%
Unit 4 School assessed coursework 30%
Examination 50%

Environmental Science may be useful in the fields of:

- Design Landscaper
- Building Architecture
- Engineer
- Urban Planner
- Environmental Consultancy
- Quality Controller
- Agriculture
- Construction
- Mining
- Property Management
- Environmental Scientist
- Bushfire Rescue Management and Conservation
- Geology
- Oceanography
Physics

Introduction

Physics seeks to understand and explain the physical world. It examines models and ideas used to make sense of the world and which are sometimes challenged as new knowledge develops. By looking at the way matter and energy interact through observations, measurements and experiments, physicists gain a better understanding of the underlying laws of nature.

VCE Physics provides students with opportunities to explore questions related to the natural and constructed world. It provides a contextual approach to exploring selected areas within the discipline including atomic physics, electricity, fields, mechanics, thermodynamics, quantum physics and waves. Students also have options for study related to a range of areas (see below). Students examine classical and contemporary research, models and theories to understand how knowledge in physics has evolved and continues to evolve in response to new evidence and discoveries.

An important feature of undertaking this study is the opportunity to engage in a range of inquiry tasks that may be self-designed, develop key science skills and interrogate the links between theory and practice. In VCE Physics inquiry methodologies include laboratory experimentation, local and remote data logging, simulations, animations and literature reviews. Students work collaboratively as well as independently on a range of tasks. They pose questions, formulate hypotheses and collect, analyse and critically interpret qualitative and quantitative data. They analyse the limitations of data, evaluate methodologies and results, justify conclusions, make recommendations and communicate their findings.

Students investigate and evaluate issues, changes or alternative proposals by considering both shorter and longer term consequences for the individual, environment and society.

The Physics Study Design is undergoing change over the next two years – Units 1 and 2 will be introduced in 2016 and Units 3 and 4 will be introduced in 2017.

Unit 1: What ideas explain the physical world?

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. Unit 1 is made up of three areas of study:

1. How can thermal effects be explained? In this area of study students investigate the thermodynamic principles related to heating processes, including concepts of temperature, energy and work. Students examine the environmental impacts of Earth’s thermal systems and human activities with reference to the effects on surface materials, the emission of greenhouse gases and the contribution to the enhanced greenhouse effect. They analyse the strengths and limitations of the collection and interpretation of thermal data in order to consider debates related to climate science.

2. How do electric circuits work? Modelling is a useful tool in developing concepts that explain physical phenomena that cannot be directly observed. In this area of study students develop conceptual models to analyse electrical phenomena and undertake practical investigations of circuit components. Concepts of electrical safety are developed through the study of safety mechanisms and the effect of current on humans. Students apply and critically assess mathematical models during experimental investigations of DC circuits.

3. What is matter and how is it formed? In this area of study students explore the nature of matter, and consider the origins of atoms, time and space. They examine the currently accepted theory of what constitutes the nucleus, the forces within the nucleus and how energy is derived from the nucleus.

Unit 2: What do experiments reveal about the physical world?

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. Unit 2 is made up of three areas of study:

1. How can motion be described and explained? In this area of study students observe motion and explore the effects of balanced and unbalanced forces on motion. They analyse motion using concepts of energy, including energy transfers and transformations, and apply mathematical models during experimental investigations of motion. Students model how the mass of finite objects can be considered to be at a point called the centre of mass. They describe and analyse graphically, numerically and algebraically the motion of an object, using specific physics terminology and conventions.

2. Options. Students choose one of twelve options related to astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science. The option enables students to pursue an area of interest by investigating a selected question.
Field of Study: Science

3. Practical investigation. Systematic experimentation is an important aspect of physics inquiry. In this area of study students design and conduct a practical investigation related to knowledge and skills developed in Area of Study 1 and/or Area of Study 2. The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data, and reach a conclusion in response to the question.

Unit 3: How do fields explain motion and electricity?
In this unit students explore the importance of energy in explaining and describing the physical world through three areas of study:

1. How do things move without contact? Students examine the similarities and differences between three fields: gravitational, electric and magnetic. Field models are used to explain the motion of objects when there is no apparent contact. Students explore how positions in fields determine the potential energy of an object and the force on an object. They investigate how concepts related to field models can be applied to construct motors, maintain satellite orbits and to accelerate particles.

2. How are fields used to move electricity? The production, distribution and use of electricity has had a major impact on human lifestyles. In this area of study students use empirical evidence and models of electric, magnetic and electromagnetic effects to explain how electricity is produced and delivered to homes. They explore magnetic fields and the transformer as critical to the performance of electrical distribution systems.

3. How fast can things go? Students use Newton’s laws of motion to analyse relative motion, circular motion and projectile motion. Newton’s laws of motion give important insights into a range of motion both on Earth and beyond. At very high speeds, however, these laws are insufficient to model motion and Einstein’s theory of special relativity provides a better model. Students compare Newton’s and Einstein’s explanations of motion and evaluate the circumstances in which they can be applied. They explore the relationships between force, energy and mass.

Unit 4: How do two contradictory models explain both light and matter?
A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. In this unit, students explore the use of wave and particle theories to model the properties of light and matter.

1. How can waves explain the behavior of light? Students use evidence from experiments to explore wave concepts in a variety of applications. Wave theory has been used to describe transfers of energy, and is important in explaining phenomena including reflection, refraction, interference and polarisation. Students investigate the properties of mechanical waves and examine the evidence suggesting that light is a wave. They apply quantitative models to explore how light changes direction, including reflection, refraction, colour dispersion and polarisation.

2. How are light and matter similar? Students explore the design of major experiments that have led to the development of theories to describe the most fundamental aspects of the physical world — light and matter.

3. Practical investigation. A student designed practical investigation related to waves, fields or motion is undertaken either in Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4. The findings of the investigation are presented in a scientific poster format.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school

Unit 3 School Assessed Coursework 21%
Unit 4 School Assessed Coursework 19%
Examination 60%
Psychology

Introduction
Psychology is a broad discipline that incorporates both the scientific study of human behaviour through biological, psychological and social perspectives and the systematic application of this knowledge to personal and social circumstances in everyday life.

VCE Psychology enables students to explore how people think, feel and behave through the use of a biopsychosocial approach. The study explores the connection between the brain and behaviour by focusing on several key interrelated aspects of the discipline: the interplay between genetics and environment, individual differences and group dynamics, sensory perception and awareness, memory and learning, and mental health.

Unit 1: How are behaviour and mental processes shaped?
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.

Unit 2: What influences psychological development?
The psychological development of an individual involves complex interactions between biological, psychological and social factors. In this area of study students explore how these factors influence different aspects of a person’s psychological development. They consider the interactive nature of hereditary and environmental factors and investigate specific factors that may lead to development of typical or atypical psychological development in individuals, including a person’s emotional, cognitive and social development and the development of psychological disorders.

Unit 3 (2016): The Conscious Self
This unit focuses on the study of the relationship between the brain and the mind through examining the basis of consciousness, behaviour, cognition and memory. Advances in brain research methods have opened new ways to understanding the relationship between mind, brain and behaviour. Students study the structure and functioning of the human brain and nervous system, and explore the nature of consciousness and altered states of consciousness including sleep. Students consider the function of the nervous system in memory and investigate the ways in which information is processed, stored and utilised. They apply different theories of memory and forgetting to their everyday learning experiences.

Unit 4 (2016): Brain, Behaviour and Experience
This unit focuses on the interrelationship between learning, the brain and its response to experiences, and behaviour. Students investigate learning as a mental process that leads to the acquisition of knowledge, development of new capacities and changed behaviours. Understanding the mechanisms of learning, the cognitive processes that affect readiness for learning, and how people learn informs both personal and social issues. Students use a biopsychosocial framework – a conceptual model which includes psychological and social factors in addition to biological factors in understanding a person’s mental state – to explore the nature of stress, simple phobia and a selected mental disorder. The intent of the study is not that of diagnosis and treatment but to explore causes of mental illness, avenues of assistance and factors that promote mental wellbeing.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school
Unit 3 School assessed coursework 20%
Unit 4 School assessed coursework 20%
Examination 60%
Field of Study: Science

Unit 3 (2017): How does experience affect behaviour and mental processes?

The nervous system influences behaviour and the way people experience the world. 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 capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved. 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.

Unit 4 (2017): How is wellbeing developed and maintained?

In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person’s functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual’s mental functioning and wellbeing.

Assessment

Units 1 and 2 A variety of work related to outcomes is assessed by the school

Unit 3  School assessed coursework  16%
Unit 4  School assessed coursework  24%
Examination  60%

Please note: The new study design for Psychology begins in 2016 for Units 1 and 2, and in 2017 for Units 3 and 4.
Computing

Introduction
This study is about the use of information technology to solve problems on both a personal and business level. Several software packages are studied including databases (MS Access), web authoring (Dreamweaver) and spreadsheets (MS Excel).

Unit 1: Computing
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. Students collect primary data when investigating an issue, practice or event and create a digital solution that graphically presents the findings of the investigation. Students examine the technical underpinnings of wireless and mobile networks, and security controls to protect stored and transmitted data, to design a network solution that meets an identified need or opportunity. They predict the impact on users if the network solution were implemented. Students acquire and apply their knowledge of information architecture and user interfaces, together with web authoring skills, when creating a website to present different viewpoints on a contemporary issue.

Unit 2: Computing
This unit focuses on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. Students develop their computational thinking skills when using a programming or scripting language to create solutions. They engage in the design and development stages of the problem-solving methodology. 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 visualisations that are clear, usable and attractive, and reduce the complexity of data. Students apply all stages of the problem-solving methodology to create a solution using database management software and explain how they are personally affected by their interactions with a database system.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school

Informatics

Unit 3: Informatics
The focus of this unit is on data, information and information systems. Students consider data and how it is acquired, managed, manipulated and interpreted to meet a range of needs. 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 when conducting online transactions. They examine how relational database management systems (RDBMS) store and manipulate data typically acquired this way. Students use software to create user flow diagrams that depict how users interact with online solutions, and acquire and apply knowledge and skills in the use of an RDBMS to create a solution.

Students develop an understanding of the power and risks of using complex data as a basis for decision making. Students complete the first part of a project. They frame a hypothesis and then select, acquire and organise data from multiple data sets to confirm or refute this hypothesis. This data is manipulated using tools such as spreadsheets or databases to help analyse and interpret it so that students can form a conclusion regarding their hypothesis. Students take an organised approach to problem solving by preparing project plans and monitoring the progress of the project.

Unit 4: Informatics
In this unit, students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs. Students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate a multimodal, online solution that effectively communicates the conclusion and findings. The evaluation focuses on the effectiveness of the solution in communicating the conclusion and the reasonableness of the findings. Students use their project plan to monitor their progress and assess the effectiveness of their plan and adjustments in managing the project.
Field of Study: Technology

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

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<th>Unit</th>
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Software Development

Unit 3: Software development

In Unit 3 students develop a detailed understanding of the analysis, design and development stages of the problem-solving methodology and use a programming language to create working software modules.

Students respond to given software designs and develop a set of working modules through the use of a programming language. Students examine a range of software design representations and interpret these when applying specific functions of a programming language to create working modules. Students analyse a need or opportunity, plan and design a solution and develop computational, design and systems thinking skills.

Unit 4: Software development

This unit focuses students further in their computational thinking skills by transforming their detailed design prepared in Unit 3 into a software solution. They evaluate the efficiency and effectiveness of the solution in meeting needs or opportunities. They also assess the effectiveness of the project plan in monitoring project progress. 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.

Assessment

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Introduction
This subject enables students to develop a theoretical understanding of the relationship between food and technology, and practical skills in the application of this understanding. The food sector is dynamic, diverse and creative. Innovative food products are continually being introduced into the marketplace in response to changing social, economic and environmental needs of society. Technology plays an important role in food product development and the way food is produced, processed, packaged and marketed. An understanding of the links between food, food processing, nutrition, health and wellbeing is a high priority in contemporary society. The study of Food and Technology challenges students to make these links and provides them with the opportunity to acquire knowledge and skills to make informed choices when selecting, storing, purchasing, preparing and consuming foods that will contribute to a healthy lifestyle.

Unit 1: Food safety and properties of food
This unit introduces students to the diverse nature of food, how to prepare it and how to store it for the best quality in terms of safety, health and aesthetics. Students study safe and hygienic food handling practices and apply these practices in the preparation of food. Food storage practices that maximise quality of raw and cooked food are also investigated. Students discover links between classification of foods and their properties and how their enjoyment of food is associated with different cooking methods and properties of foods. They examine changes in properties of food when different preparation and processing techniques are used. Students apply this knowledge when preparing food.

Unit 2: Planning and preparation of food
This unit provides students with the opportunity to investigate the best methods and equipment to use for optimum results and what to prepare for a range of situations. Students research, analyse and apply the most suitable food preparation and cooking methods to optimise the sensory, physical and chemical properties of food.

Unit 3: Food preparation, processing and food controls
Students are required to develop an understanding of food safety in Australia by investigating the causes of food poisoning and food spoilage, and the relevant regulations. Students apply safe work practices while preparing food. They will analyse the functions of the natural components of key foods and apply this information to the processing of foods. Students will investigate cooking techniques and justify the use of the best techniques for key foods. They develop an understanding of food processing techniques to prevent spoilage in industrial and domestic settings, and will also preserve food using some of these techniques.

Unit 4: Food product development and emerging trends
Here the students work independently to complete the challenge of implementation of a design plan they established in unit 3. In completing the task, students apply food safety and hygiene guidelines and evaluate the product planning and processes in the plan. Students examine food product development, and research and analyse factors that have contributed to product development. They investigate the process of product development, including packaging, packaging systems and marketing and also investigate emerging trends in product development, including societal pressures to improve health, technological developments, packaging and environmental considerations.

Assessment
Units 1 and 2 A variety of work related to outcomes is assessed by the school

Unit 3 School assessed coursework 18%
Unit 4 School assessed coursework 12%
Units 3 and 4 School assessed task 40%
Units 3 and 4 Examination 30%
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Possible other subjects/units: __________________________________________________________

Career options: __________________________________________________________

Prerequisite studies for post VCE courses: ______________________________________________

☐ VICTER courses checked: __________________________________________________________

Comments:________________________________________________________________________

__________________________________________________________________________________

Student signature: ___________________________  Parent signature: ___________________________

Date: ___________________________