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VCE HANDBOOK

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GLOSSARY

ATAR	Australian Tertiary Admission Rank. This is the score calculated from your study scores for Units 3 & 4. It is used to gain entry to a tertiary institution, but only if you apply to gain entrance. If you don't apply you don't get an ATAR, only your study scores. Universities use this number to filter applicants for their courses.
GAT	General Achievement Test. Used by VCAA to perform a number of statistical checks of Outcome, SAT and exam performance. Used also as a check on teachers – trying to ensure fairness in marking across the state. All students undertaking Units at level 3 or 4 sit the GAT. It is a general knowledge test covering: Written Communication, Mathematics, Science & Technology, Humanities, the Arts and Social Sciences. Usually happens mid June. If, for any reason you are not able to sit an exam (e.g. a medical emergency) a <i>derived examination score</i> will be calculated from your GAT and internal assessments.
Graded Assessment	Units 3 & 4 have graded assessment. Students are given a numerical mark for each Outcome, SAT and exam. These are used to rank students within each class and across the state.
Results	S = Satisfactory, N = Unsatisfactory, J = Student no longer attending but has not officially withdrawn (VTAC treats it as N when calculating ATAR)
Study Design	A description of each Unit.
Study Score	Calculated by VCAA, using statistical moderation from Outcome, SAT and exam scores. Each Unit is normally distributed after moderation. The possible range of scores for any unit is 1-50 with most scores falling between 23 and 37.
VCAA	Victorian Curriculum and Assessment Authority
VCE	Victorian Certificate of Education
VET	Vocational Educational Training
VTAC	Victorian Tertiary Admissions Centre. Calculates your ATAR score. Coordinates most applications for tertiary study within Victoria. QTAC, SATAC, UAC etc. do the same for other states. If you are going to apply interstate you must do so through the correct Admissions Centre.

OVERVIEW

VCE Graduation Requirements

The Victorian Curriculum and Assessment Authority (VCAA) administers the Victorian Certificate of Education. To graduate with the VCE, a student must satisfactorily complete 16 units of study selected from a range of studies. Satisfactorily completed units **must** include:

- three units from the English group, with at least one unit at Unit 3 or 4 level
- at least three Unit 3 & 4 studies other than English

Most students complete 22-24 Units [6 subjects at Year 11 Level and 5 at Year 12]

Satisfactory Completion of VCE Studies

For satisfactory completion of a unit, a student must demonstrate achievement of each of the outcomes for that unit as specified in the Study Design. This decision will be based on the teacher's judgement of the student's performance during classes and assessment tasks designated for the unit. As such an attendance figure of greater than 80% is required to receive an 'S'. Your teachers will set assessment tasks (called Outcomes) to see how you are progressing and you will get a list of the tasks and the deadlines for handing them in. Satisfactory completion is indicated by the award of an 'S'. Not meeting the requirements for satisfactory completion is indicated by an 'N'.

You will need to give a very good reason for a deadline to be extended, so if you have more than one deadline within a short time, you'll need to plan to get all your work done by the time it's due. Failure to meet the deadlines may mean not achieving satisfactory completion of the unit as marked by an 'N'.

Students who are at risk of receiving an 'N' for a unit will be notified before the end of that unit with the view to address any work requirements or outcomes to ensure a satisfactory completion. Subject teachers will identify the minimum work requirements and/or tasks that a student must complete in order to then receive an 'S'. A letter detailing these work requirements and/or tasks will be sent to parents along with the timeframe that they must be completed in.

For Units 3 and 4, you will get grades as well as the 'S' or 'N' described above. At Units 3 and 4 the VCAA supervises the assessment of all students. A graded assessment is either a school-based assessment or an examination. Each VCE study has three graded assessments for the Unit 3 and 4 sequence; either two school assessments and one examination or one school assessment and two examinations.

There are two kinds of school assessment. The first is called School-Assessed Coursework (SAC). This assesses how well you have performed on the assessment tasks. These tasks are done mainly in class time. All studies, except Studio Arts include School-Assessed Coursework. The second kind of school assessment, used in Art, Media and Studio Arts, is a School-Assessed Task (SAT). The framework for a School-Assessed Task is the same for every school and is set by the VCAA. Activities are designed within this framework to assist you in completion of the School-Assessed Task. The VCAA specifies how marks and grades are to be awarded. Your teacher does the marking and the school will send the VCAA a score to show how well you performed.

If a student misses a scheduled Outcome or SAC/SAT they must complete the following procedures. Firstly, the school must be notified on that day and the VCE Coordinator informed as to why the student is unable to sit the Outcome or SAC/SAT. Then, upon the student's return they must have a medical certificate or, if a family emergency, a Statutory Declaration (for unit 3 and 4 students only) detailing what the emergency was. Students then need to organise with the VCE coordinator and the subject teacher(s) to make up the Outcome or SAC/SAT and fill out the necessary paperwork. Failure to provide the correct documentation may lead to the student failing that Outcome or SAC/SAT.

External examinations

External examinations (written, oral or performance) for Units 3 and 4 subjects are set and marked by the VCAA. Most are held in November, but a small number of studies have examinations in June or October.

The ATAR

ATAR stands for Australian Tertiary Admission Rank. This includes the scaled global study scores of English, or its equivalent, and the best three other study scores (the primary four) plus 10% of the scaled scores obtained in up to two other studies. The ATAR is recognised throughout Australia.

Statistical Moderation

The process for adjusting schools' assessments to the same standard, while maintaining the students' rank given by the school is known as statistical moderation. The VCAA uses statistical moderation to ensure that the coursework assessments given by different schools are comparable throughout the State.

Scaling

Study scores have to be compared and adjusted before they can be fairly added together. This is because students take very different combinations of VCE studies, and scores can only be added together if the strength of competition in each study is about the same. Scaling overcomes these difficulties and ensures that each study contributes equally to the ATAR

Useful Websites

VCAA: (Victorian Curriculum and Assessment Authority) <http://www.vcaa.vic.edu.au/>

VTAC: (Victorian Tertiary Admissions Commission) <http://www.vtac.edu.au/> This is particularly useful for putting in lists of possible subjects and getting a display of courses that you qualify for.

The Job Guide: www.jobguide.dest.gov.au

OZJAC: (Australian Courses and Careers Database) www.curriculum.edu.au/ozjac/

All studies run at the discretion of the Principal and are only confirmed once the provisional subject selection forms have been completed.

ART

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

The study is made up of four units. Each unit has two areas of study:

1 Art Appreciation**2 Art Production**

Unit 1	1	Analysing Art and Meaning, Formal and Personal Frameworks
	2	Artmaking and Personal Meaning
Unit 2	1	Analysing Art and Culture, Formal and Cultural Frameworks
	2	Artmaking and Cultural Expression
Unit 3	1	Interpreting Art using all Frameworks
	2	Investigation and Interpretation through Artmaking
Unit 4	1	Discussing and Debating Art
	2	Realisation and Resolution of Art

Unit 1 – Area of Study: Art and Meaning and Art and Personal Meaning

1. Students analyse and interpret a variety of artworks using the Formal and the Personal Frameworks
2. Students present visual creative responses that demonstrate their personal interests through trialling techniques, materials and processes. Students employ the language of the appropriate Analytical Frameworks when reflecting upon and analysing their own Artmaking.

Unit 2 – Art and Culture and Artmaking and Cultural Expression

1. Students now interpret, compare and contrast artworks from different cultures using the Formal and the Cultural Framework.
2. Students demonstrate technical and artistic development in the presentation of visual responses that include one finished artwork through the exploration of selected media, materials and techniques. Students employ the language of the Formal and Analytical frameworks when reflecting upon and analysing their own artmaking.

ASSESSMENT: A folio of visual solutions for both outcomes in Units 1 and 2 Art. Assessment tasks for Units 1 and 2 are in the form of written and oral reports and short answer test responses in class.

Units 3 and 4

Students develop a broad and innovative body of work and communicate concepts and ideas through experiments in one or more media. A sustained body of work is prepared and/or developed. A range of approaches to interpreting art and the exploration of the meaning and messages of art works of specific periods of art is studied in Units 3 and 4. The focus is on developing skills in the critical analysis of art works.

Units 1 and 2 can be taken as individual units.
Units 3 and 4 must be taken sequentially.

It is strongly recommended that students entering Units 3 and 4 have completed at least one Unit of Art or Studio Arts and students wishing to pursue tertiary studies in the visual arts, take both subjects.

Assessment for Unit 3&4

20% coursework (written)
50% school assessed task (practical)
30% written exam (1½ hour)

The study of Art is enhanced through excursions to see and experience art in galleries and other spaces.

BIOLOGY

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

Biology

Unit 1: How do living things stay alive?

In this unit students explain what is needed by an organism to stay alive. They are introduced to some of the challenges for organisms in sustaining life. Students examine the cell as the structural and functional unit of life and the requirements for sustaining cellular processes in terms of inputs and outputs. Types of adaptations that enhance the organism's survival in a particular environment are analysed, and the role that homeostatic mechanisms play in maintaining the internal environment is studied. Students consider how the planet's biodiversity is classified and investigate the factors that affect population growth. A student investigation related to the survival of an organism or species is undertaken in Area of Study 3. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

Assessment

For this unit students are required to demonstrate achievement of three outcomes. As a set these outcomes encompass all areas of study in the unit. Suitable tasks for assessment may be selected from the following:

For Outcomes 1 and 2

- a report of a fieldwork activity
- annotations of a practical work folio of activities or investigations
- a bioinformatics exercise
- media response
- data analysis
- problem solving involving biological concepts, skills and/or issues
- a reflective learning journal/blog related to selected activities or in response to an issue
- a test comprising multiple choice and/or short answer and/or extended response.

For Outcome 3

- a report of a student-designed or adapted investigation related to the survival of an organism or a species using an appropriate format, for example a scientific poster, practical report, oral communication or digital presentation.

Unit 2: How is continuity of life maintained?

In this unit students focus on asexual and sexual cell reproduction and the transmission of biological information from generation to generation. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans is examined, and their potential use in medical therapies is considered. Students explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They consider the role of genetic knowledge in decision-making about the inheritance of various genetic conditions. In this context the uses of genetic screening and its social and ethical issues are

examined. A student investigation into, and communication of, an issue related to genetics and/or reproductive science is undertaken in Area of Study 3. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

Assessment

For this unit students are required to demonstrate achievement of three outcomes. As a set these outcomes encompass all areas of study. Suitable tasks for assessment may be selected from the following:

For Outcomes 1 and 2

- a report of a fieldwork activity
- annotations of a practical work folio of activities or investigations
- a bioinformatics exercise
- media response
- data analysis
- problem solving involving biological concepts, skills and/or issues
- a reflective learning journal/blog related to selected activities or in response to an issue
- a test comprising multiple choice and/or short answer and/or extended response.

For Outcome 3

- a report of an investigation into genetics and/or reproductive science using an appropriate format, for example, digital presentation, oral communication or written report.

Satisfactory completion

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

Levels of achievement

Units 1 and 2

Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision.

Unit 3 – Signatures of Life

In this unit students consider the molecules and biochemical processes that are indicators of life. They also investigate pathogens, parasites and the immune system.

Topics in this unit include:

- biomacromolecules in the chemistry of the cell
- structure, function and movement across cell membranes
- biochemical processes in the cell
- coordination and regulation at a cellular level
- the human immune systems' role in detecting and responding to antigens.

Unit 4 – Continuity and Change

This Unit investigates the field of genetics and links this to the areas of evolution and the origins and diversity of living organisms. Topics include:

- molecular genetics
- DNA tools and techniques
- cell reproduction
- inheritance and gene pools
- evidence for biological evolution
- patterns of biological change
- evolutionary relationships
- hominin evolution
- human intervention in evolutionary processes.

Assessment

- school-assessed coursework (40%) – experiments, reports and presentations
- end-of-year examination (60%).

CHEMISTRY

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

What is Chemistry?

Chemistry enables us to describe processes at a molecular level.

Why does iron rust?

How do batteries work? And can we make better ones for electric cars?

What is in food? And what foods are good for us?

How can we make more effective drugs to cure diseases?

Chemistry helps us to understand how substances interact in everyday materials and in industrial and biological processes.

Chemistry provides a course which is interesting for a wide range of students and is relevant to agriculture, art, biochemistry, dietetics, engineering, environmental studies, food, forensic science, forestry, horticulture, law, medicine, oceanography, pharmacy, sports science and winemaking. No wonder it is called the Central Science!

Unit 1

This Unit introduces the Big Ideas of Chemistry. Topics include:

- the periodic table of elements: its history and trends in properties of the elements
- the atomic nature of matter
- structure and bonding in materials: metals, salts, gases, hydrocarbons, diamond.
- polymers: properties and making of plastics.

Unit 2

This Unit looks at environmental chemistry involving behaviour of important solutions in water, and the atmosphere. Topics include:

- solubility and concentrations of solutions
- acids and bases and oxidation/reduction reactions, metal corrosion
- the atmosphere: gases and their chemical and physical properties.

Assessment

Assessment tasks for Units 1 and 2 may include:

- experiments – reports, techniques and safety
- modelling
- collection and interpretation of data
- presentations
- tests.

Unit 3

This Unit looks at methods for analysing substances and pathways for making chemicals. Topics include:

- chemical analysis including traditional techniques and modern spectroscopic and chromatographic methods
- quantitative chemistry of acid-base and reduction-oxidation reactions
- organic chemistry pathways and biochemistry.

Assessment

School-assessed coursework (20%) – experiments and reports.

Unit 4

This Unit looks in depth at some industrial chemical production and supplying and using energy. Topics include:

- rate and equilibrium principles applied to industrial processes, e.g. making sulphuric acid
- energy from fuels and batteries.
- electrolysis.

Assessment

School-assessed coursework (20%) – experiments and reports

End-of-year examination (60%). This will cover material from both Units 3 and 4.

COMPUTING

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. In Area of Study 1 students collect primary data when investigating an issue, practice or event and create a digital solution that graphically presents the findings of the investigation. In Area of Study 2 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. In Area of Study 3 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.

When creating solutions students need to apply relevant stages of the problem-solving methodology as well as computational, design and systems thinking skills.

Unit 2: Computing

In this unit students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. In Area of Study 1 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. In Area of Study 2 students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations that are clear, usable and attractive, and reduce the complexity of data. In Area of Study 3 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

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Assessment of levels of achievement for these units will not be reported to the VCAA. Schools may choose to report levels of achievement using grades, descriptive statements or other indicators.

DRAMA

The study of Drama at VCE level focuses on devising, creating and performing solo and ensemble performances as well as exploring and evaluating performances by other drama practitioners. Whilst areas of realism are explored the predominant style students are to create from is non-naturalism.

Non-naturalism is best compared to an abstract painting. Rather than tell a story in a linear fashion with a script that includes lengthy dialogue, non-naturalism allows students to comment on real life rather than try to imitate it exactly on stage. In this way, students use a range of stimulus material and key non-naturalistic convention such as symbolism, transformation of character and object, minimal costume, exaggerated physical expression and language to create pieces that are both powerful and open enough for audience members to have an individual interpretation.

Unit 1: Dramatic storytelling

This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters and is based on stimulus material that reflects personal, cultural and/or community experiences and stories. This unit also involves analysis of a student's own performance work and of a performance by professional drama practitioners.

In this way students develop key skills in constructive criticism. They develop the language necessary to identify and evaluate techniques used to create works of theatre. It also means students have the opportunity to watch and at times work with professional non-naturalist practitioners.

Unit 2: Non-naturalistic Australian drama

This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance that uses non-naturalistic performance styles. Students create, present and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context. Stimulus material can include but is not limited to contemporary Australian visual artists such as Del Kathryn Barton, tattoo artists such as Miso, musicians such as Midnight Oil or Hermitude, or major Australian events such as Black Saturday.

Unit 3: Devised non-naturalistic ensemble performance

This unit focuses on non-naturalistic devised ensemble drama. Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions such as Brechtian theatre, Butoh Dance, Commedia Del Arte, and Viewpoints (from contemporary American director Anne Bogart) to work collaboratively to devise, develop and present an ensemble performance.

Students use and manipulate dramatic elements, conventions, performance and expressive skills, performance styles and stagecraft in non-naturalistic ways to shape and enhance the performance.

Students also document and evaluate stages involved in the creation, development and presentation of the ensemble performance through the use of a Drama Journal and a written assessment piece.

Unit 4: Non-naturalistic solo performance

This unit focuses on the development and presentation of non-naturalistic devised solo performances. Students explore non-naturalistic performance styles and associated conventions from a diverse range of contemporary and cultural performance traditions. They develop skill in extracting dramatic potential from stimulus material and use dramatic elements, conventions, performance styles and performance and expressive skills to develop and present a short solo performance. These skills are further developed as students create a devised solo performance in response to a prescribed structure.

Assessment

Assessment tasks for Units 1 and 2 include:

- Creating and documenting a devised performance
- Presenting a devised performance
- Analysing the development and performance of devised work
- Analysing the development and performance of other drama practitioners

Unit 3

Assessment includes:

- Developing and presenting characters in a non-naturalistic devised performance
- Analysing the use of process, techniques and skills to create and present a devised ensemble performance
- Analysing and evaluating a non-naturalistic performance

School-assessed Coursework for Unit 3 will contribute 30 per cent.

Unit 4

Assessment includes:

- Devising a solo performance in response to a given stimulus material
- Describing key elements of the non-naturalistic qualities of the performance
- Creating, developing and performing a non-naturalistic solo performance in response to a prescribed structure
- Analysing and evaluating the creation, development and presentation of a devised non-naturalistic solo performance

School-assessed Coursework for Unit 4 will contribute 10 per cent.

The level of achievement for Units 3 & 4 is also assessed by an end-of-year performance examination, which will contribute 35 per cent and an end-of-year written examination which will contribute 25 per cent.

ENGLISH

Year 11

VCE English focuses on how English language is used to create meaning in written, spoken and multimodal texts of varying complexity. Literary texts selected for study are drawn from the past and present, from Australia and from other cultures. Other texts are selected for analysis and presentation of argument. The study is intended to meet the needs of students with a wide range of expectations and aspirations.

There are three areas of study across Units 1 and 2:

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. They explore how authors use structures, conventions and language to represent characters, settings, events, explore themes, and build the world of the text for the reader. 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 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.

2. 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. Students consider the contention of texts; the development of the argument including logic and reasoning, tone and bias; and the intended audience. Students consider how authors craft texts to support and extend the impact of an argument. 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.

3. 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 practise their listening and speaking skills through discussion, developing their ideas and thinking in relation to the texts studied. 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.

Assessment

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. Teachers will use a variety of learning activities and assessment tasks that provide a range of opportunities for students to demonstrate the key knowledge and key skills in the outcomes. Assessment will be completed mainly in class and within a limited timeframe. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Possible tasks for assessment in this unit may include the following: oral or written creative responses to texts; participation in discussion groups; a comparative analytical response to set texts; a persuasive text that presents an argument or viewpoint; an analysis of the use of argument and persuasive language in text/s.

Year 12

Unit 3

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

Area of Study 1: Reading and responding

This area of study focuses on the reading of a range of literary texts to develop critical and supported responses.

Students examine the structures, features and conventions used by authors of a range of selected texts to construct meaning. They identify, discuss and analyse these in order to explain how meaning is constructed through textual elements such as language and images. They also examine the ways in which the same text is open to different interpretations by different readers; for example, the ways in which a text can be read differently in a different time, place or culture. They describe the ways in which social, cultural and/or historical values are embodied in texts, and develop oral and written responses to a selected text, using the appropriate metalanguage.

Area of Study 2: Creating and presenting

The focus in this area of study is on reading and writing and their interconnection.

A Context will be chosen each year which will be the focus of study in both Units 3 and 4.

Students will read these texts in order to identify, discuss and analyse ideas and/or arguments associated with the selected Context. They will reflect on the ideas and/or arguments suggested by these texts, explore the relationship between purpose, form, audience and language and examine the choices made by authors in order to construct meaning.

Students will then draw on the ideas and/or arguments they have gained from the texts studied to construct their own texts. They write for a specified audience and purpose and draw on their experience of exploring texts to explain their own decisions about form, purpose, language, audience and context.

Area of Study 3: Using language to persuade.

The focus on this area of study is the analysis and comparison of the use of language in texts that debate a topical issue which has appeared in the Australian media since September 1 of the previous year. Students read, view and listen to texts such as feature articles and opinion columns, cartoons, editorials and letters to the editor, interviews on current affairs programs etc. They analyse and compare the ways in which verbal and non-verbal (including visual) language of these texts is used to persuade readers and viewers to share the points of views being presented.

Drawing on their study of the use of language to persuade, students construct a piece of sustained and reasoned writing in which they put forward their own point of view on the selected issue in written or oral form.

Unit 4

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

Area of Study 1: Reading and responding

This area of study builds on Area of Study 1 in Unit 3.

Area of Study 2: Creating and presenting

This area of study builds on Area of Study 2 in Unit 3

Assessment

There will be 3 Outcomes in Unit 3 which contribute 25% to the study score.

There will be 2 Outcomes in Unit 4 which contribute 25% to the study score.

There will be a 3 hr exam which contributes 50% to the study score.

FRENCH

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

Units 1 and 2 in VCE French are topic-based and it is our experience that the students enjoy working this way. There are four Assessment Tasks per Unit designed to achieve three major Outcomes.

In Unit 1, these Outcomes are:

1. Establish and maintain a spoken or written exchange related to personal areas of experience
2. Listen to, read and obtain information from written and spoken texts
3. Produce a personal response to a text focusing on real or imaginary experience.

The Assessment Tasks in Unit 1 are:

1. Informal conversation *or* Reply to personal letter/fax/email
2. Listen to spoken texts (e.g. conversations, interviews, broadcasts) to obtain information to complete notes, charts or tables in French or English; and Read written texts (e.g. extracts, advertisements, letters) to obtain information to complete notes, charts or tables, in French or English.
3. Oral presentation, *or* Review, *or* Article.

In Unit 2, the Outcomes are:

1. Participate in a spoken or written exchange related to making arrangements and completing transactions
2. Listen to, read and use information and ideas from spoken and written texts
3. Give expression to real and imaginary experience in written or spoken form.

The Assessment Tasks in Unit 2 are:

1. Formal letter, or fax or email *or* Role-play *or* Interview
2. Listen to spoken texts (e.g. conversations, interviews, broadcasts) and reorganise information and ideas in a different text type; and Read written texts (e.g. extracts, advertisements, letters) and reorganise information and ideas in a different text type
3. Journal entry *or* Personal account *or* Short story.

The course provides both a relevant and interesting study in itself and prepares students for Units 3 and 4 in Year 12.

Units 3 and 4 involve three Assessment Tasks each designed to achieve three and two major Outcomes respectively, as well as an end-of-year Oral Examination and an end-of-year Written Examination.

In Unit 3 these Outcomes are:

1. Express ideas through the production of original texts
2. Analyse and use information from spoken texts
3. Exchange information, opinions and experiences.

The Assessment Tasks in Unit 3 are:

1. A 250 word personal or imaginative written piece
2. A response to specific questions, messages or instructions, extracting and using the information required
3. A three-to-four minute role-play, focusing on the resolution of an issue.

In Unit 4, the Outcomes are:

1. Analyse and use information from written texts
2. Respond critically to spoken and written texts which reflect aspects of the language and culture of French-speaking communities.

The Assessment Tasks in Unit 4 are:

1. A response to specific questions, messages or instructions, extracting and using information requested
2. A 250-300 word informative, persuasive or evaluative written response, for example, report, comparison or review; and
3. A three-to-four minute interview on an issue related to the texts studied.

The end-of-year Oral Examination is externally assessed and is devised to test the students' listening and speaking skills.

The end-of-year Written Examination is externally assessed and devised to test the students' listening, reading and writing skills.

The study of LOTE is becoming increasingly recognised throughout the school system as having enormous value. The Victorian Curriculum and Assessment Authority recognises this by granting a high mean score to the study, thereby increasing the ATAR of students of LOTE.

Although it is theoretically possible to begin all subjects at Unit 3 level, it is regarded as essential that Units 1 and 2 are completed first.

HISTORY

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

History is the study and practice of making meaning of the past. It is also a study of the issues and problems of establishing and representing that meaning. It is a synthesising discipline which draws upon most elements of knowledge and human experience.

In this study there is a particular stress on studying the concepts of History as well as actual events, and students will be encouraged to carry out a detailed study of primary source evidence ranging from documents, diaries and official statutes to letters, novels, films, photographs and documents. We also test the relevance of Oral History.

Unit 1

Area of Study 1 - Ideology and conflict

Area of Study 2 - Social and cultural change

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 period after World War One was characterised by significant social and cultural change in the contrasting decades of the 1920s and 1930s.

Unit 2

Area of Study 1 - Competing ideologies

Area of Study 2 - Challenge and change

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. 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 change 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. While terrorism was not a new historical phenomenon, it took on new dimensions and became increasingly globalised.

Assessment tasks take a number of forms including: historical inquiries, presentations, analyses of primary sources, analyses of historical interpretations and essays.

Units 3 and 4: Revolutions

In Units 3 and 4 Revolutions students investigate the significant historical causes and

consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point, which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror.

In these units students develop an understanding of the complexity and multiplicity of causes and consequences in the revolutionary narrative. They construct an argument about the past using primary sources as evidence and evaluate the extent to which the revolution brought change to the lives of people. They consider how perspectives of the revolution give an insight into the continuity and change experienced by those who lived through dramatic revolutionary moments. Students evaluate historical interpretations about the causes and consequences of revolution and the effects of change instigated by the new order.

In Unit 3, students study the French Revolution.

In Unit 4, students study the Russian Revolution.

Area of Study 1

- The French Revolution from 1774 to October 1789 (Accession of Louis XVI to the throne to The October Days 1789)
- The Russian Revolution from 1896 to October 1917 (Coronation of Tsar Nicholas to the 25th October Revolution 1917)

Area of Study 2

- The French Revolution from October 1789 to 1795 (The October Days to the dissolution of the Convention Year III)
- The Russian Revolution from October 1917 to 1927 (Early Sovnarkom decrees to the end of the NEP)

Assessment tasks take a number of forms including: historical inquiries, analyses of primary sources, analyses of historical interpretations and essays.

Assessment

School-assessed coursework for Unit 3 will contribute 25%

School-assessed coursework for Unit 4 will contribute 25%.

End-of-year examination 50%.

LITERATURE

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

The study of literature focuses on the enjoyment and appreciation of reading that arises from discussion, debate and the challenge of exploring the meanings of literary texts. Students reflect on their interpretations and those of others. The study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. Studying literature encourages independent and critical thinking in students' analytical and creative responses to texts, which will assist students in the workforce and in future academic pursuits.

Units 1 and 2

Unit 1 focuses on the ways literary texts represent human experience and the reading practices students develop to deepen their understanding of a text. Students respond to a range of texts – poetry, prose, drama and non-print - personally, critically and creatively.

Unit 2 focuses on students' creative and critical responses to texts. Students deepen their understanding of their responses to aspects of texts such as the style of narrative, the characters, the language and structure of the text.

ASSESSMENT TASKS involve developing and justifying individual responses to texts, critical analysis and creative response, and comparisons between the construction of different texts.

Written responses in both formal and informal modes, and verbal and creative responses to texts are undertaken.

Units 3 and 4

In Unit 3 students focus on the ways writers construct their work and how meaning is created for and by the reader. Students consider how the form of a text affects meaning and generates different expectations in readers, the ways texts represent views and values and comment on human experience, and the social, historical and cultural contexts of literary works.

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

ASSESSMENT TASKS

These include:

- Discussing how meaning is re-created when a text is transformed or adapted
- Evaluating the assumptions and assertions of a critical review on a text
- Analysing and interpreting the views and values of a text
- Responding imaginatively to a text
- Analysing aspects of texts in relation to an interpretation of the whole.

These tasks or “Outcomes” are to be commenced and completed in class, and are assessed by the school. They constitute 50% of the final assessment.

An end-of-year examination, which requires students to utilise all of the interpretive skills they have practiced over the two years and which is externally assessed, also contributes 50% to the final assessment.

MATHEMATICS

These subjects will not run if there are insufficient students to constitute a class in which case they would be offered by Distance Education.

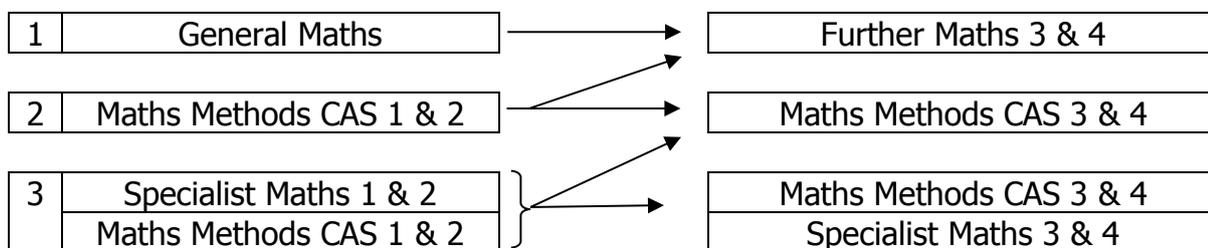
The study of VCE Mathematics is designed to provide challenging mathematical learning that takes into account the needs and aspirations of a wide range of students. It is also designed to promote students' awareness of the importance of mathematics in everyday life in a technological society and to give students confidence in making effective use of mathematical ideas, techniques and processes.

There are three studies available in Year 11 and the table below shows the progression from Units 1 and 2 to the three Year 12 studies in Units 3 and 4. Study combinations other than those shown need to be discussed with the Mathematics teachers.

VCE Mathematics: Possible Study Combinations

Year 11: Units 1 & 2

Year 12: Units 3 & 4



Note: Year 10 students who have successfully completed General Mathematics can enrol in Further Mathematics 3 & 4 as part of their Year 11 course. These students should also enrol in Maths Methods 1 & 2 if they intend to do Maths Methods 3 & 4 in Year 12. They need to enrol in Specialist Maths 1 & 2 if they also wish to do Specialist Mathematics 3 & 4. Students are allowed to count all three Year 12 subjects towards their ATAR score.

Is Mathematics a prerequisite for entry to many tertiary courses?

For example, a survey of the prerequisites for 155 courses offered by Monash University for the year 2012 entry revealed that:

- 114 courses (74%) required some VCE Mathematics subjects.
- 81 courses (52%) required any or some specific Year 12 VCE Mathematics subjects.

Are students who do more difficult mathematics subjects disadvantaged in the calculation of ATAR scores?

The increasing order of difficulty of Year 12 VCE mathematics subjects is:

- Further Maths
- Maths Methods 3 & 4
- Specialist Maths 3 & 4

The results in each Mathematics subject are compared so that students who did the more difficult subjects have their scores readjusted when calculating their ATAR scores.

Further Maths and Maths Methods are compared by looking at the results of students who did both subjects. If their average mark was say 20% lower in Maths Methods than in Further Maths, then all students in the state who did Maths Methods would have their scores raised by 20%.

A similar adjustment is applied to Specialist Mathematics scores after comparing them with the Maths Methods scores. As a consequence, a student with a study score near the average for Specialist Mathematics has his/her score increased by about 40% for the purpose of calculating the student's ATAR score.

Subject Content

Year 11: Units 1 & 2	Year 12: Units 3 & 4
General Mathematics Statistics Linear Graphs & models Shape & measurement Financial arithmetic Number patterns Trigonometry	Further Maths <i>Compulsory Core</i> Statistics and Finance <i>Modules:</i> Geometry & Trigonometry Matrices
Maths Methods CAS 1 & 2 Functions & Graphs Algebra Rates of Change & Calculus Probability	Maths Methods CAS 3& 4 Functions & Graphs Algebra Calculus Probability
Specialist Maths 1 & 2 Matrices Algebra Numbers Systems & Sets Sequences & Series Transformations Circular Functions Trigonometric ratios & applications Vectors Statistics Kinematics & Statics	Specialist Maths 3 & 4 Coordinate Geometry Trigonometric Functions Algebra Calculus Vectors Mechanics Probability and Statistics

MEDIA

The media have a significant impact on our lives, as entertainment, education, information and communication, and they generate products that can be highly influential on our values, beliefs and behaviour. This makes the media an interesting and worthwhile subject of study.

Each Unit of VCE Media combines theoretical and analytical studies with practical media production projects, primarily in film/video. Students must be prepared to engage with the theory to underpin increasingly sophisticated production work. The course would suit students who enjoy analysing films and popular culture trends, and like using digital technology such as video cameras and film editing software to create media products.

The study of VCE Media is made up of four Units:

Unit 1 – Representation and Technologies of Representation

Students develop an understanding of the relationship between the media and “reality” and examine new media technologies and their impact on society. Individual media products are created, usually in film/video, to demonstrate understanding of the theoretical concepts.

Unit 2 - Media Production and the Media Industry

Students explore the specialist production stages and roles in professional productions within the media industry, and examine the issues affecting the industry’s operation. A group film is produced in which students adopt various production roles.

Unit 3 - Narrative and Media Production Design

Students closely analyse two feature films to understand the way cinema creates meaning. Production skills are enhanced or, for those new to the subject, introduced. Students design an individual major media production.

Unit 4 - Media Process, Social Values and Media Influence

Students produce the major production project designed in Unit 3. Theory studies comprise examining texts from past eras to understand how the values of a society can be conveyed, and an exploration of the question – “How do the media influence our behaviour?”

Assessment and Satisfactory Completion

Unit 1 and 2

Individual school assessment based on theoretical and practical work.

Unit 3 and 4

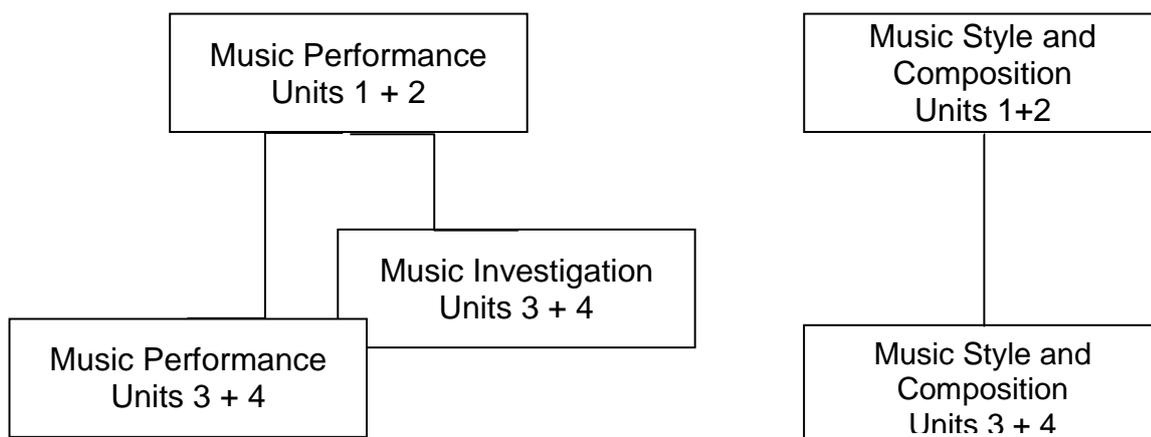
- School-Assessed Coursework – Theoretical studies: 20%
- School-Assessed Task - Major Production: 35%
- End of year examination: 45%.

MUSIC

The VCE Music study design contains an exciting array of courses that focus on performing and on creating music from a range of different styles and eras. The courses are -

Music Performance and Music Style and Composition.

The study as a whole is made up of 10 units and is structured as follows:



Students may enrol in all units or select specific combinations of units that cater for their interests. Examples of combinations of units appropriate for specific groups of students include -

Student interest	Units
Composing, arranging or improvising	Music Style and Composition Units 1-4 or Music Style and Composition Units 1+2 and Music Investigation Units 3+4
General including some group and solo performance	Music Performance Units 1+2, and Music Style and Composition Units 1-4
Performance of music works and creative practices from different times and places	Music Performance Units 1-4, Music Investigation Units 3+4, and Music Style and Composition Units 1-4

Music Performance

Central to the Music Performance study is the performance of music. Skills are developed for both solo and group contexts, in rehearsal and in performance situations. There are associated areas of creative organisation (composition and

improvisation), research tasks on issues related to performance, and aural and theory skills. In Units 1 and 2 there are four selected areas of study. They are -

- Performance
- Performance techniques
- Musicianship
- Organisation of sound.

Each unit consists of school-assessed outcomes covering a range of skill areas (3 outcomes in Unit 1, 4 outcomes in Unit 2).

Units 1 & 2 Music Performance - students will prepare and present a programme of solo and group works, develop technical, aural, theory and musicianship skills, and undertake activities in composition and improvisation

Units 3 & 4 Music Performance – students continue to develop skills acquired in Units 1+2 and elect to present a 25 minute performance programme either as a soloist or as a group member.

Units 3 & 4 Music Investigation – students extend their performance skills with in depth investigation into a chosen work (focus area). This focus area is explored through 3 areas of study (1.Investigation, 2.Composing/Improvisation, 3.Performance).

If you are interested in the Music Performance study you need to have had at least 4 years experience on one instrument or voice. For Music Performance Units 3+4 and Music Investigation Units 3+4 it is advisable that you work with an instrumental teacher. There are instrumental teachers available at Preshil for most instruments. Please ask if you need further information and advice.

Music Style and Composition

In this course students explore ways of organising sound. As they develop an understanding of ways music is designed, created and performed in a range of styles and traditions, they create their own music. A style may encompass music of an era (eg.1950s jazz), a geographical area (eg. Indonesian gamelan music), a composer or a performer. There are the following 3 areas of study –

Unit 1

- Responses to music (listening to a range of works)
- Organisation and context (techniques and traditions)
- Creative responses

Unit 2

- Responses to music
- Music created for multi-disciplinary forms (eg. theatre, dance, film etc.)
- Creative processes for multi-disciplinary forms.

Students complete 3 outcomes in each unit covering a range of skill areas.

Units 1 & 2 Style and Composition – students will create a folio of original work for a range of media, develop skills in music notation, and compile a listening journal analysing a broad range of music styles and techniques.

Units 3 & 4 Style and Composition – students will further develop music notation skills, create a journal of critical responses to a broad range of music styles, analyse two existing works in depth and create a folio of original work

ASSESSMENTS

Music Performance Units 1 & 2 and Music Style and Composition Units 1 & 2

Individual school assessment based on practical work, aural, theory and listening tests, performance examinations and other ongoing assessments in class.

Music Performance Units 3 & 4

School assessed course work – 30%

External end-of-year performance examination – 50%

External end-of-year aural/written examination – 20%

Music Investigation Units 3 & 4

School assessed course work – 50%

External end-of-year performance examination – 50%

Music Style and Composition Units 3 & 4

School assessed course work – 30%

Externally assessed task – 30%

External end-of-year aural/written examination – 40%.

PHILOSOPHY

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education.

Philosophy means 'love of wisdom.' In the subject we aim to develop an appreciation of the wisdom of both Eastern and Western philosophical traditions. We do this through introducing students to the central questions of philosophy and the core skills of philosophical inquiry.

The subject consists of four Units.

Unit 1

Students are introduced to two areas of philosophical inquiry – Metaphysics and Epistemology. Over the course of the semester students will explore a variety of questions from these areas including; What is the mind and what is the relationship between mind and body? Who am I? What is knowledge? How are scientific claims to knowledge different to religious claims to knowledge? This area of study focuses not only on philosophy but on the philosophical contributions made from the wider fields of human endeavour. Some of the issues examined in the previous year include; artificial intelligence, life after death and alternative medicines. In this Unit students will also explore various methods for investigating philosophical problems and develop skills in reasoning, argument and philosophical argument.

Unit 2

Students will engage in a rigorous course on formal argument and logic. Students will become familiar with different forms of reasoning and common fallacies in argument. Students will begin to explore a range of problems in meta-ethics, normative ethics and applied ethics. Students will ask questions such as are there universal moral principles or is morality relative? How should we live? What role does pleasure play in a good life? What, if any, moral principles should we live by? Philosophy students will be involved in formulating and defending philosophical positions in relation to practical issues such as animal rights. In this Unit students are encouraged to continue working on the skills introduced in Unit One while also developing their abilities to make connections across the spectrum of philosophical thought.

Unit 3

Students focus on two key areas of contemporary philosophical debate – the nature of mind and the nature of identity. Students will be involved in studying and evaluating arguments from relevant prescribed texts, and, through so doing, develop their skills as philosopher. Students will also explore associated contemporary debates, such as artificial intelligence, life after death and cloning.

Students explore ideas of the Good Life through examination of both ancient and modern philosophical texts, as well as through Eastern philosophical traditions. Students are encouraged to build on their skills of philosophical argument and to

apply these skills to questions concerning the purpose of life, the meaning of happiness and the nature of virtue.

Unit 4

Students explore ideas of the Good Life through examination of both ancient and modern philosophical texts. Students are encouraged to build on their skills of philosophical argument and to apply these skills to questions relating to three, interrelated contemporary debates; consumerism, social responsibility and the capacity of technology to enhance or undermine our good life.

OUTCOMES:

Unit 1

- a written reflection
- an oral analysis
- an essay
- series of short written responses.

Unit 2

- As for Unit 1.

Unit 3

- A series of short answer tests and extended response tasks

Unit 4

- A series of short answer tests and extended response tasks
- An essay
-

Coursework: 50%. End of year exam: 50%.

PHYSICAL EDUCATION

This subject is offered on a rotational basis.

VCE Physical Education examines the biological, physiological, psychological, social and cultural influences on performance and participation in physical activity. It focuses on the interrelationship between motor learning and psychological, biomechanical, physiological and sociological factors that influence physical performances, and participation in physical activity. The study of physical activity and sedentary behaviour is significant for the understanding of health, wellbeing and performance of people.

The study enables the integration of theoretical knowledge with practical application through participation in physical activities. There are opportunities for students to apply theoretical concepts and reflect critically on factors that affect all levels of performance and participation.

This VCE study is suitable for students with a wide range of aspirations, including those who wish to pursue further formal study at tertiary level or in vocational education and training settings. The study prepares students for such fields as the health sciences, exercise science and education, as well as providing valuable knowledge and skills for participating in their own sporting and physical activity pursuits to develop as critical practitioners and lifelong learners.

Unit 3: Physical activity participation and physiological performance

Unit 4: Enhancing performance.

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 multi-factorial 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 and Satisfactory Completion

Demonstrated achievement of the set of outcomes specified for the Unit.

Units 3 and 4

Unit 3 school-assessed coursework: 25%

Unit 4 school-assessed coursework: 25%

End-of-year examination: 50%.

PHYSICS

This subject will not run if there are insufficient students to constitute a class in which case it would be offered by Distance Education with support classes held at school.

What is Physics?

Physics enables us to answer questions about the physical world:

What stops us falling off the earth?

What are electricity, light and antimatter?

Are mobile phones and nuclear reactors dangerous?

Physics helps us understand how the world works and helps us to develop new technologies to try and improve our lives: to design safer cars and find more efficient forms of energy generation, transport and storage.

Physics provides an interesting course for a wide range of students, including those aiming for medical, engineering, technology-based and science-based careers.

Unit 1

Areas of Study:

1. Nuclear Physics and Radioactivity

Atomic model, periodic table, isotopes, discovery of radioactivity, α , β & γ radiation, penetration powers, radioactive half-life and decay curves, decay series, ionising radiation, radiation dosage, short and long term effects on humans, detecting radiation, sources of radiation, protection from radiation, uses of radioisotopes.

2. Electricity

Electrostatics, electric charge, Coulomb's Law, electric fields and electric field intensity, electric current, potential difference, work done, energy and power, batteries, electrical resistance in series and parallel, Ohm's Law, current and voltage laws, circuits, dry cells, maximum power transfer, household use of electricity, dangers of electricity, safety in the household.

3. Detailed Study Options

We will choose one of the following six options:

Astronomy

Energy from the nucleus

Investigations: Sustainable energy sources

Astrophysics

Investigations: Flight

Medical Physics

Unit 2

Areas of Study:

1. Motion

Distance and displacement, speed and velocity, acceleration, motion-time graphs, forces, weight, friction and drag, Newton's Laws of motion, impulse and momentum, work, force-displacement graphs, kinetic energy, gravitational potential energy, energy transfers, power.

2. Wave-like Properties of Light

The behaviour of waves and the connection with the behaviour of light, sources of light, straight-line propagation, pin-hole camera, reflection of light, images in plane and curved mirrors, refraction of light, Snell's Law, total internal reflection, critical angle, images in curved lenses, lens aberrations, optical instruments, the human eye, power of a lens, colour, dispersion of light, frequency of light.

3. Detailed Study Options

We will choose another one of the same six options as listed above for Unit 1.

Unit 3

Areas of Study:

1. Motion in one and two dimensions

Newton's laws of motion, circular motion, motion of projectiles, frames of reference, momentum and energy exchanges in collisions, potential energy of springs and gravity, motion of satellites and the planets. Applications to transport safety and motion in space.

2. Electronics and Photonics

Photonics is the science of using light to manipulate information and energy; it is the basis of much modern communication technology. We study electronic circuits with photonic components, diodes, resistors, thermistors, photonic transducers, transfer of information in analogue form, design of circuits using opto-electronic components, voltage characteristics of amplifiers.

3. Detailed Study Options

We will choose one of:

- Einstein's special relativity
- Materials and their use in structures
- Further Electronics
- Synchrotron and its applications
- Photonics
- Sound.

This may be studied either in Unit 3 or Unit 4 and is assessed as part of the final exam.

Unit 4

Areas of Study:

1. Electric Power

The generation, transmission, distribution and use of electric power are crucial to modern life. We study magnetic fields, use of fields and coils to generate electricity and forces. DC electric motors, AC alternators, transformers and electricity transmission.

2. Interactions of Light and Matter

The wave and particle nature of electrons and light, quantised energy levels in atoms, the photo-electric effect, emission and absorption spectra of atoms, the wave properties of matter.

Assessment and reporting

Assessment tasks for Units 1 and 2 may include:-

- a practical investigation
- an annotated folio of practical activities
- a summary report of practical activities
- a written report
- testing involving short answer and extended response questions
- data analysis
- a response to a media article
- a multimedia presentation

School-Assessed Coursework tasks for Units 3 and 4 may include:-

- a student-designed extended practical investigation
- an annotated folio of practical activities
- a summary report of practical activities
- a written report
- testing involving short answer and extended response questions
- data analysis
- a written response to a media article
- a multimedia presentation.

The School-Assessed Coursework accounts for 40% of the final total score, consisting of Unit 3 - 16% and Unit 4 - 24%.

The External Examination in November accounts for 60% of the final total score and covers both Units 3 and 4.

PSYCHOLOGY

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. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours.

A student-directed research investigation related to brain function and/or development is undertaken in this unit. The research investigation draws on content from Area of Study 1 and/or Area of Study 2.

Unit 2: How do external factors influence behaviour and mental processes?

A person's thoughts, feelings and behaviours are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways.

A student practical investigation related to internal and external influences on behaviour is undertaken in this unit. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

Assessment

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Assessment of levels of achievement for these units will not be reported to the VCAA. Schools may choose to report levels of achievement using grades, descriptive statements or other indicators.

STUDIO ARTS

This course focuses on the working practices an artist undertakes in the creation and presentation of art works in a specific area such as photography, ceramics/sculpture, textiles, drawing etc. Photography has been offered in the past for Units 1 and 2, with other areas of study dependent on student numbers and teacher availability. The exhibition of artworks is integral to Studio Arts and students are required to visit at least two exhibition spaces throughout their course of study, reflect on the different environments and examine how artworks are presented to the public.

The study is made up of four Units.

Units 1 and 2 can be taken individually. Units 3 and 4 must be taken sequentially.

Units 3 and 4 - individual negotiation of folio.

Unit 1

Focuses on the generation of ideas and the exploration of techniques. Students study other artists' inspiration, interpretations, media and techniques.

Unit 2

Focuses on the design process as an essential element in the development of individual work. Detailed documentation of techniques, processes and concepts is presented in the form of a workbook. The written work focuses on ways in which design elements and principles, signs and symbols and images are used in a variety of art works to communicate ideas and develop style.

Unit 3 (*subject to external review)

The student prepares an exploration proposal that formulates the content and parameters of an individual design process as well as a plan of how the proposal will be undertaken. A range of potential directions which reflect the concept and ideas documented in the exploration proposal of the individual design process is produced by the student.

The student submits a written project with supporting visual material that discusses traditional and contemporary working practices in a particular studio form.

Unit 4 (*subject to external review)

The student produces a cohesive folio of finished artworks based on selected potential directions that have developed through the design process. The work should demonstrate the skilful application of materials and techniques and communicate clearly the student's ideas.

A research project – students research, analyse and evaluate roles and methods involved in the presentation of art works to an audience and critically discuss art industry issues such as censorship, plagiarism, appropriation, marketing and promotion of art works etc.

Assessment

Units 3 and 4 School assessed task: 33% School assessed task: 33%

Written examination: 34% (1½ hr exam)

VOCATIONAL EDUCATION AND TRAINING (VET)

Students can do some VET courses in conjunction with other training institutions through the Inner Melbourne VET Cluster. Subjects that students have chosen in the past that have integrated well with VCE subjects are Hospitality, Beauty and Business Administration. Students interested in enrolling in a VET course need to discuss this with Kris Austin. Enrolments will be done through the school. VET subjects can contribute to a student's ATAR but how they contribute varies from subject to subject.