

Belmont High School

LATER YEARS HANDBOOK



2 0 1 7

(incorporating the Year Eleven and Twelve programs)

Principal

Mrs Sandra Eglezos

Enrolment Officer

Mr Scott Hucker

VCE Coordinator

Mr John McAndrew

Pathways Coordinator

Mr Nick Masters

VCAL/VET Coordinator

Mr Darren Lynch

BELMONT HIGH SCHOOL

Rotherham Street Belmont Victoria 3216 Tel: +61 3 5243 5355 Fax: +61 3 5243 2420
Email: belmont.hs@edumail.vic.gov.au Website: www.bhs.vic.edu.au

Contents

	Pages
General Information about Belmont High School	1 - 3
Later Years at Belmont High School	3
Pathway Planning and Careers Information	4 - 5
VCE General Information	6 - 7
VCE Attendance Policy	8
Assessment at Belmont High School	11
VCE Studies Offered	12
Vocational Education and Training (VET)	13 - 19
Victorian Certificate of Applied Learning (VCAL)	20
School Based Apprenticeships (SBA's)	21
Acceleration	21 - 22
Distance Education	22
Gap Year	22
The Tertiary Selection Process	23
Summary of Courses – Sequencing of Years 10-12 courses	24 - 26
Year 11 and 12 Subject Selection – Guidelines and Unit Descriptions (Note: Index on page 28)	27 – 124

A Guide to Acronyms used in this handbook

VCAA	Victorian Curriculum and Assessment Authority	TAFE	Tertiary and Further Education
ATAR	Australian Tertiary Achievement Rank	VCAL	Victorian Certificate of Applied Learning
ICT	Information and Communication Technology	VCE	Victorian Certificate of Education
MIP's	Managed Individual Pathways	VET	Vocational Education and Training
SAC	School Assessed Coursework	VSL	Victorian School of Languages
SBA's	School Based Apprenticeships	VTAC	Victorian Tertiary Admissions Centre

Belmont High School

– a centre for learning, excellence and performance –

Our Mission

At Belmont High School, our overriding purpose is to provide an environment that nurtures the wellbeing of all students, and provides successfully for their ongoing learning and variety of academic needs. Our innovative and extensive co-curricular programs challenge and engage all students. Our technology facilities and commitment to students ensures learning environments where students are well equipped for the challenges of the 21st century.

Our motto, “Strive for the Highest”, underpins our approach to working with young people.



Our School

With a student population of around 1220, Belmont is a large secondary school south of the Barwon River in the City of Greater Geelong. The majority of the enrolment is drawn from the Belmont/Highton area, however there is significant demand for places from the wider Geelong area, in particular for our VCE and VET Programs, and the academic acceleration and enrichment opportunities provided for students. The school has developed an excellent reputation within the State for the high quality teaching and learning programs it provides. Belmont High School has excellent student retention rates and outstanding VCE results that ensure that a significant proportion of VCE students gain post school placements in further education or training.

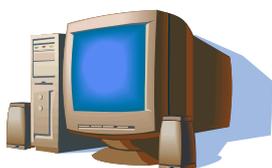
Extensive educational, sporting and recreational facilities including a gymnasium, Library, Computer Labs, Music Centre, courts and ovals are provided in spacious, landscaped grounds. Construction for the provision of buildings and facilities that will enhance the learning of students is ongoing. Three of the stages of the school’s Master Plan have been completed and include outstanding new Learning Centres, Science, Technology, Computer and Arts facilities. The BioLAB (Victorian BioScience Education Centre), has been constructed on our site and is a centre for science and mathematics excellence for students and teachers from around Victoria, and features partnerships with Deakin University, the City of Greater Geelong and the Geelong Football Club.

The House System and Student Wellbeing

The school operates a strong and successful House based system that caters for the pastoral, welfare, social, leadership and academic needs of all students. Eight Houses, with one year level each, conduct a range of activities for students throughout the year. Students develop strong loyalties to their House, and it provides an important point of contact for students and parents.

The school is also well served by Welfare and Counselling staff, and a Nurse who is based in the Health Centre each day of the week.

Information and Communication Technology and Multimedia



Belmont High School has led the way with the provision of significant infrastructure, teacher training and innovation in ICT. Our investment in information technology has been significant as all students now work in a 1:1 computer learning environment. Our students are well equipped for the workforce they will enter. VET Information Technology is an increasingly popular program that complements the full range of structured ICT and Multimedia learning in the school.

Enrichment and Academic Acceleration

In recognising that many students’ skill and academic levels are above that of their age group, both in general or in specific areas, we have in place a range of programs to enrich and/or accelerate these talented and gifted students. A teacher coordinator manages this program in order to ensure that all students’ needs are met. Through identification of students and the provision of programs, competitions and activities, all students are challenged appropriately. Belmont also offers each year a Select Entry Accelerated Learning Program that places 25 students into one group, who complete the first four years of their education in three years. This is the only registered program of its kind in Geelong for both boys and girls.

Academic Support Program

Belmont recognises that from time to time students at all year levels may require additional academic support to bring them to the levels required at their stage of schooling. Operating out of the Learning Support Centre, students are able to be referred to a number of staff who are available to work intensively with them in all curriculum areas. Houses also offer academic support programs such as Homework Groups, and parents at any time can request additional testing of students and support for their children.

Performing Arts

Outstanding opportunities are available for students to extend their interest and talents in the Performing Arts. The school annually sees students, staff and parents involved in Rock Eisteddfod, Production and a range of other performances. Our Rock Eisteddfod record is impressive having competed in many State Finals in past years.



Music

Belmont High School is recognised widely both in the Geelong community and statewide for its outstanding Music and Bands Programs. Over 120 students take part in the Music Program, learning a large number of instruments and playing in 12 Bands and Ensembles. Performance opportunities for students are frequent and we present to our community twice a year with the Winter and Spring Concerts. Our most well recognised groups are the Jazz Syndicate and Senior Concert Band that perform regularly, tour both within Victoria and Interstate, and regularly receive awards for their excellence. Additionally, VET Music (Certificate III) is an established area of study both for Belmont students, and students from other schools in Geelong.

Sport

Belmont High School offers students the full range of team, and individual sports throughout the year. The school has a proud record of participation and success at local, Regional and State level, and has won the Geelong Swimming and Athletics meets consistently over a long period of time.



Our school has strong staff support for coaching and leading teams and students are encouraged and supported in important sporting leadership and coaching roles. We encourage maximum student participation through the House structure.

Success in sport over many years has been recognised with many State titles and awards at Regional and State levels.

Camping and School Tour Programs



Belmont High School owns a camp (Tanybryn) in the picturesque Otway Ranges just north of Apollo Bay. With easy access to the coast and the surrounding wilderness, students have many opportunities to explore and learn in a superb natural environment. The camp has recently undergone extensive renovation and is well placed to serve the needs of students.

Additional camping programs are offered through Outdoor Education curriculum and we offer regular interstate and overseas tours. Students attend camping programs as a part of their Year 7 Orientation Program, Year 9 STRIVE Program and Year 12 Leadership Program. All students at other year levels are able to access both curriculum camps and tours offered each year to a variety of locations.

Co-curricular Programs

It would be difficult to find a student at Belmont who could claim that they had 'nothing to do'. The school offers an extensive co-curricular program that is broad in range to cater for the needs of all students. From the Performing Arts, Music, Camping and Sporting Programs, to the House based activities and Lunchtime Activities Programs, there is always something happening. Other key programs include the World Challenge, Fiji EcoTour, European Art Trip, Language Cultural Exchange Program, Central Australia Cultural Tour, Umpiring Academy and Year 12 Graduation Dinners. Chess Clubs, Debating and a range of other academic enrichment programs are also available to students.

Student Leadership

Many opportunities exist for students to assume leadership roles at all Year Levels and to learn and grow in these roles. Student Leadership is a priority at Belmont and includes opportunities to represent the school in School Captain and Junior School Captain roles, School Sport and School Music Captains, House Leadership, Form Leadership, and leadership of many of our other co-curricular programs.

The school also runs a very strong Student Representative Council that looks after the needs of students. Students also involve themselves in a full range of social service and fundraising activities and take leading roles in organising these.

Post Compulsory and Pathways

The Later Years Program is a powerful one for our Year 10, 11 and 12 students that includes careers counseling, work placement, course counseling and pathway planning. In the Student Pathways Centre, we have very experienced teachers with significant knowledge about the needs of senior students and the pathways and post school options available to them.

International Student Program

Belmont High School is culturally rich and values the diversity within the school. We offer support programs for international students and promote both student and teacher overseas study tours. Many of our students experience international exchange and the school provides these opportunities and support. The learning of a second language is valued at Belmont High School and many of our students go on to study language at the senior levels in Italian and Indonesian and take part in study tours to these countries. We also have sister-schools in both Italy and Indonesia.



Later Years at Belmont High School

Introduction

Belmont High School is proud of the achievements of its senior students. In addition to excellent academic results achieved across a wide range of studies, students have access to a broad range of sporting, cultural, social and leadership activities. The House system provides leadership and pastoral opportunities for senior students. Senior students make significant contributions to the running of the school through their participation on the School Council and its Committees, in the SRC, and a variety of other committees culminating in the organisation of a positive and happy conclusion to their school lives with the annual Graduation Dinner with their parents and the teaching staff.

The teaching staff are experienced and committed to the success of their students. During spare periods students are encouraged to seek help from their teachers, or to use the excellent Library and computer facilities for further research.

Assistance in improving study skills, time management and stress relief are available through the House based leadership and orientation camps for Year 12 students. A series of speakers will also conduct talks on issues relevant to Year 12 students. Year 11 students have mid-year and end of year exams and study skills programs as preparation for Year 12. Ongoing pastoral care and counseling, through the Student Wellbeing Centre, House Leaders, VCE Manager, Post Compulsory, Pathways and VET Manager, VCAL Manager and teaching staff is always available.

Parents are encouraged to contact the school at any time so that the partnership between parent, student and school can maximise each student's capabilities and educational opportunities.

Students in their "Later Years" of secondary education are faced with some very important decisions regarding Career Pathway planning. Students at Years 11 and 12 may take part in the Victorian Certificate of Education (VCE) or Victorian Certificate of Applied Learning (VCAL). VET and/or SBA programs may form part of these certificates. Outstanding careers facilities are available in the Student Pathways Centre to help students explore a range of pathways.

Some students may complete languages other than those offered at the school through Distance Education and others first year University subjects as part of their Year 12 program.

This handbook presents details of the range of options available, subject outlines, advice and details of specific Belmont High School staff who can help.

Further information about VCE or pathway planning at Belmont High School can be found by visiting the following web sites <http://bhsvce.wordpress.com/> and <http://www.belmonthscareers.com/>

As a family, please take the time to read through the handbook and discuss options with your student. It is important to make informed decisions.

Pathway Planning, Subject Selection and Careers Information

Aims of the Career's Program

To provide students with the knowledge, skills and attributes to make informed decisions about post school education, training and employment options. This includes the capacity to analyse, plan career decisions and manage school to work, or tertiary training transitions.

Managed Individual Pathways

At Belmont High School, Career Education is considered an integral part of the school curriculum. Students take part in activities in Years 7 to 9 to assist in making informed decisions regarding selection of subjects and programs in Years 10, 11 and 12.

The students in Years 7 and 8 complete Personalised Learning Plans designed to develop in students an awareness of their strengths and abilities. Students in Years 9 to 12 complete Managed Individual Pathway Plans. The students in Year 9 take part in the STRIVE program, this program has an extensive career education component to assist students in developing a pathway to a career, activities include: mock interviews, resume writing, visits to TAFE and University, guest speakers and activities to assist students to develop self-awareness and the world of work. Students in their Later Years have the opportunity to take part in many activities to assist them in Career Pathway Planning and making the transition from secondary schooling to employment or further education.

Support Services Available

The Student Pathways Centre is situated in the Administration Building. It is preferred that individual career counselling sessions are pre-arranged via an appointment. The Centre is staffed by qualified Career Counsellors. Students can gain assistance in course planning, resume preparation, presentations for job interviews, applications for tertiary studies and general counseling. VCE, VET, VCAL and SBA enquiries can also be made at the Student Pathways Centre.

Students in Years 10, 11 and 12 should make full use of the Student Pathways Centre, discussing options, checking Tertiary Entrance Requirements and familiarising themselves with the resources available.

Support is available to all students making choices regarding career planning. There is a diverse range of options available to school leavers including Tertiary Education, Apprenticeships, Cadetships, Traineeships, employment and "gap" years. The school has very good networks in place with external agencies to provide assistance where necessary to students.

Advice when choosing subjects

When choosing subjects the subject teachers can provide information about the syllabus, assessment and pathways in their subject areas.

Heads of Department can be contacted regarding curriculum:

English	Ms Barbara Daff
Mathematics	Ms Sally Morse
Arts	Ms Kirsty Zahra
Technology	Ms Belle Donald
Language	Ms Federica Cologni
Health and PE	Ms Sarah-Jane McDonald (Health), Mr Taylor Buchanan-Huhn (PE)
Science	Mr Rod Stott
Humanities	To be advised
Music	Ms Rose Humphrey, Ms Lynne Morton
Digital Technologies	Ms Liana Kelly

Program Managers

Belmont High school's Program Managers can provide information regarding programs and pathways

Pathways Manager	Mr Nick Masters
VCE Manager	Mr John McAndrew
VCAL Manager	Mr Darren Lynch
VET and SBA Manager	Mr Darren Lynch

VCE General Information (Please read this section carefully)

Information for Students Entering VCE at Belmont High School in 2017

VCE students will be required to study a minimum of 22 units – 12 units in Year 11 and 10 units in Year 12. Accelerated students may be able to study VCE units ahead of their current level.

The 22 units **must** include the following:

VCE STUDY	NO. OF UNITS
English/Literature/EAL/English Language	Units 1 and 2
English/Literature/EAL/English Language	Units 3 and 4
Any combination of studies, 3 sequences of Units 3 & 4 Studies other than English/English Language/Literature/EAL	18 Units
TOTAL	22 Units

* The selection of all units (apart from English) should be based on the student's interests and career aspirations.

* VET programs contribute towards a student's VCE.

Units 1 and 2 of each study are equivalent to Year 11 studies. Units 3 and 4 are the equivalent of Year 12 studies.

Sequence – Combination of Units 3 and 4 of a study.

Satisfactory Completion

To be awarded a VCE Certificate at the end of Year 12, a student must have satisfactorily completed at least 16 units. These units must include:

- at least 3 units of English / Literature / EAL / English Language
- at least 3 sequences of Units 3 & 4 studies other than English / Literature/ EAL / English Language
- any other units to take the total number of units to at least 16

To have an "ATAR" (Australian Tertiary Achievement Rank) calculated for tertiary admission at the end of Year 12 students must have satisfactorily completed a VCE Certificate including Units 3 & 4 of English/Literature/EAL/English Language and at least 3 other sequences of Units 3 & 4. 10 per cent of any 5th and/or 6th sequence of Units 3 & 4 will be added into your ATAR score. Some VET studies may also be scored for inclusion in the ATAR. Most other VET studies count as a student's fifth or sixth subject, providing a 10 per cent increment on a students' ATAR. Completion of School Based Apprenticeships are included in a student's ATAR calculation.

Year 11 in 2017

Students will study 6 Units in Semester 1 and 6 Units in Semester 2. English is compulsory in both semesters. The remainder of the units are chosen according to the students' interests and career selections. Students may select a different combination of units for each semester. Students may consider taking part in a VET program.

Before the selection of VCE studies, students should carefully check the "VICTER 2019" for Universities and TAFE Colleges (available from the Careers Centre). You should consider your study selections carefully in the light of the information in this book.

CHECK CAREFULLY FOR:

Prerequisite Studies

Those nominated by individual course authorities as subjects/studies which must be satisfactorily completed by all applicants seeking admission to that course. Applicants who do not meet this condition may not be considered for selection. If a pre-requisite study must be included in the best four studies for scoring purposes, this will be indicated by the phrase "studies to be included in the 'primary four'".

☐ Increment

Increments are additional points given to the fifth and sixth studies taken at Units 3 & 4 level. These incremental studies will attract 10% each of the scaled VCE study score achieved. Only one of the following combinations can be used in the best six (that is, in the calculation of the ATAR):

- English/ESL
- Chinese/CSL (Chinese as a second language)
- Indonesian/ISL (Indonesian as a second language)

No more than two mathematics studies (drawn from either previous or current VCE mathematics), no more than two music studies, no more than two history studies, no more than two information technology studies and no more than two LOTEs (languages other than English) can be included in the 'primary four'. (Other mathematics, music, histories, and/or LOTEs can be used as a 10% increment.)

Music studies: music–history and styles, music performance–group, music performance–solo.

History studies: Asian History, Australian History, the Cities in History, Koori History, Revolutions, History of Western Ideas.

The Increment for VET programs may be 10% of the average of the best four or a graded assessment depending on the program.

☐ Tertiary Selection Process

The tertiary selection process can involve two stages.

Stage One – Selection based on prerequisite studies and rank order derived from ATAR score.

Stage Two – Middle-band Selection may be based on the students' full range of VCE studies, SAC scores in prerequisite studies, profiles, folios, interviews as well as any specific credit points indicated in specific course entrance requirements listed in VICTER 2019.

See page 10 for a list of those Unit 3 & 4 studies which may be undertaken in Year 11.

NOTE: "VICTER 2019" outlining all Victorian Tertiary Entrance requirements for 2019 will be available during Term 3, 2017. It is advisable to consult "VICTER 2019" **before** final VCE selections are made.

Not all students elect to continue on to University or TAFE. There are many pathways to a career. Advice on Traineeships, Apprenticeships, Part time apprenticeships, VCAL and employment are available in the Student Pathways Centre.



VCE Attendance Policy

YEAR 11 and 12 SCHOOL ATTENDANCE POLICY 2017

1. Students must attend all timetabled classes in accordance with the 'VCE Class Attendance Policy 2017' and the attendance requirements for VCAL students. This policy is **in addition** to the class attendance requirements.
2. During the school week there are times when students do not have timetabled classes. These are known as 'study periods'. **Students are expected to be in designated areas completing study during these times.**
3. **ALL** students must attend school from the beginning of each day and be present at Form Assembly. This is irrespective of first class starting time. There will be no exceptions to this rule.
4. Students once in attendance at the school must remain at school until the designated finish time for that day. That is 3:40 on Monday, 3:15 on Tuesday, Thursday and Friday and 12:45 on Wednesday. Students are not permitted to sign out at any time unless a valid reason is provided from a parent.
5. Wednesday finishes at 12:45 for Year 11 and 12 students unless they study a VET subject.

Please Note: On some Wednesday SAC classes will be held, seminar or study sessions organised and students are required to attend these and non-attendance will be regarded as an unexplained absence.

English and Maths tutorials will also run on Wednesday afternoons.

1. **Friday Week B afternoons are now official study periods.** All students must attend these periods. The Library will be made totally free for revision classes as well as allocated classrooms. Seminars, learning activities, mentoring, tutoring and some SAC assessments will be held during this time.

VCE CLASS ATTENDANCE POLICY 2017

RATIONALE:

VCAA states that each study must have a minimum of 50 hours class time. It is a requirement at Belmont High School that students attend all timetabled classes so that teaching and learning opportunities can be maximised. Attendance in class provides opportunities for student work to be authenticated by teachers. Work which cannot be authenticated will not be accepted for assessment and will be awarded 'N'.

It is important that students minimise the number of days away from school; this includes extra-curricular activities. For information about attendance at Form Assembly please see the Year 11 and 12 School Attendance Policy.

Family holidays during school time is not recommended.

OPERATION:

1. How many classes can a student miss without a medical certificate?

Students are allowed to miss only **four lessons* per subject per semester without penalties being applied.**

* One double period is counted as one lesson. Different arrangements apply to students undertaking Outdoor and Environment Education and VET subjects. Please see your teacher for clarification.

2. What does the student have to do when they return to school after ANY absence?

It is the student's responsibility to ensure that absences are explained. Medical certificates must be presented to the General Office before being shown to teachers and then will be approved by the VCE Coordinator. Non-medical absences must be discussed with the VCE Coordinator.

3. How will I know if I am approaching the limit of my absences in a class?

Students are expected to keep a record of classes that they have missed in their organiser. Students and parents will receive a warning that the student is approaching the limit of absences after three and/or four absences have been accrued.

4. What happens if a student has a fifth absence in any subject?

A meeting will be convened between VCE Coordinator, Assistant Principal, House Leader, student and parent. If attendance cannot be accounted for, the student may receive a 'N' for the unit.

5. What if the student is absent for more than two consecutive days?

A medical/dental/approved absence certificate **must** be produced.

6. What if the absence is for a school activity, e.g. excursion, sport team?

Students must **obtain clearance from each class teacher prior to the absence.** Lists of students participating in school events submitted to the General Office before the activity takes place.

All students will be required to complete the 'Missed Class Work Proforma' sheet and return it to Mr. McAndrew/Mr. Kasperovic before absence is approved.

If approved, these absences do not count towards the total of missed classes. Students are expected to make up work that has been missed.

Students with a number of absences (approved or not) due to illness or other activity will not be permitted to participate in non-academic excursions.

7. Holidays: Holidays during class time including orientation is not recommended.

Families may apply for an approved absence on a holiday with each application considered individually based on personal reasons, student's progress and attendance. Unless extenuating circumstances apply, applications need to be made at least 2 weeks in advance and where possible before bookings are made. If an extended holiday is approved and taken (over a week), the student will be ineligible to participate in any non-compulsory activity for the whole Semester.

8. What if I am absent for a class in which a SAC is held?

Students must have a medical certificate/VCE approved absence to cover this. If you fall ill during the day and leave the school, you must be signed out by the nurse. This will then be a VCE approved absence and you will be allocated to a SAC make up class to complete the work that has been missed.

9. What is a VCE Approved Absence?

If there is a reason (not covered by medical certificates) why the student cannot attend school eg. Family emergency, the student can apply to the VCE Coordinator for a **VCE approved absence**, which is regarded in the same manner as a medical certificate. Students are expected to meet a minimum of 50 hours class time. Students who accrue a large number of approved absences may receive a 'N' for a unit if it is deemed they

have not been able to satisfy the requirements of an outcome due to attendance. It is the student's responsibility to take this into account before committing to extra-curricular activities or holidays during class time.

10. What if a student continues to suffer on-going effects from an illness and obtaining medical certificates for each absence could prove very costly?

The student should apply to the VCE Coordinator for an **extended** approved absence. (Documentation of illness will generally be required.)

11. How many 'N' results can a student receive because of breaches of the attendance requirements?

Any student who receives two 'N' results (due to poor attendance) in one semester may have their **enrolment cancelled in all units for the current year**. The student may apply to re-enrol in the following year.

12. What does the student do about any work they have missed?

It is the student's responsibility to catch up on missed work and collect any handouts that were given to the class in their absence.

Students and parents are advised to contact the VCE Coordinator with any inquiries about this policy.

Assessment at Belmont High School

Assessment for Year 11 Students in 2017

1. Assessment for the Victorian Curriculum and Assessment Authority (VCAA)

This assessment is based on the “satisfactory achievement” of a series of outcomes in each unit. An outcome is a particular activity, for example, a series of questions, an assignment, making a model, and so on. Students must follow the guidelines and achieve a satisfactory standard of key knowledge and key skills to be awarded “S”. To achieve “S” for any unit of work, a student must achieve “S” for all outcomes. An “N” (not satisfactory) for any outcome in that unit will result in “N” for the whole unit. It is therefore most important that students manage their time carefully to ensure that all outcomes in all units achieve “S” standard.

2. Belmont High School assessment

As “S” does not distinguish between work which is barely satisfactory and that which is excellent, Belmont High School will continue to award letter grades to identify standards. There will be examinations at the end of each semester.

Exams

In Year 12 examinations are a major determinant of a student’s ATAR and subsequent access to University and many other TAFE and further education programs. In preparation students in Year 10 and 11 will sit exams at mid year and end of year.

Assessment for Year 12 Students in 2017

Students will study 5 units in both Semester 1 and Semester 2. English/Literature is compulsory in both semesters. Students must study the same combination of units for both semesters as they are required to complete “pairs” or “sequences” of Units 3 & 4 subjects. Therefore no changes of units are possible at the end of Unit 3.

There are three methods of assessment in Year 12:

1. Outcomes

The same system of satisfactory achievement of outcomes as exists in Year 11.

2. School Assessed Coursework

School-assessed coursework is made up of a number of assessment tasks completed mainly in class time and will assess the unit learning outcomes. Students will receive the marks for their SACs from their teachers but will not know the grades for these until later. School-assessed coursework will be reported as grades (A+ to E; UG) by the Victorian Curriculum and Assessment Authority in December 2017. A small number of studies will have school-assessed tasks (SATs). These are produced over a period of time and will be used in studies where products and models are assessed, for example, Art, Media and Visual Communication Design.

3. Examinations

Each unit 3, 4 sequence will have at least one examination. Examinations will be held in November 2017. These examinations will be set and marked by VCAA. Grades and scores will be available in December 2017. In addition, all students studying a Unit 3, 4 sequence including VET programs with a scored assessment, will need to sit the GAT (General Achievement Test). This is an important test which provides statistical information and support for students.

Homework

Refer Belmont High School Homework Policy.

VCE Studies offered

VCE Study Information

ACCOUNTING (1-4)
 ALGORITHMICS (3-4)
 ART (1-4)
 BIOLOGY (1-4)
 BUSINESS MANAGEMENT (1-4)
 CHEMISTRY (1-4)
 COMPUTING (1-2)
 COMPUTING SOFTWARE DEVELOPMENT (3 & 4)
 COMPUTING INFORMATICS (3 & 4)
 PRODUCT DESIGN AND TECHNOLOGY (1-4)
 - Textiles
 - Food
 - Wood

ENGLISH (1-4)
 ENGLISH LANGUAGE
 ENGLISH AS AN ADDITIONAL LANGUAGE (1-4)
 ENVIRONMENTAL SCIENCE (1-2)
 EXTENDED INVESTIGATION STUDIES (3-4)
 GEOGRAPHY (1-4)
 HEALTH AND HUMAN DEVELOPMENT (1-4)
 HISTORY (1-4)
 LEGAL STUDIES (1-4)
 LITERATURE (1-4)
 LANGUAGE - Indonesian (1-4)
 - Italian (1-4)
 MATHEMATICS (1-4)

MEDIA STUDIES (1-4)
 MUSIC PERFORMANCE (1-4)
 MUSIC INVESTIGATION
 OUTDOOR EDUCATION AND
 ENVIRONMENTAL STUDIES (1-4)
 PHYSICS (1-4)
 PHYSICAL EDUCATION (1-4)
 PSYCHOLOGY (1-4)
 STUDIO ARTS
 SYSTEMS TECHNOLOGY (1-4)
 THEATRE STUDIES
 VISUAL COMMUNICATION DESIGN (1-4)

Extra information available from:

J. Watson
 D. Byrt
 K. Zahra, J. Stevens
 S. Visser, D. Matthews
 R. Pugh, E. Horne
 A. Sokolov, M. Hermans
 L. Kelly
 L. Kelly
 L. Kelly

B. Donald
 E. Cave
 P. Vernon

B. Daff
 B. Daff, W. Whitney
 A. Williams
 D. Matthews
 J. McAndrew
 R. Kline
 D. Ayres, A. Harbison
 N. Wilson, J. Stewart
 E. Horne, R. Pugh
 R. Rochester, W. Whitney
 L. Purdy
 F. Cologni
 M. Wamsteker, D. Byrt, A. Sokolov,
 P. Dann, S. Morse, J. Stewart, R. Fehling
 F. Hergstrom
 R. Humphrey, L. Morton
 R. Humphrey, L. Morton
 P. Stockton

R. Stott
 J. McAndrew, D. Ellis, R. Kline, E. Mitchell
 S. Visser, P. Cassidy, J. Soden
 K. Zahra, P. De Bruyn
 S. Webb
 K. Mann
 A. Hambling, P. Stockton



Vocational Education and Training (VET)

VET is a study option combining VCE or VCAL with vocational training and work placement in industry. VET is recognised as a pathway to a number of careers. A student's VET program may form part of a pathway towards employment or tertiary studies after secondary school. Many employers are recruiting students who have completed VET programs. A VET certificate is a nationally recognised qualification.

After two years study a student can successfully complete the VCE, obtain a VET certificate and a contribution towards the student's ATAR. VCAL students undertake VET or Further Education as part of that program. A student's VET program in most cases constitutes another subject undertaken off campus.

In 2016, approximately 100 Year 10, 70 Year 11 and 30 Year 12 students participated in VET programs. Many students attend local Registered Training Organisations such as the Gordon Institute of TAFE.

Parents do need to be aware that VET Courses may incur additional fees.

Parents and students should consider the study options provided by VET as part of the Later Years course planning process.

VET program details and application forms are available from the Student Pathways Centre. Enquiries relating to VET should be directed to Mr Darren Lynch.

2017 VET Programs offered include:

- Certificate II in Animal Studies
- Certificate II in Automotive Technology
- Certificate II in Building and Construction
- Certificate III in Beauty
- Certificate II in Outdoor Recreation
- Certificate II in Applied Fashion
- Certificate II in Dance
- Certificate II in Desktop Publishing
- Certificate II in Electrical
- Certificate II in Engineering
- Certificate II in Equine Industry
- Certificate II in Health and Remedial Massage
- Certificate II in Hairdressing
- Certificate II in Horticulture
- Certificate II in Hospitality (Operations)
- Certificate II in Media
- Certificate III in Information Digital Media and Technology
- Certificate III in Music
- Certificate III in Music Industry
- Certificate III in Sport and Recreation
- Other

Please note: External VET programs on offer may be subject to change.

Students can study Certificate III in Music, Certificate III in Information Digital Media and Technology, Certificate II in Outdoor Education, Certificate III in Interactive Digital Media and Technology and Certificate III in Sport and Recreation at Belmont High School.

Structured Workplace Learning

Structured Workplace learning is where a student takes part in a work placement as a "block" of time or ongoing weekly. These work placements form part of a student's VET or VCAL program.

Belmont High School RTO Number 22312

Belmont High School became a Registered Training Organization for the delivery of VET in 2010. Belmont High School is registered with the Victorian Registration and Qualifications Authority to deliver Certificate III Music, Certificate III Interactive Digital Media, Certificate III Information Technology, Certificate II Outdoor Recreation and Certificate III Sport and Recreation. Mr Darren Lynch is the Manager.



CUA30915 Certificate III in Music Industry



Duration: This program is conducted over two years
Contact Person: Ms Lynne Morton/Mr Rob Gador

Course Aims

Certificate III in Music Industry develops in student's advanced and diverse performing, technical and business skills in relation to the contemporary music industry.

This program is a performance program and includes areas of study in which students must learn an instrument and perform on that instrument with others and by themselves.

Course Content

The curriculum follows the National Training Package for Music and covers the following National Competency modules. 4 Core and 7 Elective units

BSBWHS201	Contribute to health & safety of self and others
CUACMP301	Implement copyright arrangements
CUAIND303	Work effectively in the music industry
CUAMLT302	Apply knowledge of style and genre to Music Industry practice
CUAMCP301	Compose simple songs or musical pieces
CUAMLT303	Notate Music
CUAMPF203	Develop ensemble skills for playing or singing music
CUAMPF301	Develop technical skills in performance
CUAMPF302	Prepare for performances
CUAMPF303	Contribute to backup accompaniment
CUAMPF305	Develop improvisation skills
CUAMPF402	Develop and maintain stagecraft skills
CUAMPF404	Perform music as part of a group
CUAMPF406	Perform music as a soloist

- Program subject to change

Contribution to the VCE

On completion of Certificate III in Music, students will receive two VCE units at 1-2 level and two units at 3-4 level. This will count as a 3-4 sequence. Students undertake a Scored Assessment contributing towards the ATAR.

Assessment

Vocational Education and Training assessment is competency based and includes practical activities, written assignments, oral and written questioning and observation. This is a hands-on course with practical assessment.

Pathways

This program has pathways into Certificate IV in Music, University and TAFE courses in Music and Audio Engineering.

Cost Guide

Year 1 \$300
 Year 2 \$225



CUF30107 Certificate III in Media

Duration: This program is conducted over two years
Contact Person: Ms Liana Kelly/Mr Ryan Fehling

Course Aims

This program will introduce students to the multimedia industry, where students will be exposed to duties performed by web page designers, animators, visualisers and multimedia producers. It provides students with entry level training in the exciting medium of digital technology within media industries.

Course Content

BSBCRT301A	Develop and extend critical creative thinking skills
CUFIND301A	Work effectively in screen and media industries
CUSOHS301A	Follow OHS procedures
CUFDIG303A	Produce and prepare photo images
CUVCOR08B	Produce drawings, represent/commercial concept
CUFYOU301A	Prepare audio assets
BSBDES302A	Explore and apply the creative design process to 2D forms
CUFANM301A	Create 2D digital animations
CUFDIG302A	Prepare video assets
CUFDIG302A	Author interactive sequences
CUFDIG304A	Create visual design components
CUFWRT301A	Write content for a range of media

- Program subject to change

Assessment

Vocational Education and Training assessment is competency based. This is a hands on course with practical assessment.

Contribution to the VCE

On completion of Certificate III Interactive Digital Media, students will receive two VCE units at 1-2 level and two units at 3-4 level. This will count as a 3-4 sequence. Students undertake a Scored Assessment contributing towards the ATAR.

Pathways

This program has pathways into Certificate IV in Multimedia and University courses.

Cost Guide

\$175 per year

ICA30115 Certificate III in Information, Digital Media and Technology

Duration: This program is conducted over two years
Contact Person: Ms Liana Kelly/Mr Ryan Fehling

Course Aims

This program is designed to provide participants with the knowledge and skills to achieve competencies that will enhance the student's employment prospects within the Information, Digital Media and Technology industries.

Course Content

Core Units

BSBOHS302B	Participate effectively in OH&S communication and consultative processes
ICAICT202A	Work and communicate effectively in an ICT environment
ICASAS301	Run standard diagnostic tests
ICAICT203	Operate application software packages
CUFDIG303A	Produce and prepare photo images
ICTICT301	Create user documentation
ICTICT302	Install and optimise operating software systems
ICTSAS305	Provide ICT advice to clients
ICTSAS306	Maintain equipment and software
ICTSAS307	Install, configure and secure a small office or home office network
ICTWEB301	Create a simple markup language document
ICTWEB302	Build simple websites using commercial programs

- Program subject to change

Assessment

Vocational Education and Training assessment is competency based. This is a hands-on course with practical assessment.

Contribution to the VCE

On completion of Certificate III in Information Technology, students will receive two VCE units at 1-2 level and two units at 3-4 level. This will count as a 3-4 sequence. Students undertake a Scored Assessment contributing towards their ATAR.

Pathways

This program has pathways into Certificate IV in Information Technology and University courses.

Cost Guide

\$175 per year

SIS20213 Certificate II in Outdoor Recreation

Duration: This program is conducted over one year
Contact Person: Mr John McAndrew/Mr David Ellis/Mr Thomas Bell

Course Aims

This program will provide the students with specific skills and knowledge to achieve competencies that will enhance employment prospects in the Outdoor Recreation industry.

Course Content

Core	
HLTAID0003	Provide first aid*
SISOODR201A	Assist in conducting outdoor recreation sessions
SISOOPS201A	Minimise environmental impact
SISXEMR001	Respond to emergency situations*
SISXIND101A	Work effectively in sport and recreation environments
SISOHS101A	Follow occupational health and safety practices
BSBWOR301	Organise personal work priorities and development*
HLTWHS001	Participate in workplace health and safety
ICTWEB201	Use social media tools for collaboration and engagement*
Electives	
SISOBWG201A	Demonstrate bushwalking skills in a controlled environment
SISOCLA201A	Demonstrate top rope climbing skills on artificial surfaces
SISOFSH201A	Catch and handle fish
SISOFSH206A	Locate and attract fish
SISONAV201A	Demonstrate navigational skills in a controlled environment
SISOOPS202A	Use and maintain a temporary overnight site
SISOSRF201A	Demonstrate surf survival skills and self-rescue skills
SROSRF002A	Demonstrate basic controlled surfing manoeuvres
SISXCAI102A	Assist in preparing & conducting sport & recreation sessions
SISXFAC207	Maintain sport, fitness and recreation equipment for activities

- Program subject to change
- Additional Core Units undertaken as part of SIS30115 Certificate III in Sport and Recreation

Assessment

Vocational Education and Training assessment is competency based. This is a hands-on course with practical assessment.

Contribution to the VCE

On completion of Certificate II in Outdoor Recreation students will receive two VCE units at 1-2 level.

Pathways

This program has pathways into Certificate III in Sport and Recreation.

Cost Guide

Year - \$700

Fees cover all costs associated with the course

SIS30115 Certificate III in Sport and Recreation

Duration: This program is conducted over one year
Contact Person: Mr John McAndrew/Mr David Ellis

Course Aims

This program will provide the students with specific skills and knowledge required to assist in the conduct of activities at outdoor recreation centres and camps. In order to enrol in this course, students must have completed the Certificate II in Outdoor Recreation SIS20213.

Course Content

BSBWOR301	Organise personal work priorities and development
*HLTAID003	Provide first aid
*HLTWHS001	Participate in workplace health and safety
*ICTWEB201	Use social media tools for collaboration and engagement
*SISXEMR001	Respond to emergency situations
BSBWHS303	Participate in WHS hazard identification, risk assessment and risk control
SISXCAI003	Conduct non-instructional sport, fitness or recreation sessions
SISXCAI004	Plan and conduct programs
SISXCCS001	Provide quality service
BSBCRT301	Develop and extend critical thinking
SISXCAI006	Facilitate groups

- Program subject to change

Assessment

Vocational Education and Training assessment is competency based. This is a hands-on course with practical assessment.

Contribution to the VCE

On completion of Certificate III in Sport & Recreation students will receive two VCE units at 3-4 level. This will count as a 3-4 sequence. Students undertake a Scored Assessment contributing towards the ATAR.

Pathways

This program has pathways into TAFE and University Outdoor Recreation, Fitness, Sport and Coaching courses.

Cost Guide

\$600

Fees cover all costs associated with the course.

22149VIC Certificate II in Applied Language

Duration: This program is conducted over one year
Contact Person: Ms Lucy Vannata, Ms Antoinette Gregory, Ms Leanne Purdy, Ms Federica Cologni

Course Aims

All students taking part in Year Ten Language (Italian and Indonesian) will complete this course. The course prepares students for VCE Languages and Certificate III in Applied Language.

Course Content

Core Units

Conduct basic oral communication for social purposes in a language other than English

Conduct basic workplace oral communication in a language other than English

Read and write basic documents for social purposes in a language other than English

Read and write basic workplace documents

Assessment

Vocational Education and Training assessment is competency based. This is a hands-on course with practical assessment.

Contribution to the VCE

On completion of Certificate II in Applied Language, students will receive two VCE units at 1-2 level.

Pathways

This program has pathways into Certificate III in Applied Language.

22150VIC Certificate III in Applied Language

Duration: This program is conducted over one year
Contact Person: Ms Lucy Vannata, Ms Antoinette Gregory, Ms Leanne Purdy, Ms Federica Cologni

Course Aims

Students in Year Eleven may elect VCE Language or the Certificate III in Applied Language (Italian and Indonesian)

Course Content

Core Units

Conduct routine oral communication for social purposes in a language other than English

Conduct routine workplace oral communication in a language other than English

Read and write routine documents for social purposes in a language other than English

Read and write routine workplace documents

Assessment

Vocational Education and Training assessment is competency based. This is a hands-on course with practical assessment.

Contribution to the VCE

On completion of Certificate III in Applied Language, students will receive three units of credit towards VCE: a unit 3-4 sequence and a Unit 3. The course will contribute a 10% increment towards the ATAR.

Pathways

This program has pathways into Certificate IV in Applied Language.

Victorian Certificate of Applied Learning (VCAL)

The VCAL is an alternative hands-on option for Year 11 and 12 students to the VCE.

The VCAL gives students practical work-related experience, as well as literacy and numeracy skills and the opportunity to build personal skills that are important for life and work. And like the VCE it is a recognised qualification.

The VCE is widely used by students as a pathway to university. Students who choose to do the VCAL are more likely to be interested in going on to training at TAFE, doing an apprenticeship, or getting a job after completing school. If students start VCAL and then decide the VCE is the right option after all, it won't be too late to change courses. Any VCE units completed as part of a VCAL course will count towards VCE, should a student decide to transfer between certificate courses.

The VCAL's flexibility enables students to undertake a study program that suits their interests and learning needs. Fully accredited modules and units are selected for the following four compulsory strands:

- Literacy and Numeracy Skills
 - Work Specific Skills
 - Industry Specific Skills
 - Personal Development Skills
-

Strand 1 – Literacy and Numeracy Skills

A VCAL program must include literacy and numeracy subjects. These can be selected from VCE English and Maths.

Strand 2 – Industry Specific Skills

VCAL programs must include industry specific units from VET programs or VCE VET. However, students are not required to focus on, or complete, any single VET certificate. For example, students can choose to undertake various modules or units from a range of VET certificates to meet the VCAL requirements, and gain experience in a range of vocational areas. The range of VET options is extensive and includes automotive, engineering, building and construction, hospitality and retail, multimedia, IT, agriculture, horticulture, warehousing and hair and beauty.

Strand 3 – Work Related Skills

In order to develop 'employability' skills, VCAL gives students the choice of undertaking either a structured work placement or part-time apprenticeship/traineeship. Students can also study units and modules that will help them prepare for work, for example, occupational health and safety or job interview skills.

Strand 4 – Personal Development Skills

As part of a VCAL program, participation in community-based programs and/or structured activities help develop team work skills, self-confidence and other skills important to life and work.

If students are successful with their VCAL course they will receive a certificate and statement of results that details the areas of study completed. Students taking in the VCAL should have a vocational pathway in mind.

Enquires should be directed to Mr Darren Lynch, VCAL Manager.

School Based Apprenticeships (SBA's)

At Belmont High School students may take part in SBA's. SBA's combine:

- Year 10, VCE or VCAL studies
- Part-time employment
- Vocational training

The SBA may be integrated or not integrated into the school program.

A non-integrated SBA is where a student is employed part time **outside** school hours, takes part in vocational training both on the job and off the job, and attends school full time. This type of arrangement often occurs in the retail or hospitality industries.

An integrated SBA is where the part time employment may form part of the normal school day. The integrated SBA is suited to students who take part in the VCAL where structured workplace learning forms part of the certificate.

Students have taken part in School Based Apprenticeships in: Retail, Hospitality, Business, I.T., Fitness, Carpentry, Tourism, Travel, Hairdressing, Children's Services, Aged Care.

Students receive award wages and complete a nationally recognised certificate providing credit towards the student's VCE or VCAL. A partnership is formed between the school, the employer, the Training Provider and the student.

Enquiries regarding School Based Apprenticeships should be directed to Mr. Darren Lynch.

Acceleration

Students at Belmont High School may accelerate in accordance with the Belmont High School Acceleration Policy. In accordance with the appropriate selection criteria students at Years 10 and 11 may undertake VCE units ahead of their current year level. Many students take advantage of this opportunity.

For example:

- Year 10 students undertaking a VCE study Units 1 & 2 or a VET program
- Year 11 students undertaking a VCE study Units 3 & 4
- Year 12 students may undertake a University Enhancement or Extension study

Acceleration Guidelines for Year 11 Students

For many Year 11 students wishing to accelerate they have already completed Units 1 and 2 at Year 10. Year 11 students may still choose to accelerate at Year 11 in many Unit 3 and 4 sequences where Units 1 and 2 are not a pre-requisite. This would take the place of a sixth Year 11 study giving a student a total of six Unit 3 & 4 sequences at the end of Year 12. For entry to TAFE and University courses this will mean the maximum six units can be scored. Due to increased competition for University and TAFE places the additional increment may mean the difference between getting in and missing out on a place. Students accelerating also experience the procedures and assessment (particularly in sitting external exams) of a Year 12 subject providing excellent preparation for the following year.

Students must complete an expression of interest form available from the Student Pathways Centre. Acceleration advice can be obtained from the subject teacher, the VCE Manager – Mr John McAndrew, the Pathways Coordinator – Mr Nick Masters, or Mr Mark Dooley, Acceleration and Enrichment Manager.

Enhancement Studies

High achieving Year 12 students may apply to take part in University Enhancement Studies at participating Universities. A student completing University Enhancement Studies has the opportunity to obtain an increment to their ATAR and credit towards their chosen University qualification.

The different modes of study available are:

- At Centres authorised to deliver on behalf of Universities
- Distance Education
- Distance Education with tutorials at the University or authorised centre, and
- Attendance at the University

Many courses may have a significant "online" component.

Recently, we have had Year 12 students taking part in Accounting, Information Technology, Mathematics and Music. Many other subjects are on offer.

Application is made directly to the University and forms are available in Term 4 from the Student Pathways Centre.

For further information, please contact Mr Nick Masters.

Distance Education

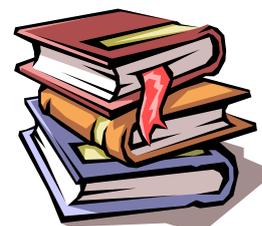
Students may undertake languages other than English not offered at Belmont High School through the Victorian School of Languages. Student must have a background in that language in order for the student to enrol. This may occur where a student has a family background in a particular language or may have past experience in studying that language.

In some instances student may wish to undertake a subject that is not on offer at Belmont High School or where very low numbers of students wishing to enrol in that subject mean that it cannot be run. The study may then be undertaken through Distance Education.

Victorian School of Languages

The Victorian School of Languages (VSL) Distance Education offers an extensive range of Languages including:

<input type="checkbox"/>	French	Years 7-12
<input type="checkbox"/>	German	Years 7-12
<input type="checkbox"/>	Greek	Years 7-12
<input type="checkbox"/>	Indonesian	Years 7-12
<input type="checkbox"/>	Italian	Years 7-12
<input type="checkbox"/>	Japanese	Years 7-12
<input type="checkbox"/>	Latin	Years 7-12



Cost: (approx) \$160.00 per annum

The VSL also offers face to face classes on a Saturday morning at Matthew Flinders Girls Secondary College and North Geelong Secondary College in a range of other languages. The Student Pathways Centre has details of these.

Distance Education Centre

The Distance Education Centre offers an extensive range of VCE subjects. A student may only undertake a subject via this study mode if the subject is not on offer at Belmont High School or where a timetable clash occurs.

Cost: \$150.00

The decision to undertake a study through Distance Education should be thought through very carefully. Students must be highly motivated and well organised.

Application forms and details are available from the Student Pathways Centre and application must be made through Belmont High School.

Enquiries to Mr Nick Masters.

“GAP Year” and Year 13

Students at Belmont High School are increasingly taking part in other activities prior to beginning their Tertiary studies.

Examples include:

- | | |
|--|--|
| <input type="checkbox"/> Volunteer programs overseas | <input type="checkbox"/> Working overseas |
| <input type="checkbox"/> Student exchange | <input type="checkbox"/> Camps USA |
| <input type="checkbox"/> Travel or study overseas | <input type="checkbox"/> Work in Australia |

Details regarding such programs are available from Mr Nick Masters, Pathways Coordinator.

Many students develop a pathway to a career through first accessing TAFE courses and then moving to University. Universities are increasingly providing credit for relevant TAFE studies.

The Tertiary Selection Process

At the end of their VCE, the VCAA issues students with a *Statement of Results* indicating whether they have satisfactorily completed their units or not, and individual grades for all School-Assessed Coursework and Examinations completed in each study at Units 3 and 4.

Students also receive a study score (relative position) calculated from all of their grades for each Unit 3/4 sequence. At the same time, students will receive a letter indicating their ATAR from VTAC. The ATAR will be used in the tertiary selection process.

The ATAR will be used by selection officers to rank current VCE applicants in order of merit. ATARs are calculated by VTAC using the study scores (relative positions) provided by VCAA. These scores will be scaled by VTAC to compare results across studies. ATARs are calculated by adding the scaled study score in English or ESL, the next best three scaled scores, 10% of any fifth and/or sixth scaled score that is available, and then ranking candidates in order of these aggregates.

Selecting University Courses

Competition is keen for places in most courses so it is recommended that you do not limit your changes of selection. You should consider and investigate more than one course, so you do not restrict your chances of being selected. It is a good idea to start now.

There are several questions to be considered when choosing courses:

(i) Areas of interest

Areas of interest should be identified (e.g. accounting, computing, science, art) and it should be ascertained whether the course is appropriate to your needs. Does the course prepare you for your chosen field of employment? Are the studies offered (majors, electives, compulsory, etc.) suitable and desired?

The Index of Major Studies in the *VTAC Guide 2017* provides a listing of studies which may be of interest and shows the institutions offering that study as a major sequence. You can also consult the website and use the search function to see what is offered in your area of interest.

Courses not in the VTAC guide require direct application to the institution.

(ii) Selecting the right institution

The choice of institution is also important. Is it conveniently located? How much will the course cost? What are the institution fees, accommodation, transport, textbooks and other special course equipment costs?

Institutions should be able to advise you on these matters and it is suggested that you talk to course advisers, careers counsellors, housing officers, etc., at the appropriate campus.

In addition, it may be helpful to attend the institution's Open Day or obtain copies of course brochures or handbooks, or talk to students already studying at a particular institution.

(iii) Satisfying entrance requirements

Are you qualified for the course and will the course selection authorities be interested in you? Some courses have particular requirements which must be satisfied before an applicant will be considered.

Requirements could be prerequisite studies, grade point averages, submission of folio, tests, interviews or completion of application forms. If you lack a stated requirement then it is unlikely you will be selected.

Entrance requirements for study in 2017 are explained on VTAC's website – www.vtac.edu.au

The requirements should be discussed with careers teachers or VCE co-ordinators at schools. Alternatively, VTAC staff or appropriate officers at the tertiary institutions may be able to provide additional information.

It is strongly recommended that time be taken now to thoroughly investigate the courses where application could be desired.

Prior preparation to ensure entrance requirements can be satisfied is essential when the time comes to select the courses for the VTAC application process.

The options are many – University, TAFE, Private Colleges, Employment, Apprenticeships, Traineeships, and Cadetships. There are often many pathways to a particular career. Talk to your Careers Counsellor.

SUMMARY OF COURSES

FIELD OF STUDY	YEAR 10	YEAR 11 – VCE UNITS 1 & 2	YEAR 12 – VCE UNITS 3 & 4
THE ARTS: R Humphrey • PERFORMING ARTS Krista Mann	Drama Certificate III in Music Rock Guitar Music	Theatre Studies Music Certificate III in Music Music Performance	Theatre Studies Certificate III in Music Music Performance Music Investigation
THE ARTS: K Zahra • VISUAL ARTS	Art Printmaking 3D Art Ceramics The Built Environment: A Design Approach Photography Visual Communication – - Manual - Computer animation and graphics	Art Studio Art Visual Communication Design	Art Studio Art Visual Communication Design
ENGLISH B Daff	English English Enrichment Media Studies English as an Additional Language	English English Language Literature Media Studies English as an Additional Language	English English Language Literature Media Studies English as an Additional Language
HEALTH AND PHYSICAL EDUCATION D Ayres/ A Harbison (Health)	Health PE Core A PE Core B Certificate II in Outdoor Recreation	Health and Human Development Physical Education Outdoor Education Certificate II in Outdoor Recreation Certificate III in Sport and Recreation	Health and Human Development Physical Education Outdoor Education Certificate III in Sport and Recreation
LANGUAGE F. Cologni	Certificate II in Applied Language (Indonesian and Italian)	Indonesian Italian Certificate III in Applied Language (Indonesian and Italian)	Indonesian Italian
MATHEMATICS S Morse	Mathematics A Mathematics B1 Mathematics B2 Mathematics C1 Mathematics C2	Specialist Mathematics Mathematical Methods General Mathematics B Foundation Mathematics	Algorithmics Specialist Mathematics Mathematical Methods Further Mathematics

FIELD OF STUDY	YEAR 10	YEAR 11 – VCE UNITS 1 & 2	YEAR 12 – VCE UNITS 3 & 4
SCIENCES Mr R. Stott	Introduction to Psychology Marine Science Forensic Science Further Chemistry Science Core	Psychology Biology, Chemistry, Physics Environmental Science	Psychology Biology, Chemistry, Physics
Commerce: To be advised	Teenagers and the Law The World of Business Money	Legal Studies Accounting Business Management	Legal Studies Accounting Business Management
• GEOGRAPHY Mr R Kline	Environments, Change and Management Global Human Geography	Geography	Geography
• HISTORY Ms A. Todorovic	History	History Unit 1 - 20 th Century (1900- 1945) Unit 2 - 20 th Century (1945 - 2000)	History (Revolutions) Unit 3 – American Revolution Unit 4 – French Revolution History (Australian) Unit 3 – Australian History Unit 4 – Australian History
PRODUCT DESIGN & TECHNOLOGY Belle Donald	Food - Bon Appetit Food - Special Occasions Food Metalwork Woodwork Fibre Systems	Food Technology Product Design & Technology – Wood Product Design & Technology – Fibre Systems & Technology	Food Technology Product Design & Technology - Wood Product Design & Technology – Fibre Systems & Technology
• DIGITAL TECHNOLOGIES Ms L. Kelly	Computer Programming IT Applications Web Page Design Certificate III in Media Certificate III in Information Digital Media and Technology	Computing Certificate III in Media Certificate III in Information Digital Media and Technology	Computing - Software Development Computing - Informatics Certificate III Media Certificate III in Information Digital Media and Technology

Summary of Courses

Victorian Certificate of Applied Learning (VCAL)

FIELD OF STUDY	VCAL FOUNDATION	VCAL INTERMEDIATE	VCAL SENIOR
ENGLISH (Literacy)	Literacy Foundation English	Literacy Foundation English	Literacy Foundation English
MATHEMATICS (Numeracy)	Mathematics	Mathematics	Mathematics
PERSONAL DEVELOPMENT	Personal Development	Personal Development	Personal Development
WORK RELATED SKILLS	Work Related Skills	Work Related Skills	Work Related Skills
INDUSTRY SPECIFIC SKILLS	VCE Arts – Technology subject	VET	VET

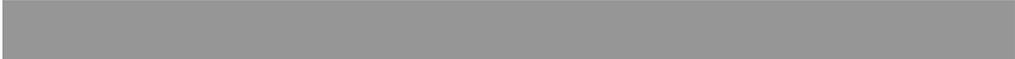
NOTES:

- VCAL students may select additional VCE Units.
- The VCAL program is flexible in that some VCAL studies may be substituted with a VCE study to satisfy the VCAL course requirement.
- Students may be able to obtain a VCE Certificate and a VCAL Certificate. Careful course counseling is required.

For enquiries please see Mr D. Lynch.

Belmont High School

Year 11 and 12 SUBJECT SELECTION



Unit Descriptions

Index to Year 11 and 12 Unit Descriptions

	Pages
• Accounting	29 - 31
• Art and Studio Arts	32 - 36
• Biology	37 - 40
• Business Management	41 - 42
• Chemistry	43 - 46
• Design and Technology – Wood/Metal/Fibre	47 - 48
• English	49 - 50
• English Language	51 - 52
• English as an Additional Language (EAL)	53 - 54
• Extended Investigation	55 - 56
• Food and Technology.....	57 - 58
• Geography	59 - 61
• Health and Human Development	62 - 63
• History	64
• History (Australian)	65
• History (Revolutions)	66
• Computing	67
• Informatics	68 - 69
• Software Development	70
• Legal Studies	71 - 72
• Literature	73 - 77
• Language – Indonesian	78 - 79
• Language – Italian.....	80 - 81
• Mathematics	82
- Unit Outlines – Year 11 Mathematics	81 - 85
- Unit Outlines – Year 12 Mathematics	85 - 89
• Media	90 - 92
• Music Performance	93 – 100
• Music Investigation	100 - 104
• Outdoor Education and Environmental Studies	105 - 106
• Physical Education	107 - 108
• Physics	109 – 111
• Environmental Science	112 – 114
• Psychology	115 – 118
• Systems Engineering	119 - 120
• Theatre Studies	121
• Visual Communication Design	122 - 124

ACCOUNTING

RATIONALE

Accounting is the process of recording, reporting, analysing and interpreting financial data and information which is then communicated to internal and external users of the information. It plays an integral role in the successful operation and management of a small business.

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.

UNIT 1: Going Into 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, recording, reporting and analysing financial data and information used by internal and external users. Recording and reporting is restricted to the cash basis.

Students examine the role of accounting in the decision-making process using single entry recording of financial data and information for the owner of a service business.

Areas of study

1. Going into business

A potential small business owner needs to make many decisions before commencing the operations of the business. The decisions made at this stage will often influence the success or failure of the business. In this area of study, students investigate features of successful and unsuccessful businesses, sources of finance and how pre-operational decisions are made.

2. Recording and reporting accounting data and information

In this area of study, students investigate the role of accounting in the generation of financial data and information for the owner of a service business. The focus is on the recording and reporting of financial data and information using a single entry recording system. Students are required to use both manual and ICT methods in the recording and reporting process.

3. Financial decision-making

The owner of a small business must make many decisions every day. These decisions affect the business's operations, and ultimately its chances of success or failure. Such decisions should be made on the basis of information generated by the accounting system. In this area of study, students apply the accounting skills they have learned in order to evaluate the financial and non-financial information of a service business.

Outcomes

On completion of this unit the student should be able to:

1. describe the resources and explain and apply the knowledge and skills necessary to set up a small business;
2. identify, record, report and explain the financial data and information for the owner of a service business, using a combination of manual and ICT methods;
3. apply accounting skills to evaluate financial and non-financial information in order to make informed decisions for a small business.

Assessment tasks

- Class tests
- Exercises using accounting software
- End of unit examination.



UNIT 2: Accounting for a Trading Business

This unit focuses on accounting for a single activity sole trader. Using the accrual approach, students use a single entry recording system for the recording and reporting of cash and credit transactions stock. They use financial and non-financial information to evaluate the performance of a business. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business.

Areas of study

1. Recording and reporting accounting data and information

A small business operator needs to input and process financial data to provide information for decision-making on the management and performance of the business. In this area of study students record and report the financial data and information of a single activity sole trader using the single entry system of recording. Both manual and ICT methods of recording and reporting are used.

2. ICT in accounting

ICT is an essential tool in the operation of a small business. This area of study enables students to develop an understanding of the role of ICT in the accounting process. Students use an accounting software package to record and report financial data and information for a single activity sole trader, and demonstrate their understanding of the importance of ICT in the accounting process.

3. Evaluation of business performance

The performance of a business should be measured and evaluated regularly. Using financial and non-financial information in this process will assist the owner in planning and decision-making for the future. This area of study focuses on an evaluation of a particular area(s) of the business such as stock or debtors, with students then suggesting strategies that will improve business performance.

Outcomes

On completion of this unit the student should be able to:

1. record and report financial data and information for a sole trader;
2. record and report financial data and information using an accounting software package for a single activity sole trader, and explain and evaluate the role of ICT in the accounting process;
3. select and use financial and non-financial information to evaluate a business and suggest strategies that will improve business performance.

Assessment tasks

- **School-Assessed Coursework**
 - Quick Books Pro Exercise
 - Exercises involving manual recording and reporting
 - Structured questions.
- **Mid Year Examination.**

UNIT 3: Double Entry for Trading Businesses

Units 3 and 4 are designed to be taken as a sequence. Unit 3 focuses on accounting and financial issues of a small trading business, operating as a sole proprietor. Students are introduced to a double-entry system using the accrual basis of accounting. The unit emphasises the role of accounting as an information system and the role of information and communications technology in completing procedures. It also investigates alternative approaches in accounting and their impact on financial reports.

Areas of study

1. Recording, reporting and understanding accounting information.
2. Decision making.

Outcomes

For this unit students are required to demonstrate achievement of two outcomes. As a set these outcomes encompass both areas of study for the unit.

On completion of this unit the student should be able to:

1. record and report financial information using the double-entry accrual-based system for a single-activity sole-proprietor trading business, using manual and information and communications technology methods;
2. analyse the accounting issues of non-current asset valuation, revenue recognition and depreciation alternatives, and explain how these issues affect financial reports.

Assessment tasks

- **School-Assessed Coursework**
 - Exercises involving manual recording and reporting
 - Structured questions.



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 covers the accrual recording and reporting system for a single activity trading business using the perpetual inventory recording system. Students learn about the role and importance of budgeting for the business and undertake the practical completion of budgets for cash, financial performance and financial position. In this unit students evaluate the information prepared and analyse the results in order to suggest strategies to the owner.

Areas of study

1. Extension of recording and reporting.

The collecting, measuring, processing and communication of accounting data and information is an important process for a sole trader. Students undertake this process using a double entry accrual-based recording and reporting system. The perpetual inventory method with First In, First Out (FIFO) will be used. This area of study allows students to build on the knowledge developed in Unit 3 of the accounting system.

2. Financial planning and decision-making.

The owner of a small business must be able to plan and control the future activities of the business. The preparation of budgeted accounting reports provides information for the owner in this decision-making process. This area of study focuses on the preparation of budgeted accounting reports by students, and the analysis of financial and non-financial information for a single activity sole trader. Students evaluate this information and suggest strategies to the owner on how to improve the performance of the business.

Outcomes

On completion of this unit the student should be able to:

1. record and report financial data and information using a double-entry accrual-based system for a single activity sole trader, and explain related aspects of this accounting system;
2. prepare and analyse budgets, evaluate a business using financial and non-financial information and suggest strategies to improve the profitability and liquidity of the business.

Assessment tasks

- **School-Assessed Coursework**
 - Exercises involving manual recording
 - Preparation of budgets for cash, financial performance, financial position and cash variance using information and communications technology
 - Written report on the evaluation of the financial performance of a business.
- **End of Unit Examination**



ART and STUDIO ARTS

CAN I DO BOTH?

Within the VCE **Art** study, theoretical research and investigation informs art making. Students are encouraged to recognize the interplay between research and art making. VCE **Studio Arts** supports students to recognize their individual potential as professional art makers. The study involves the application of an individual design process to assist the student's production of a folio of artworks.

The two studies are quite separate and both can be undertaken by any one student.

Year 9 students who have undertaken studies in both Art and/or Painting & Drawing are able to accelerate into Units 1 & 2. Year 10 students who have undertaken studies in Painting & Drawing, Printmaking, Ceramics, 3D Art, Fashion Design and Fashion Illustration may continue these pursuits in either Art or Studio Arts or both.



ART

RATIONALE

VCE Art encourages artistic development by allowing students to develop their own ideas and experiment with art materials to produce a folio of work. It also aims to give students the ability to understand the art of artists from various times and places.

AIMS

The study is designed to enable students to acquire a broad knowledge of art. This is achieved through both their practical work as well as the study of artists.

UNIT 1: Art

Areas of study

1. **Artmaking and Personal Meaning (Folio)** – Focuses on a folio of work that explores many techniques, materials and skills.
2. **Art and Meaning (Appreciation)** – Study of Australian artists and artworks.

Outcomes

On completion of this unit the student should be able to:

1. complete a folio of work using different materials and techniques;
2. analyse and interpret a variety of artworks.

Assessment tasks

Completion of a folio that contains developmental work and final artwork(s) (number to be chosen by student) that demonstrate experimentation in media and techniques within a particular art form or media.

Short-answer responses

UNIT 2: Art

Areas of study

1. **Artmaking and Cultural Expression (Folio)** – Demonstrate artistic and technical development in an area of personal interest.
2. **Art and Culture (Appreciation)** – Focuses on the study of at least one artwork from at least four different artists.

Outcomes

On completion of this unit the student should be able to:

1. demonstrate technical development and artistic development in an area of personal interest (Folio);
2. analyse, interpret, compare and contrast artworks from different cultures.

Assessment tasks

- Completion of a folio that contains developmental work and final artwork(s) exploring media of personal interest
- - Written reports
- - Short-answer responses.

UNIT 3: Art

Areas of study

1. **Investigation and interpretation (Folio)** – Focuses on making personal art responses through a broad and innovative exploration within selected media. Complete at least one finished artwork.
2. **Interpreting art (Appreciation)** – Focuses on artworks and the meaning behind them.

Outcomes

On completion of this unit the student should be able to:

1. undertake a broad and innovative investigation of media and materials to communicate individual ideas (Folio);
2. interpret different aspects of artworks meanings and messages and compare artworks (Appreciation).

Assessment tasks

School Assessed Coursework

Assessment tasks in the form of either written reports, essays or tests based on work for Outcome 2 (Unit 3) contribute to 10% of final assessment (Appreciation).

Examination

No Examination in Unit 3.



UNIT 4: Art

Areas of study

1. **Realisation and resolution (Folio)**
Focuses on the preparation and final presentation of directions explored in Unit 3. Complete at least one finished artwork.
2. **Discussing and debating art (Appreciation)**
Focuses on skills developed in Unit 3 and introduces the viewpoints expressed in commentaries to support and/or challenge art issues.

Outcomes

On completion of this unit the student should be able to:

1. realise and resolve with technical skill and awareness of aesthetic qualities, work that communicates personal concepts (Folio);
2. discuss commentaries on artworks and analyse selected artworks (Appreciation).

Assessment tasks

School Assessed Coursework

Assessment tasks in the form of open book short answer questions based on work covered for Outcome 2 (Unit 4) contribute 10% to final assessment (Appreciation).

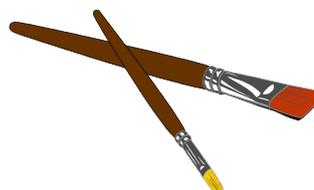
School assessed tasks using criteria provided by the Victorian Curriculum and Assessment Authority for Outcome 1 (Unit 3) and Outcome 1 (Unit 4) combined to contribute 50% to final assessment (Folio).

Examination

The examination contributes 30% to final assessment and will require short and extended answers to questions based on Outcome 2 (Unit 3) and Outcome 2 (Unit 4).

Duration of Task: 1.5 hours

Date of Task: End of year on a date to be notified



STUDIO ARTS

RATIONALE

VCE Studio Arts encourages and supports students to recognise their individual potential as artists and develop their understanding and development of art making. VCE Studio Arts broadens students' understanding of, and ability to engage with, artworks. It equips students with the knowledge and skills to pursue an art studio practice and follow tertiary and industry pathways in fine art, research and education. The study also offers students opportunities for personal development and encourages them to make an ongoing contribution to society and the culture of their community through lifelong participation in the making and viewing of artworks.

AIMS

This study enables students to:

- Express themselves creatively through art making and come to understand how to support and sustain their art practice
- Develop an individual studio process, and practice and refine specialised skills appropriate to particular art forms and media selected for art making
- Analyse and draw inspiration from the ways in which artists apply studio processes in the production of their individual artworks
- Develop an understanding of historical and cultural contexts in the production and analysis of artworks
- Develop and apply skills in visual analysis, including the use of appropriate terminology in relation to their own artwork and artists studied
- Extend their understanding of the roles and methods involved in the presentation of artworks in a range of gallery and exhibition spaces
- Develop an understanding of professional art practices related to the exhibition of artworks to an audience, including the roles and methods involved in the presentation of artworks in a range of gallery and exhibition spaces.

UNIT 1: Studio Art

Areas of study

1. **Researching and recording ideas** - Focus on researching and recording ideas in a visual diary
2. **Studio Practice** - Focus on the use of materials and techniques in the production of at least one artwork in a visual diary
3. **Interpreting art ideas and use of materials and techniques** - Focus on the ways artists from different times and cultures have interpreted ideas and sources of inspiration and used materials and techniques.

Outcomes

On completion of this unit the student should be able to:

1. Identify sources of inspiration and artistic influences and outline individual ideas, art forms and aesthetic qualities, and translate these into visual language.
2. Produce at least one finished artwork and progressively record the development of their studio practice, conveying individual ideas through the exploration of materials and techniques in the selected art form/s.
3. Discuss the artistic practice of artists from different times and cultures, their sources of inspiration, materials and techniques for at least two artworks by each artist.

Assessment tasks

- **Outcomes 1 and 2** - a selection of exploratory work and a visual diary, showing sources of ideas and inspiration translated into visual form through the use of a variety of materials and techniques.
- **Outcome 3** - short answer and extended responses

UNIT 2: Studio Art

Areas of study

1. **Exploration of studio practice and development of artworks** - focus on developing artworks through an individual studio process based on visual research and inquiry.
2. **Ideas and styles in artworks.** Focus on an analysis of historical and contemporary artworks.

Outcomes

On completion of this unit the student should be able to:

1. Develop an individual exploration proposal to form the basis of a studio process, and from this produce and document a variety of potential directions in a visual diary for at least one artwork
2. Compare a range of historical and contemporary art periods, styles or movements, and analyse the ways in which artists communicate ideas, develop styles and demonstrate aesthetic qualities in artworks.

Assessment tasks

- **Outcome 1** - undertake an exploration proposal, studio process in the production of at least one artwork.
- **Outcome 2** - short answer and extended responses

UNIT 3: Studio Art

Areas of study

1. **Exploration Proposal** – students develop an exploration proposal that creates a framework for the individual studio process.
2. **Studio Process** - students progressively refine their ideas, techniques, materials and processes and aesthetic qualities discussed in the exploration proposal. Throughout the individual studio process, students keep a visual diary and investigate the focus, subject matter, sources of inspiration and art form/s through the exploration and development of ideas, materials, techniques, art elements, art principles and demonstration of aesthetic qualities.
3. **Artists and studio practices** – students focus on professional studio practices in relation to particular art forms. Students investigate the ways in which artists have interpreted subject matter, influences, historical and cultural contexts, and communicated ideas and meaning in their artworks. Students are required to study at least two artists and two artworks by each artist. They consider the artists' use of materials, techniques and processes, and the use of art elements and art principles to demonstrate aesthetic qualities and styles in artworks.

Outcomes

On completion of this unit the student should be able to:

1. Prepare an exploration proposal that formulates the content and parameters of an individual studio process including a plan of how the proposal will be undertaken.
2. Present an individual studio process recorded in written and visual form that produces a range of potential directions, and reflects the concepts and ideas documented in the exploration proposal and work plan. a design process that produces a range of potential directions to the ideas and aims in the work brief
3. Examine the practice of at least two artists, with reference to two artworks by each artist, referencing the different historical and cultural context of each artwork.

Assessment

- **School-assessed Task** - An exploration proposal and a visual diary that presents an individual studio process, which explores and develops the concepts and ideas set out in the exploration proposal, and produces a range of visual explorations and potential directions that will form the basis of at least two finished artworks in Unit 4.
- **School-assessed Coursework** – Students respond to ways in which two different artists, with reference to at least two artworks have interpreted subject matter, influences, historical and cultural contexts, and communicated ideas and meaning in their artworks. They consider the artists' use of materials, techniques and processes, and the use of art elements and art principles to demonstrate aesthetic qualities and styles in artworks.
- **External assessment** - The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 30 per cent.

UNIT 4: Studio Art

Areas of study

1. **Production and presentation of artworks** – students focus on the refinement and presentation of artworks developed from the selected potential directions identified in the individual studio process in Unit 3.
2. **Evaluation** - students provide visual and written documentation of the selected potential directions that are the basis for the development of the artworks. When the artworks have been completed, students examine and reflect on the communication of ideas, the use of materials and techniques, the demonstration of aesthetic qualities and the relationships that have been formed through the presentation of artworks.
3. **Art industry contexts** - students focus on the analysis of artworks and the requirements and conditions of the environments where artworks are displayed. Students examine a variety of art exhibitions and review the methods and

considerations involved in the preparation, presentation and conservation of artworks. As part of this requirement, students visit at least two different art exhibitions in their current year of study.

Outcomes

On completion of this unit the student should be able to:

1. Present at least two finished artworks based on selected and evaluated potential directions developed through the studio process, which demonstrate refinement and application of materials and techniques, and that realise and communicate the student's ideas expressed in the exploration proposal.
2. Provide visual and written documentation that identifies and evaluates the extent to which the artworks reflect the selected potential directions, and effectively demonstrates a cohesive relationship between the works.
3. Compare the methods used by artists and considerations of curators in the preparation, presentation, conservation and promotion of specific artworks in at least two different exhibitions.

Assessment tasks

- **School-assessed Task** - The presentation of at least two finished artworks with an evaluation of studio processes.
- **School-assessed Coursework** – students examine a variety of art exhibitions and review the methods and considerations involved in the preparation, presentation and conservation of artworks. As part of this requirement, students visit at least two different art exhibitions in their current year of study.
- **External assessment** - The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 30 per cent.

BIOLOGY

Scope of study

Biology is a diverse and evolving science discipline that seeks to understand and explore the nature of life, past and present. The study explores the dynamic relationships between organisms and their interactions with the non-living environment. It also explores the processes of life, from the molecular world of the cell to that of the whole organism, that maintain life and ensure its continuity.

Rationale

VCE Biology enables students to investigate the processes involved in sustaining life at cellular, system, species and ecosystem levels. In undertaking this study, students examine how life has evolved over time and understand that in the dynamic and interconnected system of life all change has a consequence that may affect an individual, a species or the collective biodiversity of Earth. The study gives students insights into how knowledge of molecular and evolutionary concepts underpin much of contemporary biology, and the applications used by society to resolve problems and make advancements.

In VCE Biology students develop a range of inquiry skills involving practical experimentation and research, analytical skills including critical and creative thinking, and communication skills. Students use scientific and cognitive skills and understanding to analyse contemporary biology-related issues, and communicate their views from an informed position.

VCE Biology provides for continuing study pathways within the discipline and leads to a range of careers.

Branches of biology include botany, genetics, immunology, microbiology, pharmacology and zoology. In addition, biology is applied in many fields of endeavour including biotechnology, dentistry, ecology, education, food science, forestry, health care, horticulture, medicine, optometry, physiotherapy and veterinary science. Biologists also work in cross-disciplinary areas such as bushfire research, environmental management and conservation, forensic science, geology, medical research and sports science.

Aims

This study enables students to:

- develop knowledge and understanding of key biological models, theories and concepts, from the cell to the whole organism
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory.
- develop an informed perspective on contemporary science-based issues of local and global significance.
- develop attitudes that include curiosity, open-mindedness, creativity, flexibility, integrity, attention to detail and respect for evidence-based conclusions.
- understand and apply the research, ethical and safety principles that govern the study and practice of the discipline in the collection, analysis, critical evaluation and reporting of data
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

It is **not** recommended that students would enter Unit 2 without first completing Unit 1.

It is **not** recommended that students would enter Unit 3 without Units 1 and/or 2. If they do they would be required to undertake significant **additional preparation** as prescribed by their teacher.

Unit 1: How do living things stay alive?

Area of study 1

How do organisms function?

In this area of study students examine the structure and functioning of cells. Although the internal structure of a cell varies, all cells require a relatively stable internal environment for optimal functioning. Whether life forms are unicellular or multicellular, or heterotrophic or autotrophic, whether they live in a deep ocean trench, a tropical rain forest, an arid desert or on the highest mountain peak, all individual organisms are faced with the challenge of obtaining nutrients and water, exchanging gases, sourcing energy and having a means of removal of waste products.

Outcome 1

On completion of this unit the student should be able to investigate and explain how cellular structures and systems function to sustain life.

Assessment tasks.

Assessment tasks for this unit will be selected from the following:

- A student designed extended practical investigation.

And at least three from the following:

- practical activities;
- multimedia presentation;
- response to a media article;
- oral presentations;
- annotated poster;
- data analysis;
- problem solving;
- tests.

Area of Study 2

How do living systems sustain life?

In this area of study students examine the structural, physiological and behavioural adaptations of a range of organisms that enable them to survive in a particular habitat and to maintain a viable population size over time. They explore the importance and implications of organising and maintaining biodiversity and examine the nature of an ecosystem in terms of the network of relationships within a community of diverse organisms. Factors affecting population size and growth are analysed.

Outcome 2

On completion of this unit the student should be able explain how various adaptations enhance the survival of an individual organism, investigate the relationships between organisms that form a living community and their habitat, and analyse the impacts of factors that affect population growth.

Area of Study 3

Practical investigation

In this area of study students design and conduct a practical investigation into the survival of an individual or a species.

Outcome 3

On completion of this unit the student should be able to design and undertake an investigation related to the survival of an organism or species, and draw conclusions based on evidence from collected data.

Assessment tasks

For outcomes 1 and 2 may include:

- 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.

A report 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?

Area of Study 1

How does reproduction maintain the continuity of life?

In this area of study students consider the need for the cells of multicellular organisms to multiply for growth, repair and replacement. Students become familiar with the key events in the phases of the cell cycle. Students investigate and use visualisations and modelling to describe the characteristics of each of the phases in mitosis. Students describe the production of gametes in sexual reproduction through the key events in meiosis and explain the differences between asexual and sexual reproduction in terms of the genetic makeup of daughter cells. Students consider the role and nature of stem cells and their potential use to treat injury and disease.

Outcome 1

On completion of this unit the student should be able to compare the advantages and disadvantages of asexual and sexual reproduction, explain how changes within the cell cycle may have an impact on cellular or tissue system function and identify the role of stem cells in cell growth and cell differentiation and in medical therapies.

Area of Study 2

How is inheritance explained?

In this area of study students build on their understanding of the nature of genes and the use of genetic language to read and interpret patterns of inheritance and predict outcomes of genetic crosses. They gain an understanding that a characteristic or trait can be due solely to one gene and its alleles, or due to many genes acting together, or is the outcome of genes interacting with external environmental or epigenetic factors. Students apply their genetic knowledge to consider the social and ethical implications of genetic applications in society including genetic screening and decision making regarding the inheritance of conditions.

Outcome 2

On completion of this unit the student should be able to apply an understanding of genetics to describe patterns of inheritance, analyse pedigree charts, predict outcomes of genetic crosses and identify the implications of the uses of genetic screening and decision making related to inheritance.

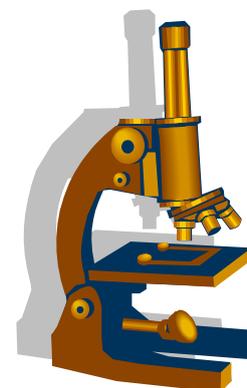
Assessment tasks.

Assessment tasks for this unit will be selected from the following:

- A written report on field work.

And at least three from the following:

- practical activities;
- multimedia presentation;
- response to a media article;
- oral presentation;
- annotated poster
- data analysis;
- tests.



Area of Study 3

Investigation of an issue

The increasing uses and applications of genetics knowledge and reproductive science in society both provide benefits for individuals and populations and raise social, economic, legal and ethical questions. Human cloning, genetic modification of organisms, the use of forensic DNA databanks, assisted reproductive technologies and prenatal and predictive genetic testing challenge social and ethical norms.

Outcome 3

On completion of this unit the student should be able to investigate and communicate a substantiated response to a question related to an issue in genetics and/or reproductive science.

Assessment task.

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

Unit 3: How do cells maintain life?

The cell is a dynamic system of interacting molecules that define life. An understanding of the workings of the cell enables an appreciation of both the capabilities and the limitations of living organisms whether animal, plant, fungus or microorganism.

Area of Study 1

How do cellular processes work?

On completion of this unit the student should be able to explain the dynamic nature of the cell in terms of key cellular processes including regulation, photosynthesis and cellular respiration, and analyse factors that affect the rate of biochemical reactions.

Area of Study 2

How do cells communicate?

On completion of this unit the student should be able to apply a stimulus-response model to explain how cells communicate with each other, outline human responses to invading pathogens, distinguish between the different ways that immunity may be acquired, and explain how malfunctions of the immune system cause disease.

Unit 4: How does life change and respond to challenges over time?

In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool.

Area of Study 1

How are species related?

On completion of this unit the student should be able to analyse evidence for evolutionary change, explain how relatedness between species is determined, and elaborate on the consequences of biological change in human evolution.

Area of Study 2

How do humans impact on biological processes?

On completion of this unit the student should be able to describe how tools and techniques can be used to manipulate DNA, explain how biological knowledge is applied to biotechnical applications, and analyse the interrelationship between scientific knowledge and its applications in society.

Area of Study 3

Practical investigation.

On the completion of this unit the student should be able to design and undertake an investigation related to cellular processes and/or biological change and continuity over time, and present methodologies, findings and conclusions in a scientific poster.

BUSINESS MANAGEMENT

RATIONALE

In contemporary Australian society there are a range of businesses managed by people who establish systems and processes to achieve a variety of objectives. These systems and processes are often drawn from historical experience and management theories designed to optimise the likelihood of achieving success. 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, managers and leaders of the business community, and as informed citizens, consumers and investors. The study of Business Management leads to opportunities across all facets of the business and management field such as small business owner, project manager, human resource manager, operations manager or executive manager. Further study can lead to specialisation in areas such as marketing, public relations and event management.

AIMS

This study is designed to enable students to:

- understand and apply business concepts, principles and terminology
- understand the complex and changing environments within which businesses operate
- understand the relationships that exist between a business and its stakeholders
- recognise the contribution and significance of business within local, national and global markets
- analyse and evaluate the effectiveness of management strategies in different contexts
- propose strategies to solve business problems and take advantage of business opportunities

UNIT 1: Planning a Business

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. Therefore how businesses are formed and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development. In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

Area of study 1: The business idea

In this area of study students investigate how business ideas are created and how conditions can be fostered for new business ideas to emerge.

Area of study 2: External environment

Students consider factors from the external environment such as legal, political, social, economic, technological, global and corporate social responsibility factors and the effects these may have on the decisions made when planning a business. Students investigate how the internal environment relates to the external environment and the effects of this relationship on planning a business.

Area of study 3: Internal environment

Students explore the factors within the internal environment and consider how planning decisions may have an effect on the ultimate success of a business.

Assessment tasks

Case study; structured questions; essay.

UNIT 2: Establishing a Business

Area of study 1: Legal requirements and financial considerations

In this area of study students are introduced to the legal requirements and financial considerations that are vital to establishing a business. They also consider the implications for the business if these requirements are not met.

Area of study 2: Marketing a business

In this area of study students develop their understanding that marketing encompasses a wide range of management practices, from identifying the needs of the target market and establishing a brand presence, through to considerations on

price, product features and packaging, promotion, place, people, physical evidence and processes. They also consider effective public relations strategies and the benefits and costs these can bring to a business.

Area of Study 3: Staffing a business

Students consider the opportunities that the skills and capabilities of staff can contribute to the business, the legal obligations that must be addressed and the relationship between employers and employees within a business.

Assessment tasks

Case study; structured questions; essay.

UNIT 3: Managing a Business

Area of study 1: Business foundations

Students investigate potential conflicts between, and the different demands of, stakeholders on a business. They examine a range of management styles and management skills that may be used when managing a business and apply these to contemporary business case studies.

Area of study 2: Managing employees

In this area of study students investigate essential factors such as motivation and training involved in effectively managing employees during their time at a business to ensure the business objectives are achieved.

Area of Study 3: Operations management

In this area of study students examine operations management and consider the best and most responsible use of available resources for the production of a quality final good or service in a competitive, global environment.

Assessment tasks

Case study; structured questions; essay.

UNIT 4: Transforming a Business

Area of study 1: Reviewing performance – the need for change

In this area of study students develop their understanding of the need for change.

Area of study 2: Implementing change

In this area of study students explore how businesses respond to evaluation data. Using a contemporary business case study from the past four years, students evaluate business practice against theory, considering how corporate social responsibility can be incorporated into the change process.

Assessment tasks

Case study; structured questions; essay.

External Examination: 50%

Internally assessed coursework: 50%

CHEMISTRY

Introduction

Scope of study

Chemistry explores and explains the composition and behaviour of matter and the chemical processes that occur on Earth and beyond. Chemical models and theories are used to describe and explain known chemical reactions and processes. Chemistry underpins the production and development of energy, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes.

VCE Chemistry enables students to explore key processes related to matter and its behaviour. Students consider the relationship between materials and energy through four themes: the design and composition of useful materials, the reactions and analysis of chemicals in water, the efficient production and use of energy and materials, and the investigation of carbon-based compounds as important components of body tissues and materials used in society.

Rationale

VCE Chemistry enables students to examine a range of chemical, biochemical and geophysical phenomena through the exploration of the nature of chemicals and chemical processes. In undertaking this study, students apply chemical principles to explain and quantify the behaviour of matter, as well as undertake practical activities that involve the analysis and synthesis of a variety of materials.

In VCE Chemistry students develop a range of inquiry skills involving practical experimentation and research specific to the knowledge of the discipline, analytical skills including critical and creative thinking, and communication skills. Students use scientific and cognitive skills and understanding to analyse contemporary chemistry-related issues, and communicate their views from an informed position.

VCE Chemistry provides for continuing study pathways within the discipline and leads to a range of careers. Branches of chemistry include organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry and biochemistry. In addition, chemistry is applied in many fields of endeavour including agriculture, bushfire research, dentistry, dietetics, education, engineering, environmental sciences, forensic science, forestry, horticulture, medicine, metallurgy, meteorology, pharmacy, sports science, toxicology, veterinary science and viticulture.

Aims

This study enables students to:

- apply models, theories and concepts to describe, explain, analyse and make predictions about chemical phenomena.
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
- develop an informed perspective on contemporary science-based issues of local and global significance.
- apply their scientific understanding to familiar and unfamiliar situations including personal, social, environmental and technological contexts.
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

It is **not** recommended that students would enter Unit 2 without first completing Unit 1.

It is **not** recommended that students would enter Unit 3 without Units 1 and/or 2. If they do they would be required to undertake significant **additional preparation** as prescribed by their teacher.

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

Area of Study 1

How can knowledge of elements explain the properties of matter?

In this area of study students focus on the nature of chemical elements, their atomic structure and their place in the periodic table. They review how the model of the atom has changed over time. Students examine the periodic table as a unifying framework into which elements are placed based upon similarities in their electronic configurations. Students explore patterns and trends of elements with reference to properties of the elements including their chemical reactivity.

Students investigate the nature of metals and their properties, including metallic nanomaterials. They investigate how a metal is extracted from its ore and how the properties of metals may be modified for a particular use. Students examine ionic

compounds. Fundamental quantitative aspects of chemistry are introduced including the mole concept, relative atomic mass, percentage abundance and composition by mass and the empirical formula of an ionic compound.

Outcome 1

On completion of this unit the student should be able to relate the position of elements in the periodic table to their properties, investigate the structures and properties of metals and ionic compounds, and calculate mole quantities.

Area of Study 2

How can the versatility of non-metals be explained?

In this area of study students explore a wide range of substances and materials made from non-metals including molecular substances, covalent lattices, carbon nanomaterials, organic compounds and polymers. They compare how the structures of these non-metallic substances are represented and analyse the limitations of these representations. Students study a variety of organic compounds and how they are grouped into distinct chemical families. Students investigate useful materials that are made from non-metals, and relate their properties and uses to their structures. They explore the modification of polymers and the use of carbon-based nanoparticles for specific applications. Students apply quantitative concepts to molecular compounds, including mole concept and percentage composition by mass, and determine the empirical and molecular formulas of given compounds.

Outcome 2

On completion of this unit the student should be able to investigate and explain the properties of carbon lattices and molecular substances with reference to their structures and bonding, use systematic nomenclature to name organic compounds, and explain how polymers can be designed for a purpose.

Area of Study 3

Research investigation

Knowledge of the origin, structure and properties of matter has built up over time through scientific and technological research, including medical research, space research and research into alternative energy resources. This research and development is ongoing and new discoveries are being made at an accelerating rate. In this area of study students investigate one aspect of the discoveries and research that have underpinned the development, use and modification of useful materials or chemicals.

Outcome 3

On completion of this unit the student should be able to investigate a question related to the development, use and/or modification of a selected material or chemical and communicate a substantiated response to the question.

Assessment tasks

For outcomes one and two may be;

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

For outcome three:

A report of an independent investigation of a topic selected from Area of Study 1 or 2, using an appropriate format, for example digital presentation, oral communication or written report.

Unit 2: What makes water such a unique chemical?

Area of Study 1

How do substances interact with water?

In this area of study students focus on the properties of water and the reactions that take place in water including acid-base and redox reactions. Students relate the properties of water to the water molecule's structure, polarity and bonding. They also explore the significance of water's high specific heat capacity and latent heat of vaporization for living systems and water supplies.

Students investigate issues associated with the solubility of substances in water. Precipitation, acid-base and redox reactions that occur in water are explored and represented by the writing of balanced equations. Students compare acids with bases and learn to distinguish between acid strength and acid concentration. The pH scale is examined and students calculate the expected pH of strong acids and strong bases of known concentration.

Outcome 1

On completion of this unit the student should be able to relate the properties of water to its structure and bonding, and explain the importance of the properties and reactions of water in selected contexts.

Area of Study 2**How are substances in water measured and analysed?**

In this area of study students focus on the use of analytical techniques to measure the solubility and concentrations of solutes in water, and to analyse water samples for various solutes including chemical contaminants. Students examine the origin and chemical nature of substances that may be present in a water supply, including contaminants, and outline sampling techniques used to assess water quality. The concept of molarity is introduced and students measure concentrations of solutions using a variety of commonly used units. Students apply the principles of stoichiometry to analyses solutions and water samples. Instrumental techniques are introduced.

Outcome 2

On completion of this unit the student should be able to measure amounts of dissolved substances in water and analyse water samples for salts, organic compounds and acids and bases.

Area of Study 3**Practical investigation**

Substances that are dissolved in water supplies may be beneficial or harmful, and sometimes toxic, to humans and other living organisms. They may also form coatings on, or corrode, water pipes. In this area of study students design and conduct a practical investigation into an aspect of water quality.

Outcome 3

On completion of this unit the student should be able to design and undertake a quantitative laboratory investigation related to water quality, and draw conclusions based on evidence from collected data.

Assessment task

A report of a student-designed quantitative laboratory investigation using an appropriate format, for example digital presentation, oral communication, scientific poster or written report.

Unit 3: How can chemical processes be designed to optimise efficiency?

The global demand for energy and materials is increasing with world population growth. In this unit students explore energy options and the chemical production of materials with reference to efficiencies, renewability and the minimisation of their impact on the environment.

Area of Study 1**What are the options for energy production?**

On completion of this unit the student should be able to compare fuels quantitatively with reference to combustion products and energy outputs, apply knowledge of the electrochemical series to design, construct and test galvanic cells, and evaluate energy resources based on energy efficiency, renewability and environmental impact.

Area of Study 2**How can the yield of a chemical product be optimised?**

On completion of this unit the student should be able to apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised, and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

Unit 4: How are organic compounds categorised, analysed and used?

The carbon atom has unique characteristics that explain the diversity and number of organic compounds that not only constitute living tissues but are also found in the fuels, foods, medicines and many of the materials we use in everyday life. In this unit students investigate the structural features, bonding, typical reactions and uses of the major families of organic compounds including those found in food.

Area of Study 1

How can the diversity of carbon compounds be explained and categorised?

On completion of this unit the student should be able to compare the general structures and reactions of the major organic families of compounds, deduce structures of organic compounds using instrumental analysis data, and design reaction pathways for the synthesis of organic molecules.

Area of Study 2

What is the chemistry of food?

On completion of this unit the student should be able to distinguish between the chemical structures of key food molecules, analyse the chemical reactions involved in the metabolism of the major components of food including the role of enzymes, and calculate the energy content of food using calorimetry.

Area of Study 3

Practical investigation

On the completion of this unit the student should be able to design and undertake a practical investigation related to energy and/or food, and present methodologies, findings and conclusions in a scientific poster.

PRODUCT DESIGN AND TECHNOLOGY – Wood/Metal/Fibre

SCOPE OF STUDY

In VCE Product Design and Technology students assume the role of a designer-maker. In adopting this role, they acquire and apply knowledge of factors that influence design. Students address the design factors relevant to their design situation.

The knowledge and use of resources is integral to product design. These resources include a range of materials, and the tools, equipment and machines needed to transform these materials in a safe manner into useful products. Increasingly, the importance of environmental sustainability is having an impact on product design and development. More sustainable approaches are therefore at the forefront throughout the product lifecycle.

RATIONALE

Designers play an important part in our daily lives. They determine the form and function of the products we use. They transform ideas into drawings and plans for the creation and manufacture of useful products that fulfil human needs and wants.

VCE Product Design and Technology can provide a pathway to a range of related fields such as industrial, product, interior and exhibition design, engineering, and fashion, furniture, jewelry, textile and ceramic design at both professional and vocational levels.

ENTRY

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

Assessment task examples

- Design folios (including the use of information and communications technology as appropriate) that contain design briefs, research, design ideas and options, documentation of decisions, materials lists and production plans;
- Production work and records of production and modification;
- Multimedia presentations supported by speaker's notes;
- Short written reports (materials testing activities, industry visits, technical reports, product evaluation reports, process evaluation reports);
- Oral reports supported by notes and/or visual materials.



UNIT 1: Product re-design and sustainability

This unit focuses on the analysis, modification and improvement of a product design with consideration of the materials used and issues of sustainability.

Area of Study 1 provides an introduction and structured approach towards the Product design process and Product design factors.

In Area of Study 2, students produce a re-designed product safely using tools, equipment, machines and materials, compare it with the original design and evaluate it against the needs and requirements outlined in their design brief.

UNIT 2: Collaborative Design

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including: human needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution.

In Area of Study 1, students work both individually and as members of a small design team to address a problem, need or opportunity and consider the associated human-centred design factors. They design a product within a range, based on a theme, or a component of a group product. They research and refer to a chosen style or movement.

In Area of Study 2 the product produced individually or collectively is evaluated.

UNIT 3: Applying the product design process

In this unit students are engaged in the design and development of a product that meets the needs and expectations of a client and/or an end-user, developed through a design process and influenced by a range of complex factors.

In Area of Study 1, students examine how a design brief is structured, how it addresses particular Product design factors and how evaluation criteria are developed from the constraints and considerations in the brief.

In Area of Study 2, students examine how a range of factors, including new and emerging technologies, and international and Australian standards.

In Area of Study 3, students commence the application of the Product design process for a product design for a client and/or an end-user, including writing their own design brief which will be completed and evaluated in Unit 4.

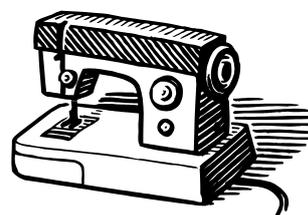
UNIT 4: Product Development and Evaluation

In this unit students learn that evaluations are made at various points of product design, development and production. In the role of designer, students judge the suitability and viability of design ideas and options referring to the design brief and evaluation criteria in collaboration with a client and/or end-user.

In Area of Study 1, students use comparative analysis and evaluation methods to make judgments about commercial product design and development.

In Area of Study 2, students continue to develop and safely manufacture the product designed in Unit 3.

In Area of Study 3, students evaluate the effectiveness and efficiency of techniques they used and the quality of their product with reference to evaluation criteria and client and/or end-user feedback.



ENGLISH

RATIONALE

This study 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, ranging from the personal and informal to more public occasions, and to develop a level of competence adequate for the demands of post-school employment, further education, and participation in a democratic society.

AIMS

This study is designed to enable students to:

- extend their competence in using standard Australian English in meeting the demands of further study, the workplace, and their own needs and interests
- extend their language skills through thinking, reading, writing, speaking and listening
- communicate ideas, feelings, observations and information effectively, both orally and in writing, to a range of audiences
- present and justify their own points of view coherently and thoughtfully, both orally and in writing
- evaluate critically points of view expressed by others.

UNIT 1: English

Areas of study

1. Reading and Creating Texts
2. Analysing and Presenting Arguments

Outcomes

On completion of this unit the student should be able to:

1. produce an analytical interpretation of the construction and features of a text.
2. produce a creative response to a selected text.
3. analyse how argument and persuasive language can be used to position an audience.
4. create a text to position audiences

Assessment Tasks

Assessment tasks for this unit include:

- an analytical response to a set text
- a creative response to a set text
- an analysis of the use of argument and persuasive language in texts
- persuasive text intended to position audiences

UNIT 2: English

Areas of study

1. Reading and Comparing Texts
2. Analysing and Presenting Argument

Outcomes

On completion of this unit the student should be able to:

1. compare the presentation of ideas, issues and themes in two texts.
2. identify and analyse how argument and persuasive language are used in texts that attempt to influence an audience
3. create a text which presents a point of view.

Assessment Tasks

Assessment tasks for this unit include:

- a comparative analytical response to set texts
- an analysis of the use of argument and persuasive language in texts
- a persuasive text that presents an argument or viewpoint

UNIT 3: English

Areas of study

1. Reading and Responding
2. Creating and Presenting through Contexts
3. Using language to persuade

Outcomes

On completion of this unit the student should be able to:

1. Develop and justify a detailed interpretation of selected texts.
2. Analyse orally and in writing how a selected text constructs meaning, conveys ideas and values and is open to interpretation.
3. From a chosen Context, draw on a chosen text to create written texts for an audience with a purpose and to discuss their decisions about form, purpose, language, audience and context.

Assessment Tasks

School Assessed Coursework

Contributes 25 % to the final assessment

Assessment includes:

1. An analytical/expository response to a selected text and exploration of how it constructs meaning.
2. Written texts created for a specific audience and Context, with a written explanation of decisions about form, purpose, language, audience and context.
3. Writing which analyses the use of language in three or more persuasive texts that debate a current issue in the Australian media, and a sustained and reasoned point of view on the selected issue in written or oral form.

UNIT 4: English

Areas of study

1. Reading and Responding
2. Creating and Presenting through Contexts

Outcomes

On completion of this unit the student should be able to;

1. Develop and justify a detailed interpretation of selected texts.
2. From a chosen Context, draw on a chosen text to create written texts for an audience with a purpose and to discuss their decisions about form, purpose, language, audience and context.

Assessment tasks

School Assessed Coursework

Contributes 25% to the final assessment

Assessment tasks for this unit include:

1. An extended written interpretation of a selected text.
2. Sustained written texts created for a specific audience and Context, with a written explanation of decisions about form, purpose, language, audience and context.

End of year Examination

Units 3 & 4 contributes 50% to the final assessment

ENGLISH LANGUAGE

RATIONALE

This study aims to enable students to further develop and refine their own skills in reading, writing, listening to and speaking English. Students learn about personal and public discourses in workplaces, fields of study, trades or social groups. They observe and discuss contemporary language in use to develop their analytical skills and understanding of linguistics. Knowledge of how language functions provides a useful basis for further study or employment in numerous fields.

AIMS

This study enables students to:

- describe and analyse the structures, features and functions of spoken and written English language, using an appropriate metalanguage
- investigate language acquisition, use, variation, and change over time
- reflect critically on attitudes to language in both its historical and contemporary contexts, with particular focus on identity, social cohesion and the distinctiveness of Australian language
- explore and analyse the interplay between convention and creativity in language use
- develop an awareness of their own critical, selective and innovative use of language and apply it to their own writing and speaking
- demonstrate, in the creation of their own texts, effective and competent use of Standard Australian

UNIT 1: Language and Communication

Areas of study

1. The nature and functions of language
2. Language acquisition

Outcomes

On completion of this unit the student should be able to:

1. identify and describe primary aspects of the nature and functions of human language
2. describe what children learn when they acquire language and discuss a range of perspectives on how language is acquired.

Assessment tasks

Assessment tasks for this unit are selected from the following:

- a folio
- an investigative report
- a test
- an essay
- a case study
- short-answer questions
- a written or an oral analysis of data
- an analysis of spoken and/or written text
- an oral and/or a multimodal presentation.

UNIT 2: Language Change

Areas of study

1. English across time
2. Englishes in contact

Outcomes

On completion of this unit the student should be able:

1. Describe language change as represented in a range of texts and analyse a range of attitudes to language change
2. Describe and explain the effects of the global spread of English in terms of both conformity and diversity, through a range of spoken and written texts..

Assessment tasks

Assessment tasks for this unit are selected from the following:

- a folio
- an investigative report
- a test
- an essay
- a case study
- short-answer questions
- a written or an oral analysis of data
- an analysis of spoken and/or written text
- an oral and/or a multimodal presentation.

UNIT 3: Language Variation and Social Purpose

Areas of study

1. Informal language
2. Formal language

Outcomes

On completion of this unit the student should be able to:

1. Identify and analyse distinctive features of informal language in written and spoken texts.
2. Identify and analyse distinctive features of formal language in written and spoken texts.

Assessment tasks:

School-assessed Coursework for Unit 3 will contribute 25 per cent.

Analysis of one or more samples of informal language and formal language in any one or a combination of the following:

- an essay
- a written report of an investigation
- a folio
- a short-answer test
- an oral presentation
- a multimodal presentation.

UNIT 4: Language Variation and Identity

Areas of study

1. Language variation in Australian society
2. Individual and group identities

Outcomes

On completion of this unit the student should be able to :

1. Investigate and analyse varieties of Australian English and attitudes towards them.
2. Analyse how people's choice of language reflects and constructs their identities.

Assessment tasks

School-assessed Coursework for Unit 4 will contribute 25 per cent.

For each outcome students will complete any one or a combination of the following:

- an essay
- a written report of an investigation
- an analysis of one or more texts
- a folio
- a short-answer test
- an oral presentation
- a multimodal presentation.

End-of-year examination

Units 3 and 4 will contribute 50 % to the final assessment.

ENGLISH AS AN ADDITIONAL LANGUAGE

RATIONALE

Students need to apply for eligibility to study English as a Second Language. Guidelines for eligibility are available through the school. Broadly speaking students must have had less than seven years of schooling in Australia.

This study aims to enable students to develop their critical understanding and control of the English Language so that they can use it in a wide range of situations, ranging from the personal and informal to more public situations, and to develop a level of competence adequate for the demands of further education, post-school employment and participation in society.

AIMS

The study is designed to enable students to:

- extend their competence in using standard English to meet the demands of further, the workplace and their own needs and interests.
- extend their language through thinking, reading, writing, speaking and listening
- understand how writers and film makers structure texts to convey meaning
- communicate ideas, feelings, observation and information effectively, both orally and in writing to a variety of audiences.
- present and justify their own point of view coherently and thoughtfully, both orally and in writing.
- evaluate critically points of view expressed by others.

UNIT 1: English as an Additional Language

Areas of study

1. Reading and the study of texts
2. The craft of Writing
3. Effective oral communication.

Outcomes

On completion of this unit the students should be able to:

1. Identify and discuss ideas, themes and issues in texts and to respond to these;
2. Communicate effectively in writing;
3. Explore ideas and issues orally

Assessment tasks

Assessment tasks for this unit include:

- Identify and discuss key aspects of a set text, and construct a piece in oral or written form
- create and present texts, including analytical, personal, creative, argumentative and informative
- Presenting a point of view on a current issue, either in writing or orally.

UNIT 2: English as an Additional Language

Areas of study

1. Reading and study of texts
2. The craft of writing
3. Effective oral communication

Outcomes

On completion of this unit the students should be able to:

1. Respond to texts;
2. Produce effective written work for a variety of purposes and audiences, using a specific context as a starting point
3. Comment orally on the key ideas and information conveyed in non-print texts and how structure is used to convey meaning.

Examination

Units 1 and 2 are examined and students receive a graded result.

Assessment tasks

Assessment tasks for this unit include:

- Discuss and analyse how texts convey ways of thinking about characters, ideas and themes, and construct a response in oral or written form.
- Create and present texts taking into account audience, purpose and context.
- Identify and analyse how language is used in a persuasive text and to present a reasoned point of view in oral or written form.

UNIT 3: English as an Additional Language**Areas of study**

1. Reading and the study of texts
2. The craft of writing
3. Effective oral communication

Outcomes

On completion of this unit students should be able to:

1. discuss the ideas, experience and issues in the texts
2. explain the way writers and film makers structure texts to convey meaning
3. convey complex ideas and information orally.

Assessment tasks**School Assessed Coursework**

Accounts for 25% of the final assessment

Assessment tasks for this unit include:

- Analyse, either orally or in writing, how a selected text constructs meaning, conveys ideas and values, and is open to a range of interpretations.
- Respond to a chosen context by creating written texts for a specified audience and purpose.
- Analyse the use of language in texts that present a point of view on an issue currently debated in the media, and to construct, orally or in writing, a sustained and reasoned point of view.

End-of-Year Examination will account for 50% of final assessment

UNIT 4: English as an Additional Language**Areas of study**

1. Reading and the study of texts
2. The craft of writing

Outcomes

On completion of this unit the students should be able to:

1. develop and justify a detailed interpretation of selected texts
2. explain the way writers and film makers structure texts to convey meaning;
3. communicate complex ideas and information effectively through writing for different audiences and purposes

Assessment tasks

Assessment tasks for this unit include:

- Develop and justify a detailed interpretation of a selected text.
- Draw on ideas and arguments suggested by a chosen Context to create written texts for a specific audience and purpose; and to discuss and analyse their decisions about form, purpose, language, audience and context.

Examination

External Units 3&4 examination accounts for 50% of the final assessment.

EXTENDED INVESTIGATION

VCE Extended Investigation is a new Higher Education VCE study that is specifically designed for academically able students. It requires self-motivation and resilience in tackling an extended and detailed investigation. The student must meet a number of milestones over the duration of the study: formulating a question, researching the field, designing a methodology, collecting and analysing data, and reporting on findings.

The purpose of VCE Extended Investigation is to test a student's ability to think critically rather than their knowledge of a specific field. The research area of the student's investigation is a means for them to demonstrate critical thinking and research skills. VCE Extended Investigation presents an opportunity for students to engage in inquiry learning, pursuing an academic interest that they have, and focusing on a problem for an extended amount of time. It is important for teachers to counsel and guide students into undertaking an area of investigation that suits the timeframe, and for which students can get information and collect data. Due to the scope of this research project, students must be practical and realistic when deciding on an area of investigation.

Focus on Thinking

The purpose of critical thinking is for students to move beyond an acceptance of information, towards a critical and careful consideration of the nature of different types of research (including their own investigation). The level of critical and complex thinking required in extended research is substantial. Students need to demonstrate complex and contextualised understanding of arguments and evidence associated with their particular investigation. They should undertake research that seeks to apply the thinking processes to their particular project. The focus is on the thinking processes involved. It is important that each student understands the processes they have undertaken in conducting their investigation and can discuss the impact on their own work in a meaningful way.

Students are asked to produce complex pieces of writing, often using established and academic theory.

Unit 3: Designing an Extended Investigation

In this unit students develop skills in question construction and design, explore the nature and purpose of research, and identify a specific research question. Students use their Extended Investigation Journal to record the progressive refinement of a selected area of interest distilled into an individual research question.

Students record their individual Extended Investigation proposal in the Extended Investigation School Record and formally lodge the research question with the Victorian Curriculum and Assessment Authority during Term 1 on a date published annually. Students undertake initial research and document their progress in their Extended Investigation Journal.

AREA OF STUDY 1

Designing a research question

AREA OF STUDY 2

Planning and commencing the investigation

AREA OF STUDY 3

Critical thinking

ASSESSMENT

The award of satisfactory completion for a unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for the unit. This decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit. The student's level of achievement in Unit 3 will be determined by School-assessed Coursework and by an externally-assessed Critical Thinking Test.

Contribution to final assessment

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

The Externally-assessed Task for Unit 3 will contribute 10 per cent.

Critical Thinking Test

Assessment for the VCE Extended Investigation includes an Externally-assessed Critical Thinking Test in Unit 3. The Critical Thinking Test will be an online test consisting of multiple choice questions and short answer questions.

Unit 4: Presenting an Extended Investigation

This unit is comprised of two parts that together constitute the student's completion of their Extended Investigation. The results of the Extended Investigation are presented in a final written report and in an oral presentation to a panel.

The final written report is submitted and includes a student's description of and reflection on the research method/s and findings and provides their response to the research question. Students present their investigation to a non-specialist panel and defend their findings, responding to questions and challenges from the panel. The Extended Investigation School Record and Extended Investigation Journal are used to record the progress of their investigation and the assistance they receive from supervising teachers, academic mentors and others.

AREA OF STUDY 1

Presenting the final research report

AREA OF STUDY 2

Defending research findings

ASSESSMENT

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

Assessment of levels of achievement

The student's level of achievement for Unit 4 will be determined by an Externally-assessed Task that consists of two parts – a final written report and an oral presentation before a panel.

Unit 4 will contribute 60 per cent.

FOOD TECHNOLOGY

RATIONALE

Food and Technology is engaging and challenging.

The food production industry is diverse, dynamic and creative. Innovative food products are developed to meet the changing social, economic and environmental needs of society. There has been a rapid development of technology related to the manufacture of food. This has influenced the way food is produced, processed, packaged and marketed.

Throughout the four units students will develop skills in the planning, preparation and evaluation of food products.

AIMS

This study is designed to enable students to:

- extend their understanding of food, and its role in contemporary society
- develop an understanding of the properties of food, and the influence of these properties on food selection, preparation and use
- develop knowledge and skills in planning and preparing food in a small-scale food operation
- understand the development, production and marketing of food products
- develop an understanding of the role of technology in all aspects of food production
- develop an understanding of factors that influence the nature and type of food available to the consumer
- develop knowledge of health, hygiene and safety issues in food production
- develop knowledge and skills in the correct and safe use of a range of tools and equipment in food preparation.

***Food charges apply to all units. Year long VCE subject fee payments are due by the end of Term 1 or please contact the school to arrange a payment plan.**

UNIT 1: Properties of Food

Areas of study

1. Keeping food safe.
2. Food properties and preparation.

Outcomes

On completion of this unit the student should be able to:

1. explain and apply hygienic and safe work practices when handling and storing food;
2. analyse the physical, chemical, sensory and functional properties of key foods and prepare foods to optimise these properties.

Assessment tasks

Assessment tasks for this unit include:

- records of planning and production
- production work
- tests
- written reports
- designing and developing a solution in response to a design brief.

UNIT 2: Planning and Preparation of Food

Areas of study

1. Food preparation processes.
2. Planning in food preparation.

Outcomes

On completion of this unit the student should be able to:

1. use skills and implement processes in food preparation of key foods;
2. plan, prepare and evaluate meals for a range of contexts.

Assessment tasks

Assessment tasks for this unit include:

- records of planning and production
- production work
- tests
- written reports
- designing and developing a solution in response to a design brief.

UNIT 3: Food Preparation, Processing and Food Controls

Areas of study

1. Food preparation and processing.
2. Maintaining food safety in Australia.
3. Developing a design plan folio.

Outcomes

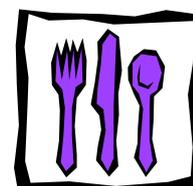
On completion of this unit the student should be able to:

1. analyse food preparation and processing techniques for key foods and prepare foods using these techniques;
2. describe the role of national, state and local authorities in maintaining safe food in Australia;
3. develop a design plan folio that effectively satisfies the requirements of a design brief.

Assessment tasks

Assessment tasks for this unit include:

1. report or test or written report;
2. written report;
3. practical test;
4. must present evidence of the development of a design plan folio.



UNIT 4: Food Product Development and Emerging Trends

Areas of study

1. Implement a design plan.
2. Product development.
3. New and emerging food trends.

Outcomes

On completion of this unit the student should be able to:

1. implement the design plan developed in Outcome 3, Unit 3;
2. analyse factors related to food product development, and explain processes involved in the marketing of a food product;
3. analyse new and emerging developments in food production.

Assessment tasks

Assessment tasks for this unit include:

- report or test or written report
- written report
- record of planning, production work and evaluation.

Units 3 and 4 is also assessed by an end of year examination.

Assessment Overall

SAC's	30%	}	Completed in class
		}	
SAT	40%	}	

End of year exam 30%

Food Technology subject fees year 11 and 12. Yearlong VCE subject fee payments are due by the end of term one or please contact the school to arrange a payment plan.

GEOGRAPHY

RATIONALE

VCE Geography enables students to examine natural and human phenomena, how and why they change, their interconnections and the patterns they form across the Earth's surface. In doing so, they develop a better understanding of their own place and other parts of the world.

Students develop a range of skills, many of which employ spatial and digital technologies. Investigative skills develop students' ability to conduct geographic study and inquiry including the collection of primary data through observation, surveys, fieldwork, and the collection of data and information from relevant secondary sources. Interpretative and analytical skills enable students to interpret information presented in a variety of formats including maps, graphs, diagrams and images.

AIMS

This study enables students to:

- develop a sense of wonder and curiosity about people, culture and environments throughout the world
- develop knowledge and understanding of geographic phenomena at a range of temporal and spatial scales
- understand and apply geographic concepts including place, scale, distance, distribution, movement, region, process, change, spatial association and sustainability to develop their ability to think and communicate geographically
- develop an understanding of the complexity of natural and human induced geographic phenomena across the Earth's surface
- understand the importance of Geography in analysing issues and challenges to human welfare and the environment, at a range of scales
- develop an understanding of the role and application of Geography in the planning and management of human welfare and the environment.

UNIT 1: Hazards and Disasters

Areas of study

Students examine hazards and disasters and the responses to them.

Hazards include a wide range of events from those within local areas to those on a regional or global scale. This unit examines the processes involved with hazards including their causes and impacts, human responses and the interconnections between human activities and natural phenomena. How can we reduce the impact and our vulnerability to hazards and disasters?

Possible topics include volcanic activity, erosion, earthquakes, tsunamis, avalanches, droughts, floods, bushfires, infectious diseases, plant and animal invasions (eg. blackberries and cane toads), oil spills, air pollution, radiation leaks, climate change.

Key skills

- analyse maps, data and other geographic information to develop descriptions and explanations
- collect, sort, process and represent data and other information
- interpret and analyse maps and other geographical data and information
- identify contrasting hazards and hazard types
- describe the characteristics of selected hazards
- describe and explain the causes, sequence and impacts of hazards and hazard events
- explain the role of spatial technologies in identification and assessment of the impacts, and management of hazards and hazard events.

Outcomes

There are two assessment outcomes for each unit. One will be based on a field work report.

Assessment tasks

Assessment tasks for this unit may include:

- field work
- data processing and presentation – graphs, maps, annotated visual display
- research reports
- tests
- short answer questions
- written responses

Unit 2: Tourism

Areas of study

Over 1 billion people travel internationally each year. The scale of tourist movements since the 1950s, and the predicted growth, has had a significant impact on environments, economies and cultures. The travel and tourism industry is responsible for 1 in 12 jobs globally.

Students study the characteristics and development of tourism, the locations of different types of tourism and the factors affecting tourism at both a local and international scale.

Key skills

- analyse maps, data and other geographic information to develop descriptions and explanations
- collect, sort, process and represent data and other information
- interpret and analyse maps and other geographical data and information
- identify the characteristics of tourism
- describe the changing sources and destinations of different types of tourism
- describe and explain the different types of tourism and tourist locations and destinations
- describe and explain the factors affecting different types of tourism
- explain the usefulness of spatial technologies for the tourism industry.

Outcomes

There are two assessment outcomes for each unit.

Assessment tasks

Assessment tasks for this unit include:

- field work
- data processing and presentation – graphs, maps, annotated visual display
- research reports
- tests
- short answer questions
- written responses

At least one assessment task will include fieldwork for each unit.

UNIT 3: Changing the land

1. Land use change: In this area of study students select a local area and use appropriate fieldwork techniques and secondary sources
2. In this area of study students undertake an overview of global land cover and changes that have occurred over time. They investigate three major processes that are changing land cover: deforestation, desertification and melting glaciers and ice sheets.

Outcomes

On completion of this unit the student should be able to:

1. On completion of this unit the student should be able to analyse, describe and explain land use change and assess its impacts.
2. On completion of this unit the student should be able to analyse, describe and explain processes that result in changes to land cover and discuss the impacts and responses resulting from these changes.

Assessment tasks

School assessed coursework

Two assessment tasks for the unit including:

- a test, data analysis, multimedia presentation, report, or short answer questions
- a written fieldwork report.

No Examination in Unit 3.

UNIT 4: Global Perspectives

Areas of study

1. Population dynamics: In this area of study students undertake an overview of world population distribution and growth before investigating the dynamics of population change over time and space. Through the study of population dynamics students growth and decline in fertility and mortality, together with population movements.
2. Population issues and challenges: In this area of study students undertake investigations into two significant population trends that have developed in different parts of the world: a growing population of one country and an ageing population of another country. Students place these trends and resulting issues and challenges in their world regional context. Issues resulting from these population trends include, among others, meeting healthcare and social service needs.

Outcomes

On completion of this unit the student will be able to:

1. analyse, describe and explain population dynamics on a global scale.
2. analyse, describe and explain the nature of significant population issues and challenges in selected locations and evaluate responses.

Assessment tasks

School assessed coursework

Two assessments tasks for the unit including any two of:

- a data analysis
- case study
- a multimedia presentation
- a structured essay
- a report
- short answer questions
- a test.

Examination in November on Unit 3 and Unit 4.

HEALTH AND HUMAN DEVELOPMENT

RATIONALE

VCE Health and Human Development provides students with the skills and knowledge to make informed decisions about their own health and to recognise the importance of health in society. In undertaking this study, they will be able to actively participate in making appropriate choices that allow for good health and be able to seek appropriate advice.

VCE Health and Human Development enables students to understand the current ideologies of health and human development in contemporary society. Students critically evaluate the health and development of the individual across the lifespan in the context of both Australia's and global health and human development. VCE Health and Human Development offers students a range of pathways and caters to those who wish to pursue further formal study in areas such as health promotion, community health research and policy development, humanitarian aid work, allied health practices, education, and the health profession.

Structure

The study is made up of four units.

UNIT 1: The Health and Development of Australia's Youth

Areas of study

1. Understanding youth health and human development
2. Youth Issues

Unit 1: The health and development of Australia's youth; Understanding Youth Health and Human Development, Youth Issues

Understanding youth health and human development

In this area of study students develop understanding of the concepts of youth health and individual human development, and explore the interrelationships that exist within and between them. Students become aware of the differing methods for measuring health status and develop a greater understanding of the health status of youth.

Youth issues

In this area of study students develop understanding of a range of determinants and their ability to influence youth health and individual human development.

Students explore the importance of nutrition and the developmental functions it performs in the body, including the consequences of nutritional imbalance on the health and individual human development of youth. Students investigate in detail one health issue relevant to youth. They explore the impact of this health issue on all dimensions of youth health and individual human development. They develop an understanding of how determinants of health act as risk and/or protective factors in relation to their selected health issue. Students form conclusions about personal, community and government strategies and programs designed to influence and promote youth health and individual human development.

UNIT 2: Individual Human Development and Health Issues

Areas of study

Prenatal Health and Individual Development, Child Health and Individual Development, Adult Health and Individual Development

Prenatal health and individual development

In this area of study students develop understanding of the health and individual human development of Australia's unborn children. Students study the physical changes that occur from conception to birth. Students investigate how determinants, including physical environment, biological, behavioural and social, influence prenatal health and individual human development.

Child health and individual development

The focus of this area of study is the development of students' understanding of the health and individual human development of Australia's children. Students study the period from birth to approximately twelve years. They explore the physical, social, emotional and intellectual changes that occur from birth to late childhood. Students investigate how determinants, including physical environment, biological, behavioural and social, influence child health and development.

Adult health and individual development

The focus of this area of study is the development of students' understanding of the health and individual human development of Australia's adults, including older adults. Students explore the physical, social, emotional and intellectual changes that occur during adulthood. They describe the health status of Australia's adults, including the various determinants that have an impact on health and individual human development.

UNIT 3: Australia's Health

Areas of study

Understanding Australia's Health (60%), Promoting Health in Australia (40%)

Understanding Australia's health

In this area of study students develop understanding of the health status of Australians by investigating the burden of disease and the health of population groups in Australia. Students use key health measures to compare health in Australia and analyse how determinants of health, including the physical environment, biological, behavioural and social, contribute to variations in health status.

The NHPAs initiative seeks to bring a national health policy focus to diseases and conditions that have a major impact on the health of Australians. The NHPAs represent the disease groups with the largest burden of disease and potential costs (direct, indirect and intangible) to the Australian community. Students examine the development of the NHPAs and their relationship to burden of disease in Australia. They analyse initiatives designed to promote health relevant to the NHPAs, and come to understand that nutrition is an important factor for a number of the NHPAs.

Promoting health in Australia

This area of study examines different models of health and health promotion. Students investigate the roles and responsibilities of governments in addressing health needs and promoting health for all through the provision of a national health system and health promotion initiatives. They examine the role of government and non-government organisations in providing programs and support for the promotion of healthy eating.

UNIT 4: Global Health and Human Development

Areas of study

Introducing Global Health and Human Development (50%), Promoting Global Health and Human Development (50%)

Introducing global health and human development

This area of study explores global health, human development and sustainability. Students identify similarities and differences in the health status between people living in developing countries and Australians, and analyse reasons for the differences. The role of the United Nations' Sustainable Development Goals is investigated in relation to achieving sustainable improvements in health status and human development.

Promoting global health and human development

This area of study explores the role of international organisations including the UN and WHO in achieving sustainable improvements in health and human development. Students consider strategies designed to promote health and sustainable human development globally, as well as Australia's contribution to international health programs through AusAid and contributions to non-government organisations.

Assessment tasks for this unit are selected from the following:

- a case study analysis
- a data analysis
- a visual presentation, such as a concept/mind map, poster or presentation file
- a multimedia presentation, using more than two data types (for example, text, still or moving images, sound or numeric) and involving some form of interaction such as hyperlinks
- an oral presentation, such as a debate or podcast (audio or visual)
- a blog
- a test
- a written response, such as a research assignment or written report.

Percentage contributions to the study score in VCE Health and Human Development are as follows:

- Unit 1 and 2 – students are required to pass all outcomes
- Unit 3 School-assessed Coursework: 25 per cent
- Unit 4 School-assessed Coursework: 25 per cent
- End-of-year examination: 50 per cent.

HISTORY

RATIONALE

History is the practice of understanding and making meaning of the past. Students learn about ideas and events that have created present societies and cultures. An understanding of the link between accounts of the past and the values and interests of the time in which the accounts were produced is a feature of the study of history.

AIMS

The study is designed to enable students to:

- develop an understanding of change over time
- understand how people in different times and cultures have interacted
- develop skills to analyse the ways in which the past has been represented
- acquire a broad historical knowledge.

UNIT 1: Twentieth Century History (1900-1945)

Areas of study

1. Crisis and conflict.
2. Social life.
3. Culture expression.

Outcomes

On completion of this unit the student should be able to:

1. analyse and explain the development and impact of a political crisis and conflict in this period;
2. discuss patterns of social life and the factors which influenced social change;
3. analyse the relationship between the historical context and a cultural expression of the period.



Assessment tasks

Assessment tasks for this unit will be a selection of:

- multimedia presentations
- film reviews
- essay
- analytical exercises
- short reports
- oral presentations
- responses to literature

UNIT 2: Twentieth Century History (1945-2000)

Areas of study

1. Ideas and Political Power
2. Movements of the People
3. Issues for the millennium

Outcomes

On completion of this unit the student should be able to:

1. analyse and discuss how post-war societies used ideologies to legitimize their worldview and portray competing systems.
2. evaluate the impact of challenges to established social, political and/or economic power during the second half of the twentieth century.
3. analyse issues faced by communities arising from political, economic and/or technological change.

Assessment tasks

Assessment tasks for this unit include a selection of:

- analytical exercises
- short reports
- film reviews
- tests
- essays

HISTORY (AUSTRALIAN)

RATIONALE

To provide a framework in which to explore the experiences of men and women from the beginnings of European settlement until today.

UNIT 3: Australian History

Areas of study

1. The colonial experience to 1850.
2. From colony to nation: 1850-1901.

Outcomes

On completion of this unit the student should be able to:

1. evaluate the colonial experience in a region, district or colony in Australia;
2. analyse the development and evaluate the effects of a significant economic, social or political trend, movement or event in colonial Australia from 1850 to 1901.

Assessment tasks

School assessed coursework (25 per cent of final assessment)

Assessment tasks for this unit include a selection of:

- reports
- essays
- analytical exercises
- biographical studies.



UNIT 4: Australian History

Areas of study

1. Everyday life in the twentieth century: 1901-1945.
2. Towards a changing society: 1945 – present.

Outcomes

On completion of this unit the student should be able to:

1. analyse the influence of a major event on everyday life of a selected group during the period 1901-1945;
2. analyse an event, issue or campaign which created debate or division in Australian society during the period 1945 to the present.

Assessment tasks

School assessed coursework (25 per cent of final assessment)

Assessment tasks for this unit include a selection of:

- reports
- essays
- analytical exercises
- biographical studies.

Examination

50 per cent of final assessment.



HISTORY (REVOLUTIONS)

RATIONALE

History is the practice of understanding and making meaning from the past. Revolutions focusses on arguably the 2 most significant world events (The American Revolution 1763-1789 and The French Revolution 1781-1795) that have helped create present day society.

Examination

50% of final assessment.

UNIT 3: THE AMERICAN REVOLUTION (1763-1789)

By the 1750s, the British-American colonies had developed into prosperous, self-governing, loyal colonies of the British Empire. However, the conclusion of the French & Indian War brought about an end to the British policy of 'Salutory Neglect'. Trying to recoup the massive debts incurred by the colonies, the 1760s saw Parliament introduce a series of revenue raising restrictions upon the colonists. Patriots violently defended this perceived attack on their Liberty with riots and protests, the barbaric tarring and feathering of British officials and their most famous act of defiance, the Boston Tea Party. With tensions rising and the outset of the Revolutionary War, in 1776 the Declaration of Independence proclaimed the rights of "Life, Liberty and the Pursuit of Happiness". However, the Founding Fathers had to overcome the world's greatest military power and appease the counter-revolutionaries internally before creating history's most enduring Republic.

Areas of study

1. Revolutionary ideas, leaders, movements and events.
2. Creating a New Society

Outcomes

1. Evaluate the role of ideas, leaders, movements and events in the development of the revolution.
2. Analyse the challenges facing the emerging new order, and the way in which attempts were made to create a new society, and evaluate the nature of the society created by the revolution.

Assessment tasks

School assessed coursework (25% of final assessment)

1. Research Report.
2. Historiographical Exercise

UNIT 4: THE FRENCH REVOLUTION (1781-1795)

The old regime of France was based upon a society built on privilege and the absolute power of the King. By the 1780s, the inequality of this social order had been questioned by enlightened thinkers and ridiculed by crude depictions of the decadent lifestyle of Versailles. An ongoing financial crisis focused attention on the forms of inequality entrenched within society, which in turn led to demands for some form of representative government. The dramatic events of 1789 – The Tennis Court Oath and Storming of the Bastille – did not seek to remove the King, but to make him accept a representative Parliament. Yet, by 1792, France was at war with the rest of Europe and internally with its own people. A new invention called the Guillotine would be introduced and some 30,000 French citizens would be executed in the Terror – including the King, his wife Marie-Antoinette and many of the original revolutionaries of 1789.

Areas of study

1. Revolutionary ideas, leaders, movements and events.
2. Creating a new society.

Outcomes

1. Evaluate the role of ideas, leaders, movements and events in the development of the revolution.
2. Analyse the challenges facing the emerging new order, and the way in which attempts were made to create a new society, and evaluate the nature of the society created by the revolution.

Assessment tasks

School assessed coursework (25 per cent of final assessment)

- analytical exercises
- essays

COMPUTING

RATIONALE

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 1: Computing

Areas of study

1. Data and graphic solutions
2. Networks
3. Collaboration and communication

Outcome 1

On completion of this unit the student should be able to acquire, secure and interpret data, and design and develop a graphic solution that communicates the findings of an investigation.

Outcome 2

On completion of this unit the student should be able to design a network with wireless capability that meets an identified need or opportunity, explain its configuration and predict risks and benefits for intended users.

Outcome 3

On completion of this unit the student should be able to design and develop a website collaboratively with others that presents an analysis of a contemporary issue and the team's point of view on the issue.

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.

Areas of study

1. Programming
2. Data Analysis and Visualisation
3. Data management

Outcome 1

On completion of this unit the student should be able to design working modules in response to solution requirements, and use a programming or scripting language to develop the modules.

Outcome 2

On completion of this unit the student should be able to apply the problem-solving methodology and use appropriate software tools to extract relevant data and create a data visualisation that meets a specified user's needs.

Outcome 3

On completion of this unit the student should be able to apply the problem-solving methodology to create a solution using database management software, and explain the personal benefits and risks of interacting with a database.

INFORMATICS

In Informatics Units 3 and 4 students focus on data, information and information systems. In Unit 3 students consider data and how it is acquired, managed, manipulated and interpreted to meet a range of needs. In Area of Study 1 students investigate the way organisations acquire data using interactive online solutions, such as websites and applications (apps), and consider how users interact with these solutions 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. In Area of Study 2 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. The second part of the project is completed in Unit 4.

UNIT 3: Informatics

RATIONALE

Unit 3 focuses on how individuals or organisations use ICT to solve information problems and to participate actively in a society where use of ICT is commonplace. Students acquire and apply knowledge and skills in solving information problems to assist in decision-making and in managing tasks and timelines. The solutions and information products should meet the specific needs of organisations such as sporting clubs, newsagencies, charities, or the needs of individuals. Students also explore how the capabilities of networked information systems support teams of workers or learners to solve problems and share knowledge

Areas of study

1. Organisations and Data Management
2. Data analytics: drawing conclusions.

Outcome 1

On completion of this unit the student should be able to design a solution, develop it using a relational database management system, and diagrammatically represent how users interact with an online solution when supplying data for a transaction.

Outcome 2

On completion of this unit the student should be able to use a range of appropriate techniques and processes to acquire, prepare, manipulate and interpret complex data to confirm or refute a hypothesis, and formulate a project plan to manage progress.

Assessment tasks

As this is a new course for next year, assessment information is unavailable at this stage.



UNIT 4: Informatics

RATIONALE

In this unit students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs. In Area of Study 1 students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate 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. In Area of Study 2, students explore how different organisations manage the storage and disposal of data and information to minimise threats to the integrity and security of data and information and to optimise the handling of information.

Areas of study

1. Data Analytics: Presenting the findings
2. Information Management

Outcome 1

On completion of this unit the student should be able to design, develop and evaluate a multimodal online solution that confirms or refutes a hypothesis, and assess the effectiveness of the project plan in managing progress.

Outcome 2

On completion of this unit the student should be able to compare and contrast the effectiveness of information management strategies used by two organisations to manage the storage and disposal of data and information, and recommend improvements to their current practices.

SOFTWARE DEVELOPMENT

UNIT 3: Software Development

RATIONALE

In Software development Units 3 and 4 students focus on the application of a problem-solving methodology and underlying skills to create purpose-designed solutions using a programming language. 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.

In Area of Study 1 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. In Area of Study 2 students analyse a need or opportunity, plan and design a solution and develop computational, design and systems thinking skills. This forms the first part of a project that is completed in Unit 4.

Areas of study

1. Programming practice
2. Analysis and Design

Outcome 1

On completion of this unit the student should be able to interpret designs and apply a range of functions and techniques using a programming language to develop working modules.

Outcome 2

On completion of this unit the student should be able to analyse and document a need or opportunity, generate alternative design ideas, represent the preferred solution design and formulate a project plan for creating the solution.

Assessment tasks

As this is a new course for next year, assessment information is unavailable at this stage.

UNIT 4: Software Development

RATIONALE

In this unit students focus on how the information needs of individuals and organisations are met through the creation of software solutions used in a networked environment. They continue to study the programming language used in Unit 3. In Area of Study 1 students further 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. In Area of Study 2 students apply systems thinking skills when explaining the relationship between two information systems that share data and how that dependency affects the performance of the systems.

Areas of study

1. Software Solutions
2. Interactions and impact

Outcome 1

On completion of this unit the student should be able to apply stages of the problem-solving methodology to create a solution using a programming language that fulfils identified requirements and assess the effectiveness of the project plan in monitoring progress.

Outcome 2

On completion of this unit the student should be able to analyse and explain the dependencies between two information systems and evaluate the controls in place in one information system to protect the integrity of its source data.

LEGAL STUDIES

RATIONALE

This study is about the way the law relates to and serves both individuals and the community. It focuses on developing an understanding of the way in which law is generated, structured and operates in Australia.

UNIT 1: Criminal Law in Action

Areas of study

1. Law in society
2. Criminal law
3. The criminal courtroom



Outcomes

On completion of this unit the student should be able to:

1. Explain the need for effective laws and describe the main sources and types of laws in society;
2. Explain the key principles and types of criminal law, apply the key principles to relevant cases, and discuss the impact of criminal activity on the individual and society;
3. Describe the process for the resolution of criminal cases, and discuss the capacity of these processes to achieve justice.

Learning opportunities are explored through case studies, mock trials and visits to both the Melbourne Courts and local prisons.

UNIT 2: Issues in Civil Law

Areas of study

1. Civil law
2. The civil law in action
3. The law in focus
4. A question of rights

Outcomes

On completion of this unit the student should be able to:

1. Explain the principles of civil law, law-making by courts, and elements of torts, and apply these to relevant cases;
2. Explain and evaluate the processes for the resolution of civil disputes;
3. Explain one or more area/s of civil law, and discuss the legal system's capacity to respond to issues and disputes related to the selected area/s of law;
4. Describe an Australian case illustrating rights issues, and discuss the impact of the case on the legal system and the rights of individuals.

Learning opportunities are explored through case studies, mock trials and visits to both the Melbourne Courts and local prisons.

UNIT 3: Law-making

Areas of study

1. Parliament and the citizen
2. The constitution and the protection of rights
3. Role of the courts in law-making



Outcomes

On completion of this unit the student should be able to:

1. Explain the structure and role of parliament, including its processes and effectiveness as a law-making body, describe why legal change is needed, and the means by which such change can be influenced;

2. Explain the role of the Commonwealth Constitution in defining law-making powers within a federal structure, analyse the means by which law-making powers may change, and evaluate the effectiveness of the Commonwealth Constitution in protecting human rights;
3. Describe the role and operation of the courts in law-making, evaluate their effectiveness and law-making bodies and discuss their relationship with parliament.

Assessment tasks

Assessment of levels of achievement

The student's level of achievement in Unit 3 will be determined by school-assessed coursework and an end-of-year examination.

Contributions to final assessment

School-assessed coursework for Unit 3 will contribute 25 per cent to the final assessment. The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50 per cent to the final assessment.

UNIT 4: Resolution and Justice

Areas of study

1. Dispute resolution
2. Court processes and procedures, and engaging in justice

Outcomes

On completion of this unit the student should be able to:

1. Describe and evaluate the effectiveness of institutions and methods for the determination of criminal cases and the resolution of civil disputes;
2. Explain the processes and procedures for the resolution of criminal cases and civil disputes, and evaluate their operation and application, and evaluate the effectiveness of the legal system.

Assessment tasks

Assessment of levels of achievement

The student's level of achievement in Unit 4 will be determined by school-assessed coursework and an end-of-year examination.

Contributions to final assessment

School-assessed coursework for Unit 4 will contribute 25 per cent to the final assessment. The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination, which will contribute 50 per cent to the final assessment.



LITERATURE

RATIONALE

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.

AIMS

The study is based on the premise that meaning is derived from the relationship between the text, the context in which it was produced and the experience of life and literature the reader brings to the texts. Accordingly, the study encompasses texts that vary in form and range from past to contemporary social and cultural contexts. The study of 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 study.

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

UNIT 1: Approaches to Literature

In this unit, students focus on the ways in which the interaction between text and reader creates meaning. Students' analyses of the features and conventions of texts help them develop increasingly discriminating responses to a range of literary forms and styles. Students respond critically, creatively and reflectively to the ideas and concerns of texts and gain insights into how texts function as representations of human experience. They develop familiarity with key terms, concepts and practices that equip them for further studies in literature. They develop an awareness of how the views and values that readers hold may influence the reading of a text.

Area of Study 1

Reading practices

In this area of study students consider how language, structure and stylistic choices are used in different literary forms and types of text. They consider both print and non-print texts, reflecting on the contribution of form and style to meaning. Students reflect on the degree to which points of view, experiences and contexts shape responses to text. They engage with other views about texts and develop an awareness of how these views may influence and enhance their own reading of a text. They develop an awareness of initial readings of texts against more considered and complex response to texts.

Outcome 1

On completion of this unit the student should be able to respond to a range of texts and reflect on influences shaping these responses. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- *the ways the conventions, techniques, language patterns, style and diction of texts can guide readers to meaning in print and non-print texts
- *the significance of characters and settings and events featured in the texts in shaping reader response
- *the structures and linguistic and literary features of particular forms of text
- *the ways others' views on texts may:
 - influence or enhance a reading of a text
 - reveal assumptions and ideas about aspects of culture and society.

Key skills

- *develop critical responses by examining the patterns of language and imagery used in the text
- *discuss how the features and conventions of the text contribute to meaning
- *understand how their own ideas and contexts influence their readings of texts
- *explore, interpret and reflect on different ideas and values represented in literature
- *apply understanding of literary criticism to their reading of text/s
- *use evidence from the texts to support a response.

VCE Literature Units 1 and 2: 2016–2020; Units 3 and 4: 2017–2020

Area of Study 2

Ideas and concerns in texts

In this area of study students investigate the ideas and concerns raised in texts and the ways social and cultural contexts are represented. They consider how texts may reflect or comment on the interests of individuals and particular groups in society and how texts may support or question particular aspects of society. Students learn to select and discuss aspects of the texts that facilitate their interpretation and understanding of the point of view being presented. They consider those

facets of human experience that are seen as important within the texts and those that are ignored or disputed. They examine the ways texts explore different aspects of the human condition.

Outcome 2

On completion of this unit the student should be able to analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- *the ways in which characters and situations reflect or reveal human experiences and social values
- *the features of society and the ideas and behaviour that texts appear to support or question
- *features of texts, for example language, characterisation and the presentation of settings, and how they contribute to meaning
- *the features appropriate for analytical responses including structure, conventions and language.

Key skills

- *analyse ways in which human experience is represented in texts including through selection of literary features, inclusion and exclusion, foregrounding and silencing
- *reflect upon the ideas and concerns raised by texts
- *analyse the views and values suggested by a text's inclusions and exclusions
- *identify and comment on some of the techniques used in texts, showing how these contribute to meaning
- *develop analytical responses to texts.

UNIT 2: Context and connections

Ideas and concerns in texts

In this area of study students investigate the ideas and concerns raised in texts and the ways social and cultural contexts are represented. They consider how texts may reflect or comment on the interests of individuals and particular groups in society and how texts may support or question particular aspects of society. Students learn to select and discuss aspects of the texts that facilitate their interpretation and understanding of the point of view being presented. They consider those facets of human experience that are seen as important within the texts and those that are ignored or disputed. They examine the ways texts explore different aspects of the human condition.

Outcome 2

On completion of this unit the student should be able to analyse the ways in which a selected text reflects or comments on the ideas and concerns of individuals and particular groups in society. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- *the ways in which characters and situations reflect or reveal human experiences and social values
- *the features of society and the ideas and behaviour that texts appear to support or question
- *features of texts, for example language, characterisation and the presentation of settings, and how they contribute to meaning
- *the features appropriate for analytical responses including structure, conventions and language.

Key skills

- *analyse ways in which human experience is represented in texts including through selection of literary features, inclusion and exclusion, foregrounding and silencing
- *reflect upon the ideas and concerns raised by texts
- *analyse the views and values suggested by a text's inclusions and exclusions
- *identify and comment on some of the techniques used in texts, showing how these contribute to meaning
- *develop analytical responses to texts.

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 draw on their study of adaptations and transformations to develop creative responses to texts.

Students develop their skills in communicating ideas in both written and oral forms.

Area of Study 1

Adaptations and transformations

In this area of study students focus on how the form of text contributes to the meaning of the text. Students develop an understanding of the typical features of a particular form of text and how the conventions associated with it are used, such as the use of imagery and rhythm in a poem or the use of setting, plot and narrative voice in a novel. Students use this understanding to reflect upon the extent to which changing the form of the text affects its meaning.

By exploring adaptations, students also consider how creators of adaptations may emphasise or understate perspectives, assumptions and ideas in their presentation of a text.

Outcome 1

On completion of this unit the student should be able to analyse the extent to which meaning changes when a text is adapted to a different form.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- *the ways the form and conventions of a text affect the making of meaning
- *differences in meaning that may be created when a text is adapted or transformed
- *the ways creators of adaptations may present assumptions and ideas about aspects of culture and society that reflect or are different from the original text
- *the ways that perspectives of the creators may inform or influence adaptations of texts.

Key skills

- analyse the construction of texts in terms of characterisation, tone, style, structure and point of view
- identify typical features of a range of forms of text, and evaluate their significance in the making of meaning
- identify and analyse the similarities and differences between the original and the adapted or transformed text.

Area of Study 2

Creative responses to texts

In this area of study students focus on the imaginative techniques used for creating and recreating a literary work. Students use their knowledge of how the meaning of texts can change as form changes to construct their own creative transformations of texts. They learn how writers develop images of people and places, and they develop an understanding of language, voice, form and structure. Students draw inferences from the original text and speculate about the writer's purpose. In their adaptation of the tone and the style of the original text, students develop an understanding of the concerns and attitudes explored.

Students develop an understanding of the various ways in which authors craft texts. They reflect critically upon their own responses as they relate to the text, and discuss the purpose and context of their creations.

Outcome 2

On completion of this unit the student should be able to respond creatively to a text and comment on the connections between the text and the response.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- the point of view, context and form of the original text
- the ways the central ideas of the original text are represented
- the features of the original text including ideas, images, characters and situations, and the language in which these are expressed
- techniques used to create, recreate or adapt a text and how they represent particular concerns or attitudes.

Key skills

- identify elements of construction, context, point of view and form particular to the text, and apply understanding of these in a creative response
- choose stylistically appropriate features including characterisation, setting, narrative, tone and style
- critically reflect on how language choices and literary features from the original text are used in the adaptation.

Unit 4: Interpreting texts

In this unit students develop critical and analytic responses to texts. They consider the context of their responses to texts as well as the ideas explored in the texts, the style of the language and points of view. They investigate literary criticism informing both the reading and writing of texts. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches. Specifically, for Unit 4 Outcome 1, the literary criticism selected must reflect different perspectives, assumptions and ideas about the views and values of the text/s studied.

Area of Study 1

Literary perspectives

In this area of study students focus on how different readings of texts may reflect the views and values of both writer and reader. Students consider the ways in which various interpretations of texts can contribute to understanding. They compare and analyse two pieces of literary criticism reflecting different perspectives, assumptions and ideas about the views and values of the text studied. Students identify the issues, ideas and contexts writers choose to explore, the way these are represented in the text/s and the cultural, social, historical and ideological contexts in which they were created. Students enquire into the ways readers may arrive at differing interpretations about a text and the grounds on which they are developed. Through close attention to two pieces of literary criticism reflecting different perspectives, students develop their own response to a text.

Outcome 1

On completion of this unit students should be able to produce an interpretation of a text using different literary perspectives to inform their view.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Key knowledge

- the ways that literary criticism presents assumptions and ideas about aspects of culture and society and how these inform readings of the text
- contexts (cultural, social, historical and ideological) that may influence the construction and reading of the text
- the ways in which the text may reflect or question aspects of human behaviour through characterisation, imagery, style, point of view and structure
- the ways that contemporary views and values influence interpretations.

Key skills

- identify and analyse the views and values in texts
- explain how a literary criticism foregrounds particular views and questions texts in particular ways
- analyse how literary criticism informs readings of texts
- compare, analyse and evaluate different perspectives of texts presented in literary criticism.

Area of Study 2

Close analysis

In this area of study students focus on detailed scrutiny of the language, style, concerns and construction of texts. Students attend closely to textual details to examine the ways specific features and/or passages in a text contribute to their overall interpretations. Students consider features of texts including structure, context, ideas, images, characters and situations, and the language in which these are expressed. They develop their interpretations using detailed reference to the text, logical sequencing of ideas and persuasive language.

Outcome 2

On completion of this unit the student should be able to analyse features of texts and develop and justify interpretations of texts.

To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Key knowledge

- the effects and nuances of language
- the significance of key passages in interpreting a text
- the connections between features of a text in developing an interpretation
- the views and values suggested in a text
- the conventions appropriate to presenting an interpretation.

Key skills

- discuss how certain passages in a text can reveal developments in a text
- analyse the features of a text and make appropriate connections between them
- analyse how key passages and features in a text contribute to an interpretation
- synthesise the various elements of the text into a coherent view.

LANGUAGE – INDONESIAN

RATIONALE and AIMS

The study of Indonesian contributes to the overall education of our students who live in a culturally diverse world. Areas of focus are communication, cross-cultural understanding and awareness, literacy and general knowledge. The culture of our Indonesian-speaking neighbors is a prominent focus. Students discover the potential to apply Indonesian to work, further study, training or leisure.

VCE UNIT 1: Indonesian

Areas of study

1. Gaya Kehidupan (Lifestyles)
2. Geografi dan Lingkungan (Geography and the Environment)
3. Hiburan dan Remaja (Entertainment and Young people)

Outcomes

On completion of this unit the student should be able to establish and maintain a conversation, write about personal experiences, listen for and read for specific information and respond personally to real or imaginative experiences.

Assessment tasks

- Speaking Task - Informal conversation
- Reading Task - read, extract and reorganize information
- Listening Task - listen to conversations/interviews and extract information
- Writing Task - review or article, letter or email

VCE UNIT 2: Indonesian

Areas of study

1. Bertamasya (Visiting Indonesia)
2. Sejarah dan cerita dari zaman dahulu (History and stories of the past)
3. Pahlawan (Heroes)

Outcomes

On completion of this unit the student should be able to learn to negotiate through role plays, read and listen to information and write or perform a personal or imaginative piece.

Assessment tasks

- Speaking Task - Role play or Interview
- Reading Task – read, extract and reorganize information
- Listening Task - listen to conversations/interviews and extract information
- Writing Task - a formal letter/fax or email, journal entry/personal account/short story.



VCE UNIT 3: Indonesian

Areas of study

1. Adat Istiadat (Customs and traditions).
2. Kesehatan (Health)
3. Cita-cita dan Pekerjaan (Aspirations and Work).

Outcomes

On completion of this unit the student should be able to express ideas through speaking and writing, analyse and use information they have heard, and exchange information, opinions and experiences through speaking and writing.

Assessment tasks

- Writing Task - a 250 word personal or imaginative written piece.
- Listening Task - response to specific questions, messages or instructions, extracting and using the information requested.
- Speaking Task – a 3-4 minute role-play, focusing on the resolution of an issue.

VCE UNIT 4: Indonesian

Areas of study

1. Pengaruh Barat (Western Influences)
2. Detailed study.
3. Revision

Outcomes

On completion of this unit the student should be able to analyse and use information from written texts, respond critically to spoken and written texts which reflect aspects of the language and culture.

Assessment tasks

- Reading Task - response to specific questions, messages, instructions, extracting and using information requested
- Writing Task – a 250-300 word informative or persuasive written response
- Speaking Task - a 3-4 minute interview on an issue related to the texts studied.

Examination

Oral Exam: Conversation and Discussion (15 minutes)

Written Exam: Listening, Reading and Writing (2 hours writing 15 minutes reading time)



LANGUAGE – ITALIAN

VCE Italian

RATIONALE and AIMS

The study of Italian contributes to the overall education of our students who live in a culturally diverse world. Areas of focus are communication, cross-cultural understanding and awareness, literacy and general knowledge. The students discover the potential to apply Italian to work, further study, training or leisure.

The Program explores the Italian language and culture under three main themes: THE INDIVIDUAL; THE LOTE SPEAKING COMMUNITIES; THE CHANGING WORLD. Each theme is further divided into many subtopics.

THE INDIVIDUAL	THE LOTE SPEAKING COMMUNITIES	THE CHANGING WORLD
Personal World	Historical perspectives	The World of Work
Health and Leisure	Lifestyle in Italy and Abroad	Technology
Education and Aspirations	The Arts and Entertainment	Trade and Commerce
	Social and Contemporary Issues	Tourism and Hospitality

VCE UNIT 1: Italian

Areas of study

- L'identità e famiglia (Identity and Family)
- I miei amici (My Friends)
- I miei hobby (My hobbies)
- La scuola (School)
- Il Futuro (The Future)

Outcomes

On completion of this unit the student should be able to establish and maintain a conversation, write about personal experiences, listen for and read for specific information and respond personally to real or imaginative experiences.

Assessment tasks

- Speaking Task - Informal conversation
- Reading Task - read, extract and reorganize information
- Listening Task - listen to conversations/interviews and extract information
- Writing Task - review or article, letter or email

VCE UNIT 2: Italian

Areas of study

- Le Superstizioni (Superstitions)
- Le Donne e Lavoro (Women and the Workplace)
- Prodotti Italiani "Il Made In Italy" (Italian Products)
- Commercio tra Italia ed Australia (Commerce Trade between Italy and Australia)

Outcomes

On completion of this unit the student should be able to learn to negotiate through role plays, read and listen to information and write or perform a personal or imaginative piece.

Assessment tasks

- Speaking Task - Role play or Interview
- Reading Task – read, extract and reorganize information
- Listening Task - listen to conversations/interviews and extract information
- Writing Task - a formal letter/fax or email, journal entry/personal account/short story

VCE UNIT 3: Italian

Areas of study

- Le Fiabe (Fairytales)
- Gruppi di Minoranza in Italia e in Australia (Minority groups in Italy and in Australia)
- I Rom (The Rom gypsies)

Outcomes

On completion of this unit the student should be able to express ideas through speaking and writing, analyse and use information they have heard, and exchange information, opinions and experiences through speaking and writing.

Assessment tasks

- Writing Task - a 250 word personal or imaginative written piece.
- Listening Task - response to specific questions, messages or instructions, extracting and using the information requested.
- Speaking Task – a 3-4 minute role-play, focusing on the resolution of an issue.

VCE UNIT 4: Italian

Areas of study

- Le origini del ghetto (The origins of the ghetto)
- Detailed study
- Revision

Outcomes

On completion of this unit the student should be able to analyse and use information from written texts, respond critically to spoken and written texts which reflect aspects of the language and culture.

Assessment tasks

- Reading Task - response to specific questions, messages, instructions, extracting and using information requested.
- Writing Task – a 250-300 word informative or persuasive written response.
- Speaking Task - a 3-4 minute interview on an issue related to the texts studied.

Detailed Study

The Detailed Study enables the students to explore and compare aspects of the language and the culture of the Italian speaking community through a range of oral and written texts in the target language. The students are expected to discuss their Detailed Study through the texts chosen as reference, in the second part of the oral exam (8 minutes)
The topic of the Detailed Study is: I Ghetti in Italia (The Ghettos in Italy)

Oral Exam

The oral exam is made up by two sessions:

- Conversation (approximately 7 minutes)
- Discussion (approximately 8 minutes on chosen aspects of the Detailed Study)

The assessment criteria include: communication, content and language

Written Exam

The written exam is held over two hours and includes 15 minutes of reading time. It includes three sections:

- Listening and responding
- Reading and responding
- Writing

The assessment criteria focus on comprehension and the ability to convey clear and accurate messages.

MATHEMATICS

RATIONALE

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 unambiguous and a means by which people can understand and manage their environment.

UNDERLYING PRINCIPLE

It is an underlying principle of the Mathematics study that all students will engage in the following mathematical activities:

1. Apply knowledge and skills

The study of aspects of the existing body of mathematical knowledge through learning and practising mathematical algorithms, routines and techniques, and using them to find solutions to standard problems.

2. Model, investigate and solve problems

The creative application of mathematical knowledge and skills in unfamiliar situations, including real-life situations, which require investigative, modelling or problem-solving approaches.

3. Use technology

The effective and appropriate use of technology to produce results which support learning mathematics and its application in different contexts.

Unit Outlines – Year 11 Mathematics

UNITS 1 AND 2: Foundation Mathematics

Foundation Mathematics provides for the continuing mathematical development of students entering VCE needing mathematical skills to support their other VCE subjects including VET and VCAL programs and *who do not intend to undertake Unit 3 and 4 studies in VCE Mathematics in the following year.*

In Foundation Mathematics there is a strong emphasis on using mathematics in practical contexts relating to everyday life, personal work and study. Students are encouraged to use appropriate technology in all areas of their study. These units will be especially useful for students undertaking VET and VCAL programs.

At the end of Unit 1, students will be expected to have covered material equivalent to at least two of the areas of study. Unit 2 is intended to complement Unit 1 in development of the course material.

Areas of study

The areas of study for Units 1 and 2 of Foundation Mathematics are 'Space and shape', 'Patterns in number', 'Handling data' and 'Measurement and design'.

Outcomes

For each unit students are required to demonstrate achievement of three outcomes.

On completion of each unit the student should be able to:

1. use confidently and competently mathematical skills and concepts from at least two areas of study of 'Space and shape', 'Patterns in number', 'Handling data' and 'Measurement and design';
2. apply and discuss basic mathematical procedures in contexts relating to familiar situations, personal work and study;
3. select and use technology to apply mathematics to a range of practical contexts.

Assessment tasks

Assessment tasks for Outcome 1 – a selection of:

- assignments
- summary or review notes
- tests.



Assessment tasks for Outcome 2 are:

- a report on an application or use of mathematics; for example, costing of an eighteenth birthday party, budgeting for a holiday, a survey of types of television programs, design of a car park
- a presentation in oral, written, poster, or multimedia format (for example, presentation software), on mathematics that students have encountered in personal work or study; for example, mathematics encountered in the study of another VCE subject, or encountered in a part-time work or work-experience location, or in daily experience.

Assessment tasks for Outcome 3: although some specific tasks may be set to enable this outcome to be demonstrated, some or all of the assessment tasks for Outcomes 1 and 2 will incorporate the effective and appropriate use of technology and enable assessment of Outcome 3.

UNITS 1 AND 2: General Mathematics

RATIONALE

General Mathematics provides courses of study for diverse groups of students. Most students studying General Mathematics will intend to study Further Mathematics 3 & 4.

Areas of study

1. Arithmetic
2. Graphs of linear and non-linear equations
3. Data analysis and simulation
4. Decision and business mathematics
5. Algebra
6. Geometry and trigonometry.



Each unit will cover four or more topics selected from at least three of the above Areas of Study.

Outcomes

For each unit students are required to demonstrate achievement of three outcomes. As a set these outcomes encompass all of the selected areas of study for each unit.

On completion of each unit the student should be able to:

1. define and explain key concepts, in relation to the topics from the selected areas of study, and apply a range of related mathematical routines and procedures;
2. apply mathematical processes in non-routine contexts and analyse and discuss these applications in at least three of the areas of study;
3. use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques or approaches in at least three of the areas of study.

A CAS calculator is required for General Mathematics A and highly recommended for General Mathematics B.

Assessment tasks

For each unit demonstration of the achievement of Outcome 1 must be based on the student's performance on a selection of the following tasks. Assessment tasks for this outcome are:

- assignments
- tests
- summary or review notes.

For each unit demonstration of the achievement of Outcome 2 must be based on the student's performance on a selection of the following tasks. Assessment tasks for this outcome are:

- projects
- short written responses
- problem-solving tasks
- modelling tasks.

For each unit demonstration of the achievement of Outcome 3 must be based on the student's performance on a selection of tasks completed in demonstrating achievement of Outcomes 1 and 2 which incorporate the effective and appropriate use of technology in contexts related to topics in the selected material from the areas of study.

UNITS 1 AND 2: Mathematical Methods CAS

Areas of study

Mathematical Methods Units 1 and 2 are designed as a preparation for Mathematical Methods Units 3 and 4. The areas of study for each of Units 1 and 2 are 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability'.

Outcomes

For each unit students are required to demonstrate achievement of three outcomes.

On completion of this unit the student should be able to:

1. define and explain key concepts as specified in the content from the 'Functions and graphs', 'Algebra', 'Calculus' and 'Probability' areas of study, and to apply a range of related mathematical routines and procedures;
2. apply mathematical processes in non-routine contexts and to analyse and discuss these applications of mathematics;
3. use technology to produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Assessment tasks

Assessment tasks for Outcome 1, a selection of:

- assignments
- tests; and/or
- summary or review notes.

Assessment tasks for Outcome 2, a selection of:

- projects
- short written responses
- problem-solving tasks; and/or
- modelling tasks.

Some assessment tasks will be technology free (to reflect what happens in Exam 1 in Year 12).

Some or all of the assessment tasks for Outcomes 1 and 2 will incorporate the effective and appropriate use of technology to enable assessment of Outcome 3.

To study Mathematical Methods (CAS) Units 1 & 2 students must have a sound background in number, algebra, function, sets and probability and related aspects of working mathematically including the effective use of technology for numerical, graphical or symbolic computation.

A CASIO CLASSPAD CAS calculator is essential for this study and students without one will be severely disadvantaged with their preparation for Mathematical Methods CAS Units 3&4.

UNITS 1 AND 2: Specialist Mathematics (General A)

RATIONALE

Most students studying Specialist Mathematics Units 1 & 2 will also be studying Mathematical Methods 1 & 2 and intend to study Mathematical Methods 3 & 4 and in some cases Specialist Mathematics Units 3 & 4.

Areas of study/Topics

UNIT 1

1. Number Systems
2. Transformations
3. Algebra
4. Trigonometry
5. Sequences and series
6. Variation

UNIT 2

1. Algebra
2. Non-Linear Graphs
3. Linear Programming
4. Geometry
5. Vectors
6. Kinematics & Dynamics

Specialist Mathematics 1 & 2 will focus on Functions and Graphs, Algebra, Geometry and Trigonometry in preparation for Units 3 & 4

Outcomes

For each unit students are required to demonstrate achievement of three outcomes. As a set these outcomes encompass all of the selected areas of study for each unit.

On completion of each unit the student should be able to:

1. define and explain key concepts, in relation to the topics from the selected areas of study, and apply a range of related mathematical routines and procedures;
2. apply mathematical processes in non-routine contexts and analyse and discuss these applications in at least three of the areas of study;
3. use technology to produce results and carry out analysis in situations requiring problem solving, modelling or investigative techniques or approaches in at least three of the areas of study.

A CAS calculator is required for Specialist Mathematics and students will be disadvantaged without one.

Assessment tasks

For each unit demonstration of the achievement of Outcome 1 must be based on the student's performance on a selection of the following tasks. Assessment tasks for this outcome are:

- assignments
- tests

For each unit demonstration of the achievement of Outcome 2 must be based on the student's performance on a selection of the following tasks. Assessment tasks for this outcome are:

- short written responses
- problem-solving and application tasks

For each unit demonstration of the achievement of Outcome 3 must be based on the student's performance on a selection of tasks completed in demonstrating achievement of Outcomes 1 and 2 which incorporate the effective and appropriate use of technology in contexts related to topics in the selected material from the areas of study.

Some assessment tasks will be technology free (to reflect what happens in Exam 1 in Year 12).

Unit Outlines – Year 12 Mathematics

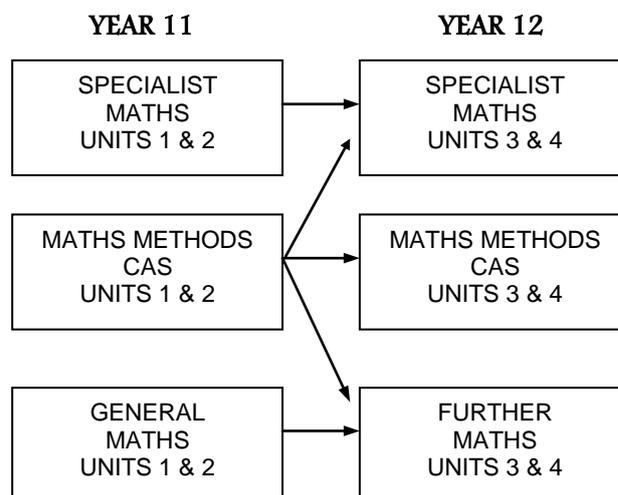
UNITS 3 AND 4: Further Mathematics

RATIONALE

Further Mathematics Units 3 and 4 are intended to be widely accessible. They provide general preparation for employment or further study. The assumed knowledge for Further Mathematics Units 3 and 4 is drawn from General Mathematics Units 1 and 2; students who have done only Mathematical Methods Units 1 and 2 will also have had access to this assumed knowledge.

Areas of study

1. 'Data analysis' (Core material)
2. 'Applications' (Module material), which consists of five modules:
 - Module 1: Number patterns and applications
 - Module 2: Geometry and trigonometry
 - Module 3: Graphs and relations
 - Module 4: Business related mathematics
 - Module 5: Networks and decision mathematics.



UNIT 3: Further Mathematics

Outcomes

For Unit 3 these outcomes encompass 'Data analysis' and one module from the 'Applications' area of study.

On completion of this unit the student should be able to:

1. define and explain key terms and concepts as specified in the content from the areas of study, and use this knowledge to apply related mathematical procedures to solve routine application problems;
2. use mathematical concepts and skills developed in the 'Data analysis' area of study to analyse a practical and extended situation and interpret the outcomes of this analysis in relation to key features of that situation;
3. select and appropriately use technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches in the areas of study 'Data analysis' and the selected module from the 'Applications' areas of study.

School assessed coursework

School-assessed coursework for Unit 3 will contribute 20 per cent.

1. Application task

A data analysis application task with several components of increasing complexity. All outcomes will be covered by components of the task.

2. Analysis task

A short item of 2-4 hours duration over 1-2 days selected from, e.g. a short and focused investigation, challenging problem or modelling task.

Outcomes 1 and 2 should be covered across the two Analysis tasks. The use of technology (Outcome 3) should be incorporated in the assessment task selected to demonstrate achievement of at least one of Outcomes 1 and 2.

UNIT 4: Further Mathematics

Areas of study

Two modules are selected from the 'Applications' areas of study.

Outcomes

On completion of this unit the student should be able to:

1. define and explain key terms and concepts as specified in the content from the 'Applications' area of study, and use this knowledge to apply related mathematical procedures to solve routine application problems;
2. apply mathematical processes in contexts related to the 'Applications' area of study and analyse and discuss these applications of mathematics;
3. select and appropriately use technology in order to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches related to the selected modules for this unit from the 'Applications' areas of study.

School assessed coursework

Unit 4 will contribute 14 per cent to the final assessment.

Analysis task 1

This task relates to one of the selected 'Application' modules in Unit 4. It is a short item of 2-4 hours duration over 1-2 days selected from, for example:

- an assignment where students have the opportunity to work on a broader range of problems; *or*
- a short and focused investigation, challenging problem or modelling task; *or*
- a set of application questions requiring extended response analysis in relation to a particular topic or topics; *or*
- item response analysis for a collection of multiple choice questions.

Analysis task 2

This task relates to the second selected 'Applications' module in Unit 4. It is a short item of 2-4 hours duration over 1-2 days selected from, for example:

- an assignment where students have the opportunity to work on a broader range of problems; *or*
- a short and focused investigation, challenging problem or modelling task; *or*
- a set of application questions requiring extended response analysis in relation to a particular topic or topics; *or*
- item response analysis for a collection of multiple-choice questions.

This task is to be a different type to that selected for Analysis task 1.

Outcomes 1 and 2 should be covered across the two Analysis tasks.

The use of technology (Outcome 3) should be incorporated in the assessment task selected to demonstrate achievement of at least one of Outcomes 1 and 2.

Examination

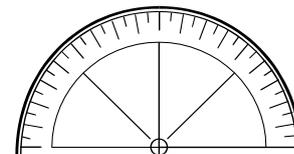
Units 3 and 4 will also be assessed by two end-of-year examinations, which will contribute 66 per cent to the final assessment.

Examination 1 (Facts, Skills and Applications Task)

Multiple choice questions covering the core and selected modules.

Examination 2 (Analysis Task)

Four sets of extended answer questions from Data Analysis and the three selected modules.



* Student access to a graphics or CAS calculator will be assumed by the VCAA exam setting panel.

UNITS 3 AND 4: Mathematical Methods CAS

Areas of study

Mathematical Methods Units 3 and 4 consists of the following areas of study: 'Functions and Graphs', 'Calculus', 'Algebra' and 'Probability' which must be covered in a progression from Unit 3 to Unit 4, with an appropriate selection of content for each of Unit 3 and Unit 4. Mathematical Methods 3 & 4 assumes knowledge of the Mathematical Methods 1 & 2 areas of study. **Students must have their own Casio ClassPad CAS calculator. The exam panel write exam papers with the assumption that students have a CAS calculator thus students without will be severely disadvantaged during exam time.**

Outcomes

On completion of each unit the student should be able to:

1. define and explain key concepts as specified in the content from the 'areas of study, and apply a range of related mathematical routines and procedures;
2. apply mathematical processes in non-routine contexts, and to analyse and discuss these applications of mathematics;
3. select and appropriately use a Computer Algebra System and other technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Assessment tasks

The student's level of achievement for Units 3 and 4 will be determined by school-assessed coursework and two end-of-year examinations.

Contribution to final assessment

School-assessed coursework for Unit 3 will contribute 20 per cent and for Unit 4 will contribute 14 per cent to the final assessment. Units 3 and 4 will also be assessed by two end-of-year examinations, which will contribute 66 per cent.

School Assessed Coursework – Unit 3

Outcomes 1, 2 and 3 will be assessed by:

- A function and calculus application task with several components of increasing complexity, worth 40 marks
- Two tests designed to cover material from each area of study in relation to Outcome 1 and corresponding aspects of Outcome 3, worth 20 marks. **Total 60 marks**

School Assessed Coursework – Unit 4

Outcomes 1, 2 and 3 will be assessed by:

- Two analysis tasks, each worth 20 marks. Both tasks are a short item of 2-4 hours duration over 1-2 days selected from:
 - an assignment where students have the opportunity to work on a broader range of problems; *or*
 - a short and focused investigation, challenging problem or modelling task; *or*
 - a set of application questions requiring extended response analysis in relation to a particular topic or topics; *or*
 - item response analysis for a collection of multiple-choice questions.

The second task is to be related to the Probability area of study.

End of year examinations

Examination 1 (1 hour) Short answer and some extended questions. **NO** calculators or notes are allowed. A formula sheet will be provided.

Examination 2 (2 hours) Multiple choice and extended questions. One bound reference, one scientific and one CAS calculator may be taken into the exam.

UNITS 3 AND 4: Specialist Mathematics

Students who select this subject must also be studying, or have previously studied, Mathematics Methods (CAS) Units 3 and 4. It is essential that students enjoy learning mathematics and they must have demonstrated good basic skills in both Mathematics Methods Units 1 and 2, and Specialist Mathematics Units 1 and 2.

Areas of study

Co-ordinate Geometry, Circular (Trigonometric) Functions, Algebra, Calculus, Vectors in Two and Three Dimensions and Mechanics.

Students will require an approved CAS Calculator and will be disadvantaged without one.

Outcomes

On completion of this unit the student should be able to:

1. define and explain key terms and concepts in the areas studied and to apply a range of related mathematical routines and procedures;
2. apply mathematical processes with an emphasis on general cases, in non-routine contexts, and to analyse and discuss these applications of mathematics;
3. select and appropriately use technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Assessment tasks

School Assessed Coursework

Unit 3 and 4 will contribute 34 per cent to the final assessment.
(Total of 100 marks allocated across units 3 and 4).

Unit 3: Two analysis tasks, each worth 20 marks and taking 2-4 hours work over 1-2 days. Selected from:

- an assignment
- a short focused investigation or challenging problem
- a set of application questions requiring extended response analysis
- an item response analysis for a collection of multiple choice questions.

Unit 4: A problem solving or modelling application task with an emphasis on Outcomes 2 and 3, worth 40 marks.

Two tests designed to cover material from each area of study in relation to Outcome 1 and related to aspects of Outcome 3, worth 20 marks together.

End of Year Examinations

Examination 1 (1 hour)

Short answer and some extended questions. No calculators or notes are allowed. A formula sheet will be provided.

Examination 2 (2 hours)

Multiple-choice and extended-answer questions. One bound reference, one scientific and one CAS calculator may be taken into the exam.



UNITS 3 AND 4: Algorithmics

Algorithmics is a new study for 2015. The following information has not been formally ratified by VCAA and is subject to minor changes. Melbourne University and Monash University will both give this subject some credit towards a first year computing degree.

Algorithmics is a highly structured and theoretically well-founded framework for solving authentic, practical problems with computational methods. Algorithmics is fundamental to computer sciences and software engineering, and is essential for understanding the technical underpinnings of the information society. This subject examines how information about the world can be systematically represented and processed and how such a process can be sufficiently explicit and precise that it can be represented in a computer program. The focus is not on coding but on “algorithmic thinking”. Mathematical techniques are used to establish crucial properties of algorithms. Algorithms also covers deeper topics in computer sciences such as the possibility of artificial intelligence and prospects for new models of computation inspired by physical and biological systems.

Prerequisites

Students must have completed or are presently completing Mathematical Methods Units 1 and 2.

Rationale

Computing is central to our society and economy, and drives innovation in health, entertainment, science and business. Computation has fundamentally transformed the way we conduct science and engineering: simulation, virtual experiments, computational analysis and prediction have become indispensable parts of the contemporary scientific method. Computation enables us to make sense of data, whether it concerns the environment, the economy, health, entertainment, social and organizational structures or any other sphere of human experience or endeavor.

Unit 3: ALGORITHMIC PROBLEM SOLVING

This unit focuses on how algorithms are used for solving complex problems.

Areas of study

1. Data modelling with abstract data types
In this area of study, students will develop and apply knowledge and skills in representing information. They will explore and solve problems in areas such as social networks and transport networks. Students should be able to devise formal representations for modelling information and decision problems and apply these to a practical problem.
2. Algorithm design
Students will be able to design an efficient algorithm to solve an information or a decision problem.
3. Applies algorithms
Students will be able to evaluate, test and document algorithms and data representations and solve problems which involve the integration of multiple algorithms and data types.

Unit 4: DESIGNING INTELLIGENT ALGORITHMS

This unit focuses on the algorithm design process.

Areas of study

1. Formal algorithm analysis
Students develop knowledge and skills to investigate the correctness and efficiency of algorithms and apply these to the formal analysis of a naïve algorithm for a given problem.
2. Advanced algorithm design
Students encounter a variety of more sophisticated algorithm design patterns, and apply their knowledge of these to construct an improved solution for the problem posed.
3. Universality of computation algorithms
Students learn about the hard limits to computability, and that there are computational problems which cannot be solved using any kind of computational machinery.

Assessment

2.5 hour exam – 60%
School assessed work – 40%

MEDIA

RATIONALE

The media – press, radio, film, television and photography – have significant impact on people's lives. They influence the way people spend their time, perceive themselves and others, and play a crucial role in the creation of personal, social, cultural and national identity. Aside from constructing media designs and developing media skills like photography there is an emphasis on analytical and writing skills.

AIMS

The study is designed to enable students to:

- analyse media products to understand how meaning is constructed
- examine the relationship between the media, its processes, media products and society
- develop an understanding of the roles, historical development, ownership and structure of media
- develop an awareness of media policies and issues within Australian society
- produce and critically analyse media products
- learn to communicate through media forms.

UNIT 1: Representation and Technology

Areas of study

1. Representation

Representations involve the selection of images, words or sounds with a view to influencing the audience's experience of reality. An event, idea, story, institution, character is portrayed in such a way that the audience is forced to examine its views and beliefs. In this unit we look at how the media construct meaning and influence us while presenting a product as natural and realistic.

2. Technology

Where there was once only print medium, we now have photography, television and radio. With computers there is a new medium developing, one which operates under limited legal and ethical restraints while having enormous power to influence its audience. We communicate via satellite and cable, and are rapidly moving towards a digital world. In this unit we look at the development of media technology, its influences on us and the emergence of new media technologies.

Outcomes

On completion of this unit the student should be able to:

1. describe the construction of specific media representations;
2. produce and compare media representations;
3. recognise and evaluate the creative and cultural implications of the new media technologies.

Assessment tasks

Assessment tasks for this unit include:

- black and white photographic folio
- production of a radio or television script
- journalism assignment
- analysis of representations within a film text
- oral presentation on one form of media technology
- commence major project – that is, media marketing campaign, photographic exhibition, documentary film
- digital imaging computer folio.

UNIT 2: Media Production and the Australian Media Industry

Areas of study

1. Media production

Specialists perform specific roles in the development of a media product from its inception to completed production, distribution and/or exhibition. The product is shaped by its origins – whether it comes from a commercial or non-commercial source. In this unit we look at the function of, and roles performed by, specialists within the media industry.

2. The Australian media industry

The production, distribution and circulation of media products is governed by law (common law and legislation), by industry ethics and standards, by pressures within the media industry, and by audience pressure. Media products are also influenced by financial considerations. In this unit we look at the differences between commercial and non-commercial media, the changing patterns of media ownership and factors affecting the Australian media.

Outcomes

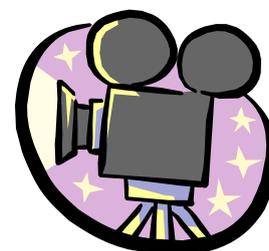
On completion of this unit the student should be able to:

1. explain media production processes and demonstrate specialist production skills;
2. identify and analyse industry and production issues;
3. describe production characteristics of Australian media organisations, and discuss their social and industrial contexts.

Assessment tasks

Assessment tasks for this unit include:

- oral presentation on the role and function of one media specialist
- research and writing of a print feature article
- colour photographic folio
- historical investigation of the Australian film industry – essay 800 words
- complete major project – that is, media marketing campaign, photographic exhibition, documentary film
- exam.



UNIT 3: Narrative and Media Production Design

Areas of study

1. Narrative

Narrative gives meaning to media products. Narrative orders the events, images, words and sounds, and may be categorised into genres or types of stories such as horror, soap opera and teen movies. Narrative communicates themes and issues within a text. In this unit we look at the way audiences are engaged by and respond to narrative through such production elements as film techniques, lighting, acting, setting and characterisation.

2. Media production skills

Developing designs for media products necessitates flair, imagination and creativity. Concepts and ideas are documented for production through blueprints called storyboard or flow charts. These blueprints include specifications including lighting, sound effects and scene development. In this unit we will look at the development of blueprints and a range of technical applications used in the production process.

Outcomes

On completion of this unit the student should be able to:

1. understand the nature and function of production and story elements in fictional media texts and explain how these elements structure narrative to engage audience;
2. demonstrate a variety of media skills including producing media designs and using a range of media equipment;
3. prepare a media production design plan or blueprint.

Assessment tasks

School assessed coursework and examination.

School assessed coursework (10 per cent of final assessment)

School assessed coursework for this unit include:

- film narrative analysis - essay 500-750 words
- complete two exercises related to media production skills
- prepare a media production plan to be implemented in Unit 4.

UNIT 4: Media Process, Social Values and Media Influence

Areas of study

1. **Media process** – The specific production process for a television mini-series is very different from that required for a television current affairs program. Similarly, a radio talk show involves a different production process from that of a radio documentary. In this unit we will look at the production process and apply hands-on use of media equipment.
2. **Social values** – The media are instrumental in determining and disseminating the broad set of cultural beliefs, ideas and conventions which guide society. Social values constantly evolve with tension existing between the dominant set of values and different or emerging values. In this unit we look at how social values are represented in the media and the way media texts can shape social values.
3. **Media influence** – It is sometimes argued that individuals and mass audiences passively absorb media products which makes them susceptible to manipulation and encourages them to adopt specific forms of behaviour. In this unit we will look at the rights and responsibilities of media within our society and the influence of audience to shape media outcomes.

Outcomes

On completion of this unit the student should be able to:

1. produce a media product for an identified audience from the media production plan prepared by students in Unit 3;
2. discuss the ways social values shape the content of a media text;
3. analyse media ownership along with the nature and extent of its influence.

Assessment tasks

School assessed coursework (20 per cent of final assessment) (SAC)

School assessed coursework for this unit include:

- analysis of social values in media text – essay 750 words
- oral presentation on media influence in relation to a sub-group of society
- media influence – essay 750 words.

School assessed task (30 per cent of final assessment) (SAT)

Production of a media product implementing plan from Unit 3.

Activities include:

- animation 30-90 seconds
- radio sequence 5-12 minutes
- video sequence 5-10 minutes
- black and white photographic folio
- print layout of 8-12 pages incorporating digital imaging
- multimedia sequence with 5-10 separate screens or pages and 10-20 interactive elements.

Examination (50 per cent of final assessment)

Students will be asked a series of questions on:

- narrative organisation in fictional texts
- exercises relating to production design plan from Unit 3
- the role of social values in shaping a media text
- the nature and extent of media influence.

MUSIC PERFORMANCE

RATIONALE

VCE Music offers students opportunities to engage in the practice of performing, creating and studying music that is representative of diverse genres, styles and cultures. Students can specialize in one or more approaches to the study of music, depending on the VCE program overall and the post-VCE pathways they may be interested in following.

Music is an integral part of all cultures from the earliest of times, expressing and reflecting human experience. Music exists in a myriad of forms, each able to elicit an array of intellectual and emotional responses from its audience. A study of music enables students to strengthen their own relationship with music and to be personally enriched as they develop greater control of their own musical expression.

Music learning requires students' active engagement in the practices of listening, performing and composing. As they learn in music, students apply critical and creative thinking skills to analyse and critique the work of contemporary and historical practitioners and develop their understanding of the diverse ways in which music ideas can be shaped to communicate artistic and expressive intent. Students also develop insights into the music traditions of contemporary and historical global cultures and form understandings of ways in which music can interact with other arts forms and fields of endeavour.

When students perform the works of other musicians, they develop skills in communicating and in working cooperatively and communally to achieve creative outcomes. Through analysing and responding to the work of other musicians, students develop knowledge of music, skills in critical thinking and greater confidence in written and oral expression. Students use communications and music technologies to achieve considered musical outcomes.

VCE Music equips students with personal and musical skills that enable them to follow pathways into tertiary music study or further training in a broad spectrum of music related careers. VCE Music also offers students opportunities for personal development and encourages them to make an ongoing contribution to the culture of their community through participation in life-long music making.

AIMS

This study enables students to:

- develop and practise musicianship
- perform, compose, arrange and improvise music from diverse styles and traditions
- engage with diverse music genres, styles, contexts and practices
- communicate understanding of cultural, stylistic, aesthetic and expressive qualities and characteristics of music
- explore and expand personal music interests, knowledge and experiences
- use imagination, creativity and personal and social skills in music making
- access pathways for further education, training and employment in music
- use electronic and digital technologies in making and sharing music and communicating ideas about music
- participate in life-long music learning and the musical life of their community.



Structure

The study is made up of ten units. Each unit deals with specific content contained in areas of study and is designed to enable students to achieve a set of outcomes for that unit. Each outcome is described in terms of key knowledge and key skills.

The study structure is:

Music Style and Composition Units 1–2 (Correspondence Course only)

Music Performance Units 1–2

Music Performance Units 3–4

Music Investigation Units 3–4

Music Style and Composition Units 3-4 (Correspondence Course only)

Students may enrol in all units or select specific combinations of units that cater for their interests and intended pathways.

ENTRY

There are no prerequisites for entry to Units 1, 2 and 3 Music Performance, Units 1, 2 and 3 Music Style and Composition and Unit 3 Music Investigation. Students must undertake Unit 3 of the relevant Unit 3–4 sequence prior to undertaking Unit 4.

Music Performance Units 1–4, Music Investigation Units 3–4, and Music Style and Composition Units 1–4 are designed to a standard equivalent to the final two years of secondary education.

All VCE studies are benchmarked against comparable national and international curriculum.

At least four to five years' experience in learning an instrument/s is recommended before commencing VCE Music Performance and Music Investigation.

Music Performance

- Unit 3 School-assessed Coursework: 20 per cent
- Unit 4 School-assessed Coursework: 10 per cent
- End-of-year performance examination: 50 per cent
- End-of-year aural and written examination: 20 per cent.

Music Investigation

- Unit 3 School-assessed Coursework: 30 per cent
- Unit 4 School-assessed Coursework: 20 per cent
- End-of-year performance examination: 50 per cent.

FURTHER REQUIREMENTS

Accompanists must be engaged at the students own expense when required for solo performance assessment tasks. Regular instrumental tuition is highly recommended.

UNIT 1: Music Performance

Areas of study

This unit focuses on building students' performance and musicianship skills to 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 they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Outcomes

Area of Study 1 - Performance

In this area of study students prepare performances by selecting, researching and learning solo and group works. They perform regularly in a variety of contexts and use these performances to explore ways of expressively shaping their chosen works and communicating their artistic intentions to an audience. They develop their individual instrumental and musicianship skills through regular practice and develop group skills through rehearsal and performance with other musicians.

Outcome 1

On completion of this unit the student should be able to prepare and perform a program of group and solo works.

Area of Study 2 – Preparing for performance

This area of study focuses on developing students' capabilities to present musically engaging and technically competent group and solo performances. Students research the selected works to help identify and systematically practise relevant material and processes that will enhance their ability to realise the character and style of the selected group and solo works.

As students develop and practise rehearsal strategies, they trial the use of techniques and conventions. They systematically develop their capacity to use aural, technical and interpretative musicianship skills to enhance their performance. Students identify strengths and weaknesses in their performance capabilities and develop a planned approach to address challenges and optimise their performance. They select and create exercises and practise material to consolidate and refine their command of instrumental and presentation techniques. They build their understanding of how to control and manipulate techniques and conventions, increasing their ability to communicate with an audience.

Outcome 2

On completion of this unit the student should be able to demonstrate and discuss techniques relevant to the performance of selected works.

Area of Study 3 - Music language

This area of study focuses on developing understanding of music language used for interpretation and critical listening. Students study concepts in isolation, from a theoretical perspective and in the contexts of performing and interpretation. This approach develops students' general musicianship and enables them to apply their knowledge when they learn, interpret, rehearse and perform music works. Students develop their ability to hear, identify and sing fundamental components of music language including intervals, scales and triads. They also re-create and extend short melodic and rhythmic phrases, sing and play from sight and memory, and practise and refine their ability to notate music by hand. Students use knowledge developed across this area of study to explore characteristics of works being prepared for performance and make decisions about approaches to interpretation.

Outcome 3

On completion of this unit the student should be able to identify, re-create, extend and notate music language components and short phrases, and describe ways elements of music may be interpreted.

Assessment tasks

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.

Achievement of **Outcome 1** must be based on the student's performance on the following assessment tasks:

- a performance recital of three works including at least one group work and one solo work with accompaniment.

Achievement of **Outcome 2** must be based on the student's performance on the following assessment tasks:

- technical work and exercises and unprepared performance demonstration
- a written report, or an oral presentation, or a multimedia presentation of technical work and exercises supporting the preparation of works performed in Outcome 1.

Achievement of **Outcome 3** must be based on the student's performance on the following assessment task:

- a test that includes written, aural and practical components that identify, re-create, notate and transcribe elements of music, and describe ways in which expressive elements of music may be interpreted.



UNIT 2: Music Performance

Areas of study

This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Outcomes**Area of Study 1 - Performance**

In this area of study students prepare for their performances by selecting, researching, interpreting and learning solo and group works. Works selected for performance in this area of study should be different from those works selected for Unit 1. Students perform regularly in a variety of contexts and use these performances to explore and build on ways of expressively shaping their chosen works and communicating their artistic intentions to an audience. They develop their individual instrumental and musicianship skills through regular practice and develop and implement group skills through rehearsal and performance with other musicians.

Outcome 1

On completion of this unit the student should be able to prepare and perform a program of group and solo works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Area of Study 2 - Preparing for performance

This area of study focuses on continual development of students' capabilities to present musically engaging and technically competent group and solo performances. Students develop knowledge of the works they are preparing by identifying and systematically practising relevant material and processes that will enhance their ability to realise the character and style of selected group and solo works. As students undertake individual practice and group rehearsals, they trial the use of strategies, techniques and conventions to enhance their performance. They also systematically develop their capacity to use aural, technical and interpretative musicianship skills to enhance their performance. Students identify strengths and weaknesses in their performance capabilities and develop a planned approach to address challenges and optimise their performance. They select and create exercises and practise material to consolidate and refine their command of instrumental and presentation techniques. They build their understanding of how to control and manipulate techniques and conventions, increasing their ability to present a musically intelligible performance that engages effectively with an audience.

Outcome 2

On completion of this unit the student should be able to demonstrate and discuss techniques relevant to performance of selected works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Area of Study 3 - Music language

In this area of study students continue to build their understanding of music language used for interpretation and critical listening. Students study concepts in isolation, from a theoretical perspective and in the contexts of performing and interpretation. They build their general musicianship ability, identifying specific applications for their skills in learning, rehearsal and performance contexts. Students develop their ability to identify, sing, play, and write fundamental components of music language, including intervals, scales and triads. They also re-create and extend short melodic and rhythmic phrases, singing and playing from sight and memory, and practise and refine their ability to notate music by hand. Students use knowledge developed across this area of study to explore characteristics of works being prepared for performance and make decisions about approaches to interpretation.

Outcome 3

On completion of this unit the student should be able to re-create, extend and notate music language components and short phrases, and describe ways elements of music may be interpreted. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.

Area of Study 4 - Organisation of sound

This area of study focuses on creating original work as a composition or an improvisation informed by analysis of a work/s being prepared for performance. The creative process is an individual one and has many starting points for inspiration. Students study and listen to a wide variety of music. They explore a range of strategies within a selected stylistic framework to explore creative possibilities and generate and extend music ideas, for example improvisation and/or by using an element of music or a concept, such as a key, chord progression, instrumentation, mood.

Students identify characteristics in works they are preparing for performance that can be used in their composition or improvisation and explore relevant influences on composers/performers. They experiment with, develop and refine music ideas considering the music language used in the original work, the range and characteristics of selected instruments, the use of instruments in combination, the balance of dynamics and tone colour, the blend of instrumental voices, music forms and structures, and notation conventions. Digital instruments, tools and/or equipment should be used, as appropriate, to create, notate, review, refine, present/perform and/or record compositions and improvisations.

Outcome 4

On completion of this unit the student should be able to devise a composition or an improvisation that uses music language evident in work/s being prepared for performance. To achieve this outcome the student will draw on knowledge and related skills outlined in Area of Study 4.

Assessment tasks

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.

Outcome 1

- Performance of three works including at least one group work, and one solo work with accompaniment

Outcome 2

- A demonstration of technical work and exercises
- An oral/or multimedia/or written explanation of technical work and exercises showing how they have supported the students' development as an instrumentalist and their preparation of works performed in outcome 1
- A performance of unprepared material (sight reading, imitation or improvisation)

Outcome 3

- Aural and Theory workbook of class activities and test that includes written, aural and practical components.

Outcome 4

Composition and/or improvisation exercises and accompanying documentation (multimedia or written) that describes use of music language in the exercises.



UNITS 3 AND 4

For Units 3 and 4 this study divides into two streams:

- A Music Performance**
- B Music Investigation**

Please read Entry requirements for this study.

UNIT 3: Music Performance

This unit focuses on building and refining performance and musicianship skills. Students focus on either group or solo performance and begin preparation of a performance program they will present in the end-of-year examination. As part of their preparation, students will also present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Performance examination – students choose whether they will present their external end-of-year performance examination program as a member of a group or as a soloist.

Areas of study

Area of Study 1 - Performance

In this area of study students prepare performances by selecting, researching, interpreting and learning solo and group works. Where students have completed Units 1 and/or 2, works selected for performance in this area of study should be different to those works selected for Outcome 1 in those units. Students perform regularly in a variety of contexts and use these performances to explore and build on ways of expressively shaping their chosen works and communicating their artistic intentions to an audience. They develop their individual instrumental and musicianship skills through regular practice and develop and implement group skills through rehearsal with other musicians. Across Units 3 and 4 students must perform the number of works specified for the selected instrument or group in the performance examination specifications and relevant prescribed list. The works selected should allow students to meet examination requirements and conditions.

Outcome 1

On completion of this unit the student should be able to prepare and perform a program of group and solo works, and demonstrate a diverse range of techniques and expressive qualities and an understanding of a wide range of music styles and performance conventions. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Area of Study 2 - Preparing for performance

This area of study focuses on continual development of students' capabilities to present musically engaging and technically competent group and solo performances. Students develop knowledge of the works they are preparing to perform and systematically practise relevant material and processes that will enhance their ability to realise the character and style of selected group and solo works. As students develop and practise rehearsal strategies, they trial the use of techniques and conventions. They systematically develop their capacity to use aural, technical and interpretative musicianship skills to enhance their performance. Students identify strengths and weaknesses in their performance capabilities and develop a planned approach to address challenges and optimise their performance. They select and create exercises and practise material to consolidate and refine their command of instrumental and presentation techniques. They build their understanding of how to control and manipulate techniques and conventions to increase their ability to communicate with an audience.

Outcome 2

On completion of this unit the student should be able to demonstrate and discuss techniques relevant to performance of selected works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Area of Study 3 - Music language

In this area of study students continue to systematically develop understanding of music language used for performance, interpretation and critical listening. They develop and refine their ability to identify, recognise, notate and transcribe short music excerpts, as well as to re-create short sections of music by singing, humming and/or playing. Students practise and refine their ability to notate music by hand. They further develop their understanding of ways elements of music can be interpreted in the performance of music works. They apply this knowledge through analysis and comparison of ways in which performers have interpreted a variety of works, including works created by Australian composers/songwriters after 1980 and works by composers working in other times and locations.

Outcome 3

On completion of this unit the student should be able to identify, re-create, notate and transcribe short excerpts of music, and discuss the interpretation of expressive elements of music in pre-recorded works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.

Assessment tasks

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. The student's level of achievement for Unit 3 Outcomes 2 and 3 will be determined by school assessed coursework. The marks for this work contributes 20% to the study score.

Assessment tasks are:

- Performance of a program of at least 15 minutes duration (for 1-3 performers, 20 – 25 for 4 or more), consisting of contrasting works including at least one group work, and one solo work with accompaniment
- A demonstration of technical work and exercises
- An oral/or multimedia/or written explanation of technical work and exercises showing how they have supported the students' development as an instrumentalist and their preparation of works performed in outcome 1
- A performance of unprepared material (sight reading, imitation or improvisation)
- Aural and Theory workbook of class activities and test

SACS**Outcome 2**

Demonstrate and discuss techniques relevant to performance of selected works. A demonstration of material selected to assist with development of general instrumental technique and preparation of works selected for Outcome 1 including exercise/s created by the student. (Marked out of 40)

AND (Marked out of 10)

A discussion of how the selected material is supporting the student's development as an instrumentalist and their preparation of works for Outcome 1. The discussion may be presented in one or both of the following formats:

- oral
- multimedia.

Outcome 3

Identify, re-create, notate and transcribe short excerpts of music, and discuss the interpretation of expressive elements of music in pre-recorded works.

A test that includes the following components:

- aural and theory (Marked out of 20)
- written, and (Marked out of 10)
- practical components.(Marked out of 20)

Total marks 100

*School-assessed Coursework for Unit 3 contributes 20 per cent to the study score

External assessment

The level of achievement for Units 3 and 4 is also assessed by an end-of-year performance examination, which will contribute 50 per cent, and an end-of-year aural and written examination which will contribute 20 per cent.

UNIT 4: Music Performance

This unit focuses on further development and refinement of performance and musicianship skills. Students focus on either group or solo performance and continue preparation of a performance program they will present in the end-of-year examination. All students present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. Through analyses of other performers' interpretations and feedback on their own performances, students refine their interpretations and optimise their approach to performance. They continue to address challenges relevant to works they are preparing for performance and to strengthen their listening, aural, theoretical and analytical musicianship skills.

Areas of study**Area of Study 1 - Performance**

In this area of study students prepare performances by selecting, researching, learning and interpreting solo and group works. Works selected for performance should complement those works selected for Outcome 1 in Unit 3.

Students perform regularly in a variety of contexts and use these performances to explore and consolidate their understanding of ways they can expressively shape their chosen works and communicate their artistic intentions to an audience. They develop their individual instrumental and musicianship skills through regular practice and develop and implement group skills through rehearsal with other musicians.

Across Units 3 and 4 all students must perform the number of works specified for the selected instrument or group in the performance examination specifications and relevant prescribed list. The works selected should allow students to meet examination requirements and conditions.

Outcome 1

On completion of this unit the student should be able to prepare and perform informed interpretations in a program of group and solo works, and demonstrate a diverse range of techniques, expressive qualities and understanding of a wide range of music styles and performance conventions. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Area of Study 2 - Preparing for performance

This area of study focuses on continual development of students' capabilities to present musically engaging and technically competent group and solo performances. Students develop knowledge of the works they are preparing to identify and systematically practise relevant material and processes that will enhance their ability to realise the character and style of selected group and solo works. As students develop and practise rehearsal strategies, they trial the use of techniques and conventions. They systematically develop and refine their capacity to use aural, technical and interpretative musicianship skills to enhance their performance.

Students identify strengths and weaknesses in their performance capabilities and develop a planned approach to address challenges and optimise their performance. They select and create exercises and practise material to consolidate and refine their command of instrumental and presentation techniques. They build their understanding of how to control and manipulate techniques and conventions, increasing their ability to communicate with an audience.

Outcome 2

On completion of this unit the student should be able to demonstrate and discuss techniques relevant to refining the performance of selected works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Area of Study 3- Music language

In this area of study students continue to systematically develop their understanding of music language used for performance, interpretation, critical listening and analysis. They develop and refine their ability to identify, recognise, notate and transcribe short music excerpts, as well as to re-create short sections of music by singing, humming and/or playing. Students practise and refine their ability to notate music by hand. They further develop their understanding of ways expressive elements of music can be interpreted in the performance of music works. They apply this knowledge to analyse and compare ways in which performers have interpreted a variety of works, including works created by Australian composers/songwriters after 1980 and works by composers working in other times and locations.

Outcome 3

On completion of this unit the student should be able to identify, re-create, notate and transcribe short excerpts of music, and discuss the interpretation of expressive elements of music in pre-recorded works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.

Assessment Tasks

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. **SACs for Unit 4 contribute 10% to the study score**

Assessment tasks are:

- Performance of a program of at least 10 minutes duration (for 1-3 performers, 10 – 15 for 4 or more), consisting of contrasting works including at least one group work, and one solo work with accompaniment
- A demonstration of technical work and exercises
- An oral/or multimedia/or written discussion of technical work and exercises showing how they have supported the students' development as an instrumentalist and their preparation of works performed in Outcome 1
- A performance of unprepared material (sight reading, imitation or improvisation)
- Aural and Theory workbook of class activities and test

SACS

Contribution to final assessment. School-assessed Coursework for Unit 4 will contribute 10 per cent to the study score.

Outcome 2

Demonstrate and discuss techniques relevant to refining the performance of selected works.

A demonstration of material selected to assist with development of general instrumental technique and preparation and presentation of works selected for Outcome 1, including exercise/s created by the student. (marked out of 40)

AND

A discussion of how the selected material is supporting the student's development as an instrumentalist and their preparation of works for Outcome 1. The discussion may be presented in one or both of the following formats:

- oral
- multimedia.

(marked out of 10)

END OF YEAR EXAMINATIONS

EITHER GROUP PERFORMANCE OR SOLO PERFORMANCE 50 % OF FINAL SCORE

NB Students can only be assessed in one examination and must select either group or solo Group Performance Examination –

A live performance of at least four contrasting works that represent a range of styles and diversity of character. At least two works in the program must be selected from the prescribed list.

- One assessed performer time limit 25 minutes
- Two or three assessed performers time limit 30 minutes
- Four assessed performers time limit 35 minutes
- Five or six assessed performers time limit 40 minutes

Solo Performance Examination – A live performance of contrasting works that represent a range of styles and diversity of character, from the prescribed list. Check the specific requirements for your instrument including the number of works to be performed.

AURAL AND WRITTEN EXAMINATION 20% OF FINAL SCORE

UNIT 3: Music Investigation

In this unit students design and conduct an investigation into performance practices that are characteristic of a music style, tradition or genre. They describe and explore their selected Investigation Topic and its practices through critical listening, analysis and consideration of technical, expressive and contextual issues, and through composition, improvisation or arrangement and performance. Students begin by researching a representative sample of music and related contextual issues. They develop their knowledge and understanding of techniques and ways of achieving expressive outcomes and other aspects relevant to performance practice in the style, tradition or genre they are investigating. In this study research involves critical listening, analysis of live and recorded performances and study of scores/charts and other texts as appropriate to the Investigation Topic.

Students develop and maintain a portfolio to document evidence of their research and findings. The portfolio also includes exercises, sketches or recorded improvisations that demonstrate their developing understanding of the Investigation Topic. Concurrently, students select, rehearse and prepare to perform a program of works that are representative and characteristic of their Investigation Topic. Through performance, students demonstrate knowledge and understanding of expressive and instrumental techniques and conventions and other relevant aspects of performance practice. As they learn and practise each work in the program, students use findings from their research to trial and make decisions about interpretative options and develop their ability to master technical and expressive features of the music

Investigation Topic approval

All students submit an Investigation Topic Proposal to the VCAA outlining the scope of their investigation and performance program. At least one work in the program must be selected from either the Prescribed List of Group Works or the rescribed List of Notated Solo Works as published on the VCAA website.

Students who choose to present their programs as soloists must:

- select an instrument from the Prescribed List of Notated Solo Works
- select a work from a current Prescribed List published on the VCAA website or receive approval to perform an alternative work. This work is the basis for the investigation and performance program.

Students wishing to perform as soloists on an alternative instrument must receive approval for the instrument and one work from the VCAA.

Students who choose to present their end-of-year examination program as members of a group must:

- select an instrument or instruments (no approval is required)
- form or select a group/s
- select a work from a current Prescribed List published on the VCAA website or receive approval to perform an alternative work. This work is the basis for the investigation and performance program. Investigation Topic approval, Alternative Instrument and Alternative Works guidelines and application forms are provided on the Music Investigation study page on www.vcaa.vic.edu.au

Areas of study

Area of Study 1 - Investigation

Students identify and describe an Investigation Topic and conduct research to develop their understanding of relevant performance practices. They explore performances by leading practitioners and stylistic and structural characteristics of the music. As they research, analyse and listen critically to a sample of music works that includes works selected for performance and other works that are representative of the style, genre or tradition under investigation, students develop knowledge and understanding that will inform their performances. Evidence from this research is documented in a portfolio. Students also learn to use relevant music terminology and language to describe and discuss their research findings.

Outcome 1

On completion of this unit the student should be able to demonstrate understanding of practices and issues that inform performance of works that are representative of a selected music style, tradition and/or genre relevant to the Investigation Topic. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1

Area of Study 2 - Composition/improvisation/arrangement

Students complete composition, arrangement or improvisation exercises to develop their understanding of the music and performance practices characteristic of the style, tradition or genre investigated in Area of Study 1. The music they create should demonstrate understanding of instrumental and expressive techniques, characteristic treatment of elements of music, use of compositional devices and relevant performance conventions. Using an appropriate notation format, students prepare a score/chart of the exercises and use this to support a discussion of how the exercises are informed by their research findings.

Outcome 2

On completion of this unit the student should be able to compose, improvise and/or arrange original music exercises and document and discuss music characteristics and performance practices relevant to the Investigation Topic. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 2.

Area of Study 3 - Performance

Students plan, rehearse and perform a program of works that are representative and characteristic of the style, tradition or genre they are investigating. The performance program enables students to apply research being undertaken for Area of Study 1 regarding stylistic characteristics, instrumental and expressive techniques, practices and conventions and approaches to interpretation. Through their research students explore possibilities for performance of each work in the program. They develop interpretations that balance relevant personal, stylistic, practical, technological, historical and cultural influences. As students shape their interpretation and learn and rehearse each work in the program they may do additional research about specific individual and/or group performance techniques and conventions. They also practice exercises or other materials to develop relevant instrumental and performance techniques. Through regular performance practice in a variety of contexts, they explore ways of expressively shaping their chosen works and develop their ability to communicate their artistic intentions to an audience.

Outcome 3

On completion of this unit the student should be able to present a performance of music works and communicate knowledge and understanding of a specific music style, tradition and/or genre relevant to the Investigation Topic. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.

Assessment Tasks

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. The student's level of achievement in Unit 3 will be determined by school-assessed coursework on Outcomes 1, 2 and 3 which will contribute 30% to the study score and one end-of-year examination.

Assessment tasks are:

- Performance of a program of at least 15 minutes duration, consisting of contrasting works relevant to the selected Focus Area
- A demonstration of technical work and exercises related to the Focus Area
- Research presentation of the background contextual issues relevant to performance practice, critical listening to recordings of performances and examination of texts including musical scores.
- Present a folio of exercises, sketches or recorded improvisations/compositions that demonstrate understanding of the characteristics of the Focus Area
- An oral/or multimedia/or written explanation of composition/arranging/improvisation exercises showing how they have supported the students' development as an instrumentalist and their preparation of works performed in Outcome 3
- Aural and Theory music analysis activities related to the research and development of the students selected Focus Area

SACS - Contribution to final assessment School-assessed Coursework for Unit 3 will contribute 30 per cent to the study score.

Outcome 1

Demonstrate understanding of practices and issues that inform performance of works that are representative of a selected music style, tradition and/or genre relevant to the Investigation Topic.

A report that includes written, audio and visual components. The report will be based on research undertaken for Outcome 1 and be presented in a multimedia format. (40 marks)

AND

Outcome 2

Compose, improvise and/or arrange original music exercises and document and discuss music characteristics and performance practices relevant to the Investigation Topic.

A presentation that includes:

- performance of exercises created by the student for Outcome 2
- demonstration of material from a technical work program developed for Outcome 3, and
- commentary that describes relevance to the Investigation Topic of the exercises created for Outcome 2 and the material from the Outcome 3 technical program (40 marks)

AND

Outcome 3

Present a performance of music works and communicate knowledge and understanding of a specific music style, tradition and/or genre relevant to the Investigation Topic.

Responses to questions about material presented in the report and the presentation. (20 marks)

Total marks 100

*School-assessed Coursework for Unit 3 contributes 30 per cent.

Units 3 and 4 performance examination

The level of achievement for Units 3 and 4 is also assessed by an end-of-year performance examination, which will contribute 50 per cent.

UNIT 4: Music Investigation

In this unit students refine the direction and scope of their end-of-year performance program. They also compose, improvise or arrange and perform a work that is characteristic of the music style, tradition or genre they are investigating and continue developing their understanding of relevant performance practices. Students continue to listen to the work of other performers and develop their ability to execute technical and expressive demands and apply performance conventions to realise their intended interpretations of each work.

Areas of study

Area of Study 1 - Preparing a Performer's Statement

Students use their learning from Unit 3 and further research to reflect on and evaluate their interpretative approaches to the music works they are preparing to perform. This research extends students' understanding of the possibilities for performance of their program. They consider how to balance their realisation of technical and expressive features with choices they have made in relation to personal, stylistic, practical, technological, historical and cultural influences. They prepare a Performer's Statement that explains their interpretative approach to the works and demonstrates their understanding of performance practices relevant to the music style, tradition and/or genre of works in the performance program they are preparing. This statement will be provided to assessors at the end-of-year performance examination

Outcome 1

On completion of this unit the student should be able to explain and justify their interpretative approach to performance of a program of works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1.

Area of Study 2 - Composition/improvisation/arrangement

Students complete an original composition, improvisation and/or arrangement to demonstrate their understanding of an Investigation Topic. They use research and exercises created in Unit 3 to plan their work. The work should demonstrate understanding of idiomatic instrumental techniques, performance conventions, performer abilities and other practical considerations. Students prepare a score, chart or other digital form that can be used by performers to learn, rehearse and prepare the work for performance. They perform the work and explain how it is characteristic of the music style, tradition or genre they are investigating.

Outcome 2

On completion of this unit the student should be able to compose/improvise/arrange an original music work and perform a music work and explain how it is characteristic of a music style, tradition and/or genre relevant to the Investigation Topic.

Area of Study 3- Performance

Students refine their interpretation of works that are representative and characteristic of the style, tradition or genre they are investigating. They explore ways to present the program, considering use of performance conventions, the order in which they will perform the works and, as appropriate, use of accompaniment, equipment and digital technologies. They continue to practise exercises and other materials to develop relevant instrumental and performance techniques. Through regular performance in a variety of contexts, they trial and evaluate audience reception of their interpretations and adjust their performance in response.

Outcome 3

On completion of this unit the student should be able to demonstrate artistic intent and understanding in a cohesive and engaging performance of music works. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 3.

Assessment tasks

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. The student's level of achievement in Unit 3 will be determined by school-assessed coursework on Outcomes 2 and 3 which will contribute 25% to the study score and one end-of-year examination.

Assessment tasks are:

- Performance of a program of at least 10 minutes duration, consisting of contrasting works relevant to the selected Focus Area
- A demonstration of technical work and exercises related to the Focus Area
- A performance/commentary to explain and justify their interpretative approach to performance of a program of works.
- Present a developmental folio of your composition/improvisation/arrangement
- An oral/or multimedia/or written explanation of composition/arranging/improvisation exercises showing how they have supported the students' development as an instrumentalist and their preparation of works performed in Outcome 3
- Aural and Theory music analysis activities related to the research and development of the students selected Focus Area

SACS

Contribution to final assessment

School-assessed Coursework for Unit 4 will contribute 20 per cent to the study score.

Outcome 2

Compose/improvise/arrange and perform an original music work and explain how it is characteristic of a music style, tradition and/or genre relevant to the Investigation Topic.

Compose, improvise or arrange, document and perform an original music work that demonstrates understanding of a music style, tradition and/or genre. (80 Marks)

AND

Explain how the work is representative of the music style, tradition and/or genre. The explanation may be in one of the following formats:

- oral
- multimedia.

(20 Marks)

*School-assessed Coursework for Unit 4 contributes 20 percent

External assessment

The level of achievement for Units 3 and 4 is also assessed by an end-of-year performance examination.

The performance examination will contribute 50 per cent.

End-of-year performance examination

Description

The student will:

- present a live performance of at least four contrasting works that are representative and characteristic of the music style, tradition and/or genre investigated across Units 3 and 4
- submit to the assessors a Performer's Statement that describes their interpretative approach to the works.

The live performance will draw on knowledge and skills from Unit 3 Outcome 3, and Unit 4 Outcome 3. At least one work in the program must be selected from a current prescribed list as published on the VCAA website or be an approved

Alternative Work. The student, in consultation with the school, will select the instrument/s and performance program in accordance with the requirements of the examination. An examination is defined as a single assessment period.

Duration of examination:

One assessed performer – 25 minutes.

Two or three assessed performers – 30 minutes.

Four assessed performers – 35 minutes.

Five or six assessed performers – 40 minutes

OUTDOOR EDUCATION AND ENVIRONMENTAL STUDIES

RATIONALE

Outdoor Education and Environmental Studies examines ways in which experience in the outdoor/natural environment influences human development. The primary focus of Outdoor Education is on understanding people's relationships with the outdoors and this is learnt in the classroom and through direct practical experience. Empathy for the natural environment is expected and fostered throughout the 4 units. This subject aims to provide the skills and knowledge to safely participate in activities in outdoor environments so that the environment is respected and appreciated.

Outdoor Education and Environmental Studies at Belmont High School is a self-funding unit of study and payment of funds is a pre-requisite of the course and should not be confused with voluntary school levies. Obviously the hire of buses, equipment and suitably accredited professionals (when needed) is necessary for the types of activities undertaken in Outdoor Education. The actual activities may vary from year to year but include such activities as surfing, canoeing, rock-climbing, orienteering, fishing, and skiing. Students are also expected to participate in a camp which must be funded.

UNIT 1: Understanding Nature

This unit examines the ways in which humans understand and relate to nature in the context of outdoor environments. It focuses on the human-nature relationships and develops understanding through practical experiences.

Areas of study

1. Humans and nature.
2. Natural environments.

Outcomes

On completion of this unit the student should be able to:

1. describe the way in which humans respond to, encounter and understand nature;
2. explain the interrelationships between components of natural environments and changes that occur in the natural environments.

Assessment tasks

- Oral presentations
- Practical reports
- Written responses
- Tests
- Short reports.

UNIT 2: Environmental Impacts

This unit focuses on human related impacts on natural environments at all levels. Outdoor recreation is the major focus along with its implications of human impact on the environment.

Areas of study

1. Impact on people.
2. Impact on nature.

Outcomes

On completion of this unit the student should be able to:

1. explain factors which influence outdoor experiences and their impact on nature;
2. analyse policy and procedures for minimising human impact.

Assessment tasks

- Oral presentations
- Practical reports
- Written responses
- Tests
- Short reports



UNIT 3: Relationships with Outdoor Environments

This unit considers the ecological, historical and social contexts of relationships between humans and environments in Australia.

Areas of study

1. Historical perspectives of the Australian environment.
2. Contemporary relationships with outdoor environments.

Outcomes

On completion of this unit the student should be able to:

1. analyse how particular perceptions and relationships have influenced an outdoor environment;
2. explain the evolution of human-nature relationships.

Assessment tasks

- Written report
- Practical report
- Data analysis
- Short essay
- Test
- Multi-media presentation

UNIT 4: Future of Natural Environments

This unit focuses on sustainable use and management of natural environments. It emphasises the need to develop a balance between human requirements and the conservation of the environment.

Areas of study

1. Healthy natural environments.
2. Sustaining environments.

Outcomes

On completion of this unit the student should be able to:

1. describe the contemporary state of the environment
2. evaluate practices and strategies for sustainable interaction between humans and outdoor environments;

Assessment tasks

- Written report
- Data analysis
- Short essay
- Test

PHYSICAL EDUCATION

UNIT 1: Learning and Improving Skills

This unit looks at a range of factors that influences learning and improving physical skills and the role of the coach.

Areas of study

1. Movement analysis.
2. Coaching for enhanced performance.

Outcomes

For this unit students are required to demonstrate achievement of two outcomes. As a set these outcomes encompass both areas of study for the unit.

On completion of this unit the student should be able to:

1. Explain the application of biomechanical and skill learning principles in analysis and how motor skills are learned and improved.
2. Identify and evaluate a range of coaching practices that enhance performance.

Assessment tasks

The award of satisfactory completion of this unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for this unit.

Assessment tasks for this unit include:

- written reports
- tests
- structured questions
- oral reports
- laboratory reports
- case study analysis
- media analysis
- exam.



UNIT 2: The Active Body

This unit looks at a range of factors that influences learning and improving physical skills and the role of the coach.

Areas of study

1. Body systems and performance.
2. Impact of physical activity on the individual.

Outcomes

For this unit students are required to demonstrate achievement of two outcomes. As a set these encompass both areas of study for the unit.

On completion of the unit the student should be able to:

1. Explain how the musculo-skeletal, cardio respiratory and energy systems function during physical activity.
2. Explain the impact of participation in physical activity on the health of populations and analyse factors affecting participation.



Assessment tasks

The award of satisfactory completion of this unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for this unit.

Assessment tasks for this unit include:

- written reports
- tests
- structured questions
- oral reports
- laboratory reports
- case study analysis
- media analysis
- exam.

UNIT 3: The Physiological & Participatory Perspectives of Physical Activity

This unit introduces students to an understanding of physical activity from a physiological and participatory perspective. It examines the concept of physical fitness and the contribution of energy systems to performance in physical activity. It also examines why people initially begin and continue with physical activity and models/strategies used to promote it.

Areas of study

1. Monitoring and promotion of physical activity.
2. Physiological requirements of physical activity.

Outcomes

On completion of this unit the student should be able to:

1. analyse individual and population levels of physical activity and evaluate strategies used to promote it;
2. analyse the role and relative contribution of the energy systems during physical activity.

Assessment tasks

The student's level of achievement will be determined by school-assessed coursework and an end-of-year examination.

Assessment tasks for this unit include:

- written reports
- tests
- structured questions
- oral reports
- laboratory reports
- case study analysis
- video analysis
- data analysis.

UNIT 4: Enhancing Physical Performance

This unit examines the factors that influence an individual's initial and life-long involvement in physical activity.

Areas of study

1. Enhancing fitness through training.
2. Strategies for enhancing sports performance.

Outcomes

On completion of this unit the student should be able to:

1. plan and evaluate training programs;
2. evaluate practices/strategies that aim to enhance sports performance.

Assessment tasks

The student's level of achievement will be determined by school-assessed coursework and an end-of-year examination.

Assessment tasks for this unit include:

- written reports
- structured questions
- laboratory reports
- case study analysis
- data analysis
- media analysis
- video analysis
- tests.



PHYSICS

Introduction

Scope of study

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 including atomic physics, electricity, fields, mechanics, thermodynamics, quantum physics and waves. Students also have options for study related to astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science. 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.

Rationale

Physics is a natural science based on observations, experiments, measurements and mathematical analysis with the purpose of finding quantitative explanations for phenomena occurring from the subatomic scale through to the planets, stellar systems and galaxies in the Universe. While much scientific understanding in physics has stood the test of time, many other areas continue to evolve. They undertake practical activities and apply physics principles to explain and quantify both natural and constructed phenomena.

VCE Physics provides for continuing study pathways within the discipline and leads to a range of careers. Physicists may undertake research and development in specialist areas including acoustics, astrophysics and cosmology, atmospheric physics, computational physics, education, energy research, engineering, instrumentation, lasers and photonics, medical physics, nuclear science, optics, pyrotechnics and radiography. Physicists also work in cross-disciplinary areas such as bushfire research, climate science, forensic science, geology, materials science, neuroscience and sports science.

Aims

This study enables students to:

- apply physics models, theories and concepts to describe, explain, analyse and make predictions about diverse physical phenomena.
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
- develop an informed perspective on contemporary science-based issues of local and global significance.
- apply their scientific understanding to familiar and to unfamiliar situations, including personal, social, environmental and technological contexts.
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

It is **not** recommended that students would enter Unit 3 without Units 1 and/or 2. If they do they would be required to undertake significant **additional preparation** as prescribed by their teacher.

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. Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter.

Area 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.

Area of Study 2

How do electric circuits work?

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.

Area of Study 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. 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.

Students design and undertake investigations involving at least one independent, continuous variable. A student designed practical investigation relates to content drawn from Area of Study 1 and/or Area of Study 2 and is undertaken in Area of Study 3.

Area 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. They describe and analyse graphically, numerically and algebraically the motion of an object, using specific physics terminology and conventions.

Area of Study 2

Options

Twelve options are available for selection in Area of Study 2. Each option is based on a different observation of the physical world. One option is to be selected by the student from the following:

- What are stars?
- Is there life beyond Earth's Solar System?
- How do forces act on the human body?
- How can AC electricity charge a DC device?
- How do heavy things fly?
- How do fusion and fission compare as viable nuclear energy power sources?
- How is radiation used to maintain human health?
- How do particle accelerators work?
- How can human vision be enhanced?
- How do instruments make music?
- How can performance in ball sports be improved?
- How does the human body use electricity?

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. They examine the production of electricity and its delivery to homes.

Area of Study 1

How do things move without contact?

On completion of this unit the student should be able to analyse gravitational, electric and magnetic fields, and use these to explain the operation of motors and particle accelerators and the orbits of satellites.

Area of Study 2

How are fields used to move electrical energy?

In this area of study students 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.

Area of Study 3

How fast can things go?

On completion of this unit the student should be able to investigate motion and related energy transformations experimentally, analyse motion using Newton's laws of motion in one and two dimensions, and explain the motion of objects moving at very large speeds using Einstein's theory of special relativity.

Unit 4: How can two contradictory models explain both light and matter?

In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour. Students further investigate light by using a particle model to explain its behaviour. A wave model is also used to explain the behaviour of matter which enables students to consider the relationship between light and matter.

Area of Study 1

How can waves explain the behaviour of light?

On completion of this unit the student should be able to apply wave concepts to analyse, interpret and explain the behaviour of light.

Area of Study 2

How are light and matter similar?

On completion of this unit the student should be able to provide evidence for the nature of light and matter, and analyse the data from experiments that supports this evidence.

Area of Study 3

Practical investigation

On completion of this unit the student should be able to design and undertake a practical investigation related to waves or fields or motion, and present methodologies, findings and conclusions in a scientific poster.

ENVIRONMENTAL SCIENCE

Introduction

Scope of study

Environmental science explores the interactions and interconnectedness between humans and their environments and analyses the functions of both living and non-living elements that sustain Earth systems. In VCE Environmental Science, Earth is understood as a set of four interdependent systems: the atmosphere, biosphere, hydrosphere and lithosphere. The study explores how the relationships between these systems produce environmental change over a variety of time scales. Students investigate the extent to which humans modify their environments and the consequences of these changes in local and global contexts with a focus on pollution, biodiversity, energy use and climate change; they explore the conceptual, behavioural, ethical and technological responses to these changes. Students examine data related to environmental monitoring over various time scales, case studies, research, models, frameworks and theories to understand how knowledge in environmental science has evolved and continues to evolve in response to new evidence and discoveries.

Rationale

VCE Environmental Science enables students to explore the challenges that past and current human interactions with the environment presents for the future by considering how Earth's atmosphere, biosphere, hydrosphere and lithosphere function as interrelated systems. In undertaking this study, students examine how environmental actions affect, and are affected by, ethical, social and political frameworks.

In VCE Environmental Science students develop a range of inquiry skills involving practical experimentation and research, analytical skills including critical and creative thinking, and communication skills. Students use scientific and cognitive skills and understanding to analyse contemporary issues related to environmental science, and communicate their views from an informed position.

VCE Environmental Science provides for continuing study pathways within the field and leads to a range of careers. Diverse areas of employment range from design, including landscape or building architecture, engineering and urban planning, environmental consultancy and advocacy, which may involve employment in air, water and/or soil quality monitoring and control, agriculture, construction, mining and property management and water quality engineering. Environmental scientists also work in cross-disciplinary areas such as bushfire research, environmental management and conservation, geology and oceanography.

Aims

This study enables students to:

- examine Earth as a dynamic and complex set of four interacting systems (atmosphere, biosphere, hydrosphere and lithosphere) that undergo change over various time scales and that affect, and are affected by, human activities.
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory
- develop an informed perspective on contemporary science-based issues of local and global significance.
- understand and apply the research, ethical and safety principles that govern the study and practice of the discipline in the collection, analysis, critical evaluation and reporting of data
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

Structure

The study is made up of four units:

Unit 1: How are Earth's systems connected?

Unit 2: How can pollution be managed?

Unit 3: How can biodiversity and development be sustained? INTRODUCED FROM 2017.

Unit 4: How can the impacts of human energy use be reduced? INTRODUCED FROM 2017.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

It is **not** recommended that students would enter Unit 2 without first completing Unit 1.

It is **not** recommended that students would enter Unit 3 without Units 1 and/or 2. If they do they would be required to undertake significant **additional preparation** as prescribed by their teacher.

Unit 1: How are Earth's systems connected?

In this unit students examine Earth as a set of four interacting systems: the atmosphere, biosphere, hydrosphere and lithosphere. Students apply a systems perspective when exploring the physical requirements for life in terms of inputs and outputs, and consider the effects of natural and human-induced changes in ecosystems. They investigate the physical environment and its components, the function of local ecosystems and the interactions that occur in and between ecological components over different timescales. Students consider how the biotic and abiotic components of local ecosystems can be monitored and measured.

Area of Study 1

How is life sustained on Earth?

Life on Earth is dependent on four major inputs: energy, nutrients, air and water. In this area of study students examine the processes and interactions occurring within and between Earth's four systems – the atmosphere, biosphere, hydrosphere and lithosphere – that affect the availability, accessibility and usability of these inputs for life. They examine the processes within and between the four systems, and distinguish between outputs that can be reused as inputs and those that require treatment as wastes.

Outcome 1

On completion of this unit the student should be able to compare the processes and timeframes for obtaining the key inputs required for life on Earth, describe strategies for the minimisation of waste product outputs, and explain how Earth's four systems interact to sustain life.

Area of Study 2

How is Earth a dynamic system?

In this area of study students explore changes in systems that can occur over different time scales (short, medium or long term), have cyclic or unpredictable patterns, and can be caused by natural- or human-induced factors. They examine the flow of matter and energy in selected environmental events and phenomena with reference to natural and unpredictable or abrupt environmental changes in Earth's four systems. Students learn how environmental changes may be monitored and measured. Students discuss how changes over time can be explained by interactions between different environmental processes and how these changes may affect all four Earth systems.

Outcome 2

On completion of this unit the student should be able to describe the flow of matter and energy, nutrient exchange and environmental changes in ecosystems across Earth's four systems over different time scales.

Area of Study 3

Practical investigation

Ecosystems are subject to change in response to biotic or abiotic disturbances, or changes in the frequency at which they are disturbed, affecting the atmosphere, biosphere, hydrosphere and lithosphere. In this area of study students design and conduct a practical investigation into the monitoring of ecosystems or their components and/or change in ecosystems.

Outcome 3

On completion of this unit the student should be able to design and undertake an investigation related to ecosystem monitoring and/or change, and draw a conclusion based on evidence from collected data.

Assessment tasks

For Outcomes 1 and 2

- a fieldwork report
- a case study
- a report of a practical activity involving the collection of primary data
- annotations of a practical work folio of activities or investigations
- a research investigation involving the collection of secondary data
- a model of an aspect of Earth systems
- a logbook of practical activities
- analysis of data/results including generalisations/conclusions
- media analysis/response
- problem solving involving environmental science concepts, skills and/or issues
- a test comprising multiple choice and/or short answer and/or extended response
- a reflective learning journal/blog related to selected activities or in response to an issue

For Outcome 3

- a report of a student-designed and/or adapted and/or extended investigation related to ecosystem monitoring and/or change that can be presented in various formats, for example digital presentation, oral presentation, written report or graphic organiser.

Unit 2: How can pollution be managed?

In this unit students explore the concept of pollution and associated impacts on Earth's four systems through global, national and local perspectives. They distinguish between wastes, contaminants and pollutants and examine the characteristics, measurement and management of pollution. They analyse the effects of pollutants on the health of humans and the environment over time. Students consider the rules for use, treatment and disposal of pollutants and evaluate the different perspectives of those who are affected by pollutants. They explore the significance of technology, government initiatives, communities and individuals in redressing the effects of pollutants, and consider how values, beliefs and evidence affect environmental decision making.

Pollutants can be produced through natural and human activities and can generate adverse effects for living and non-living things when released into ecosystems. Students examine how pollutant effects produced in one of Earth's four systems may have an impact on the other systems. They explore the factors that affect the nature and impact of pollution including pollutant sources, transport mechanisms and potential build-up due to long-term or repeated exposure. Students compare three pollutants of national and/or global significance with reference to their effects in the atmosphere, biosphere, hydrosphere and lithosphere, and discuss management options.

Students undertake an in-depth case study of the management strategies that apply to a pollutant of local concern related to ecosystem monitoring and/or change. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

Area of Study 1

When does pollution become a hazard?

In this area of study students examine biotic and abiotic indicators of pollution in various environments. Using selected examples, they distinguish between pollutants that result in bioaccumulation, and air- or water-borne pollutants. Students explore the chemical and physical characteristics, sources and transport mechanisms of pollutants and consider how levels of safety standards are set. They analyse the effects of pollutants on environmental and living systems and consider approaches to monitor and manage pollutants.

Outcome 1

On completion of this unit the student should be able to compare a selected pollutant that results in bioaccumulation with an air- or water-borne pollutant, with reference to their sources, characteristics and dispersal, explain how they can be measured and monitored, and describe treatment options.

Area of Study 2

What makes pollution management so complex?

Pollutants may be categorised by the Earth systems they affect, the chemical form that poses greatest threat to life, or the method used to make the pollutant inactive. Any particular pollutant may fall into multiple categories. In this area of study, students investigate three pollutants of national or global concern. They explain how pollutants move through, and affect, the atmosphere, biosphere, hydrosphere and lithosphere, and compare treatment and management options for each pollutant. Students investigate a question for each of the three categories of pollution: air, water and soil.

Outcome 2

On completion of this unit the student should be able to compare the sources, nature, transport mechanism, effects and treatment of three selected pollutants, with reference to their actions in the atmosphere, biosphere, hydrosphere and lithosphere.

Area of Study 3

Case study

Recognition of the impacts on public health and on the environment due to the pollution generated by human activities has grown. Pollution management technologies and legislation to improve the quality of water, air and land have been developed in response. A shifting emphasis from pollution management towards pollution prevention also reflects social and behavioural change in responding to pollution as an issue.

In this area of study students investigate a case study involving the management of a selected pollutant of local interest. Material for the investigation may be gathered from laboratory work, fieldwork, computer simulations and modelling, literature searches, environmental databases and interviews with experts.

Outcome 3

On completion of this unit the student should be able to investigate and communicate a substantiated response to an issue involving the management of a selected pollutant of local interest.

Assessment task

A report of a case study involving the management of a selected pollutant of local interest

PSYCHOLOGY

Introduction

Scope of study

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. Students examine classical and contemporary research and the use of imaging technologies, models and theories to understand how knowledge in psychology has evolved and continues to evolve in response to new evidence and discoveries. An understanding of the complexities and diversity of psychology leads students to appreciate the interconnectedness between different content areas both within psychology, and across psychology and the other sciences.

Rationale

VCE Psychology provides students with a framework for exploring the complex interactions between biological, psychological and social factors that influence human thought, emotions and behaviour. In undertaking this study, students apply their learning to everyday situations including workplace and social relations. They gain insights into a range of psychological health issues in society.

VCE Psychology provides for continuing study pathways within the discipline and leads to a range of careers. Opportunities may involve working with children, adults, families and communities in a variety of settings such as academic and research institutions, management and human resources, and government, corporate and private enterprises. Fields of applied psychology include educational, environmental, forensic, health, sport areas such as medical research or as part of on-going or emergency support services in educational, institutional and industrial settings.

Aims

This study enables students to:

- apply psychological models, theories and concepts to describe, explain and analyse observations and ideas related to human thoughts, emotions and behaviour.
- develop a range of individual and collaborative science investigation skills through experimental and inquiry tasks in the field and in the laboratory.
- develop an informed perspective on contemporary science-based issues of local and global significance.
- understand and apply the research, ethical and safety principles that govern the study and practice of the discipline in the collection, analysis, critical evaluation and reporting of data
- communicate clearly and accurately an understanding of the discipline using appropriate terminology, conventions and formats.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4.

It is **not** recommended that students would enter Unit 2 without first completing Unit 1.

It is **not** recommended that students would enter Unit 3 without Units 1 and/or 2. If they do they would be required to undertake significant **additional preparation** as prescribed by their teacher.

Unit 1: How are behaviour and mental processes shaped?

Area of Study 1

How does the brain function?

Advances in brain research methods have led to new ways of understanding the relationship between the mind, brain and behaviour. In this area of study students examine how our understanding of brain structure and function has changed over time and how the brain enables us to interact with the external world around us. They analyse the roles of specific areas of the brain and the interactions between different areas of the brain that enable complex cognitive tasks to be performed. Students explore how brain plasticity and brain damage can affect a person's functioning.

Outcome 1

On completion of this unit the student should be able to describe how understanding of brain structure and function has changed over time, explain how different areas of the brain coordinate different functions, and explain how brain plasticity and brain damage can change psychological functioning.

Area of Study 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 a person's emotional, cognitive and social development and the development of psychological disorders.

Outcome 2

On completion of this unit the student should be able to identify the varying influences of nature and nurture on a person's psychological development, and explain different factors that may lead to typical or atypical psychological development.

Area of Study 3

Student-directed research investigation

In this area of study students investigate a question related to brain function and/or psychological development. Students analyse the scientific evidence that underpins the research in response to a question of interest. They then communicate the findings of their research investigation and explain the psychological concepts, outline contemporary research and present conclusions based on the evidence.

Assessment tasks

For outcomes 1 and 2 may include;

- a report of a practical activity involving the collection of primary data
- a research investigation involving the collection of secondary data
- a brain structure modelling activity
- a logbook of practical activities
- analysis of data/results including generalisations/conclusions
- media analysis/response
- problem solving involving psychological concepts, skills and/or issues
- a test comprising multiple choice and/or short answer and/or extended response
- a reflective learning journal/blog related to selected activities or in response to an issue

... and for outcome 3

A report of an investigation into brain function and/or development that can be presented in various formats, for example digital presentation, oral presentation, or written report.

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 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.

Area of Study 1

What influences a person's perception of the world?

Human perception of internal and external stimuli is influenced by a variety of biological, psychological and social factors. In this area of study students explore two aspects of human perception – vision and taste – and analyse the relationship between sensation and perception of stimuli. They consider how biological, psychological and social factors can influence a person's perception of visual and taste stimuli, and explore circumstances where perceptual distortions of vision and taste may occur.

Outcome 1

On completion of this unit the student should be able to compare the sensations and perceptions of vision and taste, and analyse factors that may lead to the occurrence of perceptual distortions.

Assessment tasks.

The assessment tasks for Units 1 and 2 are selected from the following:

- Research investigation
- Annotated folio of practical activities
- Media response
- Oral presentation using two or more data types



- Visual presentation
- Test
- Essay
- Debate
- Data analysis
- Evaluation of research

Area of Study 2

How are people influenced to behave in particular ways?

A person's social cognition and behaviour influence the way they view themselves and the way they relate to others. In this area of study students explore the interplay of biological, psychological and social factors that shape the behaviour of individuals and groups. They consider how these factors can be used to explain the cause and dynamics of particular individual and group behaviours, including attitude formation, prejudice, discrimination, helping behaviour and bullying. Students examine the findings of classical and contemporary research as a way of theorising and explaining individual and group behaviour.

Outcome 2

On completion of this unit the student should be able to identify factors that influence individuals to behave in specific ways, and analyse ways in which others can influence individuals to behave differently.

Assessment tasks

The assessment tasks for Units 1 and 2 are selected from the following:

- Research investigation
- Annotated folio of practical activities
- Media response
- Oral presentation using two or more data types
- Visual presentation
- Test
- Essay
- Debate
- Data analysis
- Evaluation of research



Area of Study 3

Student-directed practical investigation

In this area of study students design and conduct a practical investigation related to external influences on behaviour. The investigation requires the student to develop a question, plan a course of action 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. The investigation is undertaken by the student using a range of methods, including experiments, surveys, questionnaires, observational studies and/or rating scales.

Outcome 3

On completion of this unit the student should be able to design and undertake a practical investigation related to external influences on behaviour, and draw conclusions based on evidence from collected data.

Assessment task

A report of an investigation into internal and/or external influences on behaviour that can be presented in various formats, for example digital presentation, oral presentation, scientific poster or written report.

Unit 3: 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 functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them.

Area of Study 1

How does the nervous system enable psychological functioning?

On completion of this unit the student should be able to explain how the structure and function of the human nervous system enables a person to interact with the external world and analyse the different ways in which stress can affect nervous system functioning.

Area of Study 2

How do people learn and remember?

On completion of this unit the student should be able to apply biological and psychological explanations for how new information can be learnt and stored in memory, and provide biological, psychological and social explanations of a person's inability to remember information.

Unit 4: How is wellbeing developed and maintained?

Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour.

Area of Study 1

How do levels of consciousness affect mental processes and behaviour?

On completion of this unit the student should be able to explain consciousness as a continuum, compare theories about the purpose and nature of sleep, and elaborate on the effects of sleep disruption on a person's functioning.

Area of Study 2

What influences mental wellbeing?

On completion of this unit the student should be able to explain the concepts of mental health and mental illness including influences of risk and protective factors, apply a biopsychosocial approach to explain the development and management of specific phobia, and explain the psychological basis of strategies that contribute to mental wellbeing.

Area of Study 3

Practical investigation

On completion of this unit the student should be able to design and undertake a practical investigation related to mental processes and psychological functioning, and present methodologies, findings and conclusions in a scientific poster.

SYSTEMS ENGINEERING

RATIONALE

This study involves the design, construction and application of simple technological systems. Students may specialise in mechanical or electrical/electronic systems.

Students will make a model that includes both electrical and mechanical parts. Examples are: motorised Scooter, Robot Arm, Ferris Wheel or a radio controlled device. This is a great subject for those who enjoy finding out how and why machines work.

Units 1 and 2 or Units 3 and 4 are recommended but not essential for students wanting to complete the Engineering Units offered by Deakin.

Simulation software is an integral part of this course.

AIMS

This study is designed to enable students to:

- acquire knowledge of mechanical systems
- acquire knowledge of electrical/electronic systems
- develop an understanding of ways in which basic systems may be linked to form more sophisticated integrated systems
- develop an understanding of the interactions between technological systems and the home, industry, commerce, the environment and society
- acquire knowledge of developments in technological systems
- understand the concept of design in relation to technological systems
- develop skills in the design, construction, repair, maintenance and modification of technological systems
- develop safe, logical and efficient work practices
- develop skills in the use of information and communication technologies.

UNIT 1: Mechanical Engineering Fundamentals

Areas of study

1. Mechanical principles including gears, pulleys and levers.

Production

Students are able to construct any electromechanical device. This includes motorized scooters, electronic clocks, robots, radio controlled devices, etc.

Assessment tasks

- | | |
|-------------------|-----|
| • Production work | 50% |
| • Short tests | 25% |
| • Assignments | 25% |

UNIT 2: Electro Technology Engineering Fundamentals

Areas of study

Basic electric, electronic and mechanical devices. Program integrated circuits.

Production

Students are able to construct any electromechanical device. This includes motorized scooters, electronic clocks, robots, radio controlled devices, etc.

Assessment tasks

- | | |
|-------------------|-----|
| • Production work | 50% |
| • Short tests | 25% |
| • Assignments | 25% |

UNIT 3: Systems Engineering and Energy

Areas of study

Basic electric, electronic and mechanical devices.

Outcomes

On completion of this unit the student should be able to:

1. construct an electro/mechanical system which has a control device;
2. evaluate, fault find, adjust and repair simple systems.

Production

Students are able to construct any electromechanical device of their choice. This includes motorised scooters, electronic clocks, robots, radio controlled devices, etc.

UNIT 4: Interpretation and Control of Technological Systems

Areas of study

1. Basic electric, electronic and mechanical devices.
2. Computer Controlled devices.
3. Students will have the opportunity to program their own PIC's (Programmable Integrated Circuits).

Outcomes

On completion of this unit the student should be able to:

1. construct an electro/mechanical system which has a control device;
2. evaluate, fault find, adjust and repair simple systems.

Assessment tasks – Units 3 and 4

- Production work 50%
- SAC 20%
- Examination 30% End of Year

THEATRE STUDIES

UNIT 1: Pre-modern theatre

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 created up to 1920 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 in performance.

Area of studies:

1. Pre-modern theatre
2. Interpreting playscripts
3. Analysing a play in performance

UNIT 2: Modern theatre

In this unit students study 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. They study theatrical analysis and production evaluation and apply these skills to the analysis of a play in performance.

Area of studies:

1. Modern theatre
2. Interpreting through stagecraft
3. Analysing a play in performance

UNIT 3: Playscript interpretation

In this unit students develop an interpretation of a playscript through the stages of the theatrical production process: planning, development and presentation. Students specialise in two areas of stagecraft, working collaboratively in order to realise the production of a playscript. They use knowledge they develop from this experience to analyse the ways stagecraft can be used to interpret previously unseen playscript excerpts.

Area of studies:

1. Production process
2. Theatrical interpretation
3. Production analysis

UNIT 4: Performance interpretation

In this unit students study a scene and associated monologue from the *Theatre Studies Stagecraft Examination Specifications* published annually by the Victorian Curriculum and Assessment Authority, 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 using selected areas of stagecraft to realise their interpretation.

Area of studies:

1. Monologue interpretation
2. Scene interpretation
3. Performance analysis

VISUAL COMMUNICATION DESIGN

RATIONALE

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. Designers create and communicate through visual means to shape the everyday quality of life for individuals, communities and societies. Visual communication design relies on drawing as the primary component of visual language to support the conception and visualisation of ideas.

UNIT 1: Introduction to Visual Communication Design

Areas of study

1. **Drawing as a means of communication** – This area of study focusses on using observational drawings as a starting point for visualizing new design possibilities. Students creatively use a range of media to generate instrumental and freehand drawings that represent alternative visualisations.
2. **Design elements and design principles** – This area of study focuses on the experimentation, exploration and application of design elements and principles through manual freehand drawing.
3. **Visual Communication Design in Context** – Through a case study approach, students explore how visual communications have been influenced by social and cultural factors and past and contemporary visual communication practices.

Outcomes

On completion of this unit the student should be able to:

1. complete instrumental drawings using a range of paraline drawing systems;
2. draw from direct observation, in proportion, and render the drawings;
3. explore and apply design elements and principles to satisfy a stated purpose;
4. describe and analyse contemporary and historical examples of visual communications and explain how they communicate ideas, present information and reflect influences.

Assessment tasks

The award of satisfactory completion for a unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for the unit. This decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit. The Victorian Curriculum and Assessment Authority will publish annually an assessment guide which will include advice on the scope of the assessment tasks and the criteria for assessment.

Assessment tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

UNIT 2: Applications of Visual Communication Design

Areas of study

1. **Technical drawing in context** – This area of study focuses on the acquisition and application of presentation drawing skills that incorporate the use of technical drawing conventions.
2. **Type and Imagery** – In this area of study students develop knowledge and skills in manipulating type and images when communicating ideas and concepts in the design field of communication.
3. **Applying the design process** – This area of study focuses on the application of specific stages of the design process to organise thinking about approaches to solving design problems and presenting ideas.

Outcomes

On completion of this unit the student should be able to:

1. create technical drawings using manual and digital methods
2. create typography concepts using manual and digital methods
3. apply a design process to develop a visual communication solution to a set task.

Assessment tasks

The award of satisfactory completion for a unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for the unit. This decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit. The Victorian Curriculum and Assessment Authority will publish annually an assessment guide which will include advice on the scope of the assessment tasks and the criteria for assessment.

Assessment tasks must be a part of the regular teaching and learning program and must not unduly add to the workload associated with that program. They must be completed mainly in class and within a limited timeframe.

UNIT 3: Design Thinking and Practice

Areas of study

1. a) **Analysis and practice in context** – In this area of study students explore a range of existing visual communications in the communication environmental and industrial design fields.
 - b) **Design industry practice** – In this area of study students investigate how the design process is applied in industry to create visual communications.
2. **Developing a brief and generating ideas** – In this area of study students gain a detailed understanding of three stages of the design process: development of a brief, research and the generation of ideas.

Outcomes

On completion of this unit the student should be able to:

1. make and document design decisions that are informed by the analysis of existing visual communications.
2. describe the roles and relationships between the clients, designers and specialists
3. apply design thinking skills to create, analyse, evaluate, reflect on, and critique information and ideas
4. document a brief that states two distinct client needs.

Assessment tasks

School assessed coursework

School assessed coursework for Unit 3 will contribute 33 per cent to the final assessment. The award of satisfactory completion for a unit is based on a decision that the student has demonstrated achievement of the set of outcomes specified for the unit. This decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit. The Victorian Curriculum and Assessment Authority will publish annually an assessment guide which will include advice on the scope of the assessment tasks and the criteria for assessment.

Examination

The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination which will contribute 34 per cent to the final assessment:

- knowledge of drawing systems and skill in drawing and rendering
- development of solutions to visual communication problems
- analysis and evaluation of examples of visual communication
- processes and procedures used to produce visual communications.



UNIT 4: Design Development and Presentation

Areas of study

1. **Development of design concepts** – In this area of study students focus on the design process stages of the development of concepts and refinement. Using separate design processes, students develop and refine design concepts that satisfy each of the needs of the brief established in Unit 3.
2. **Final presentations** – This area of study focuses on the final stage in the design process, the resolution of presentations. Students produce two final visual communication presentations, which are the refinements of the concepts developed in Outcome 1.
3. **Evaluation and explanation** – In this area of study students devise a pitch to present and explain their visual communications.

Outcomes

On completion of this unit the student should be able to:

1. select ideas for development that address the requirements of the brief
2. select and apply a range of manual and digital methods, materials, media, design elements, design principles, presentation formats and conventions to develop concepts
3. present final visual communications
4. devise and deliver a pitch that supports the presentation of final visual communications.

Assessment tasks

School assessed coursework

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. The decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit.

Examination

Students will be required to answer a series of questions related to Units 3 and 4 set by an examination panel.

