VCE HANDBOOK

ZENITH

LIGHTHOUSE CHRISTIAN COLLEGE

2018

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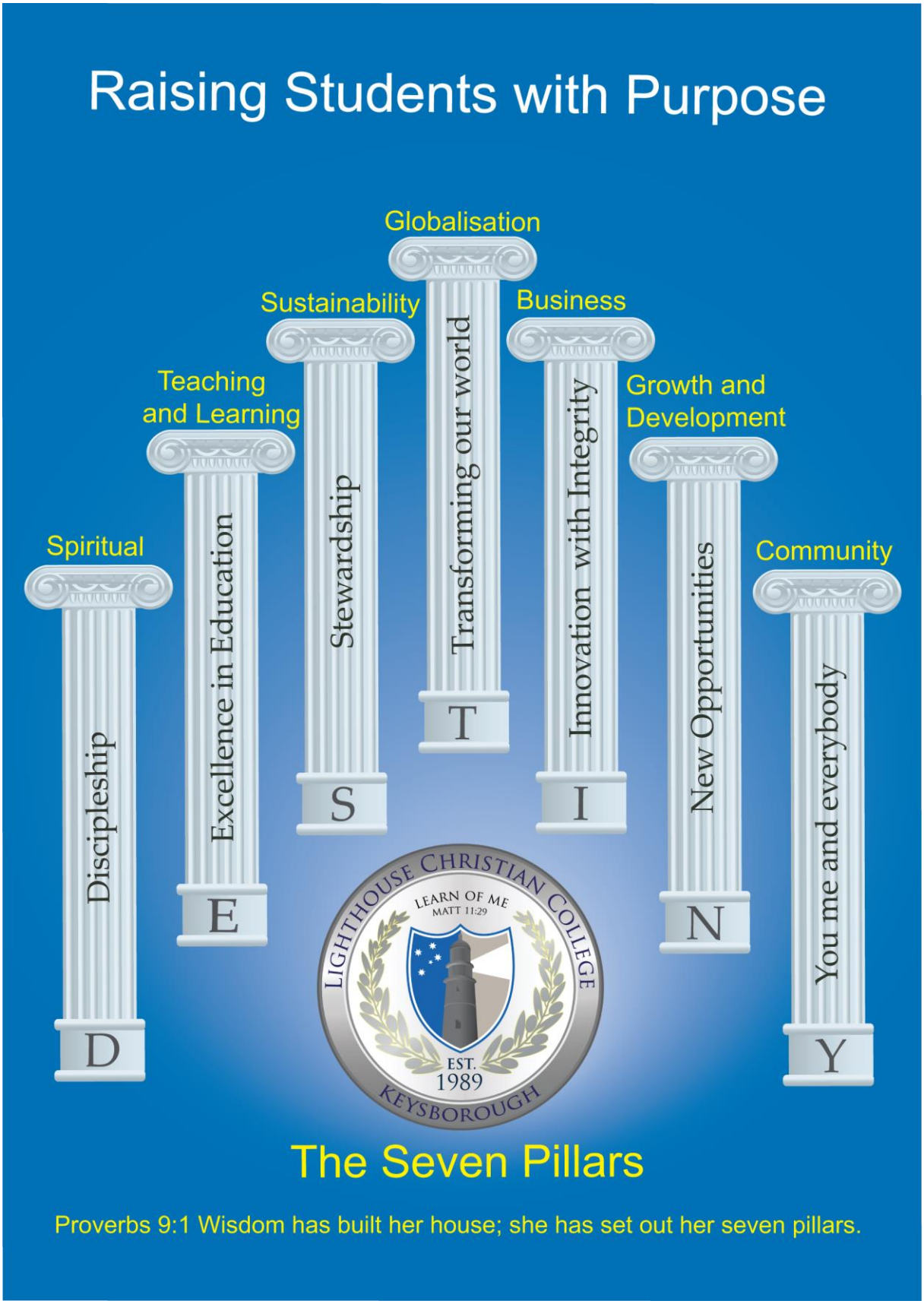
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The Seven Pillars
Proverbs 9:1 Wisdom has built her house; she has set out her seven pillars.

8 PEDAGOGICAL STANDARDS

1. We know our students and how they learn.

2. We know the content and how to teach it.

3. We plan for and implement effective Teaching and Learning.

4. We create and maintain effective learning environments.

5. We assess and report on student learning.

6. We engage in professional learning.

7. We engage professionally with colleagues, parents and carers.

8. Implementation of a Christian perspective throughout programs and assessment.

MISSION OF
LIGHTHOUSE CHRISTIAN COLLEGE

The Christian Choice for Excellence in Education

Our Mission and Values

To assist Christian parents to teach and train their children in a Christian environment, so that they will fulfill God's purposes in their lives and bring an uncompromising Christian influence to our society.

Our Values:

- Integrity
- Community
- Love
- Excellence
- Responsibility
- Respect
- Friendship
- Compassion
- Courage
- Humility

ZENITH (YEARS 11-12) LEADERSHIP TEAM

- College Principal — Mrs Avril Howard
- Deputy Principal — Mr Vernon Clark
- Director of Teaching and Learning — Mrs Margaret Jewell
- Zenith Coordinators (Year 11&12) — Mr Paul Donovan
Mrs Reena Thomas
- Chaplaincy, Health and Wellbeing Team

WELCOME TO ZENITH (VCE) AT LIGHTHOUSE CHRISTIAN COLLEGE

A Message from the Principal

I wish to extend a very warm welcome to you and your child as they enter their senior schooling years at Lighthouse Christian College where they will be part of the Zenith sub-school section (VCE). Students you are on the way to shaping your vocational pathways and moving into your God given destiny in a great way. Parents we are privileged to partner with you in the Christian educational journey of your child as they complete their senior secondary schooling.

Since the establishment of the VCE at LCC in 1999 God has given us success in all our endeavors. The scripture the Lord impressed on the founders and which remains a promise for the future is a verse from Zechariah 4:6:

'Not by might nor by power, but by my Spirit,' says the Lord.

From commencement we have had a 100% academic success rate and *Lightkeepers* alumni are employed in a range of professions and trades. All Lightkeepers alumni comment on how quickly the VCE years pass by and how much they enjoyed the Christian community atmosphere at LCC.

Year 12 is essentially only three terms of classes, so we encourage students to invest their time well. We strongly advise students to focus on their academic goals and not over commit to co-curricular activities outside of school. Their goal must be to use this unique school opportunity to its maximum.

The VCE staff stand with VCE students to enable them to reach their dreams and to move confidently in the direction of their God ordained destiny. We trust that the journey will be enjoyable and characterised by excellence. Please refer to the attributes of a Lighthouse Graduate on page 7.

Students are encouraged that before they start their days' work, and each night before study, to ask God to help them learn well. Success is built on doing the homework and assignments set and regular revision of topics covered.

The Zenith staff team and I look forward to working with the VCE students to help them attain their goals.

Please do not hesitate to contact me on any educational needs you may have. We are here to help, serve and bless.

Yours in Christ's Service

Avril Howard
Principal

A LIGHTHOUSE GRADUATE

- Is a confident dedicated and passionate disciple of Jesus Christ, empowered by the Holy Spirit, who knows who they are, what they are about and how God has called them to serve Him in His Kingdom.
- Is a uniquely gifted young adult with a strong work ethic and a pathway and a purpose equipped to influence the next generation.
- Is well prepared in the academic disciplines and committed to life-long learning.
- Is an effective written and verbal communicator applying such skills in a confident, persuasive and respectful manner.
- Is self motivated about their future and keen to apply their knowledge and skills to make a tangible difference in the world.
- Is entrepreneurial, flexible, motivated and innovative.
- Is an autonomous learner, resilient, persistent and reflective with their faith grounded both in their experience of God and in the Word of God.
- Is an analytical problem solver who effectively synthesises, initiates, and self manages.
- Is a creative thinker prepared to take risks when learning.
- Is an ethical digital citizen and a confident and competent user of digital technologies.
- Is empathetic with highly developed interpersonal and intrapersonal skills, demonstrating Christ-like love for everyone.
- Is able to articulate the Christian worldview and has apologetic skills to defend their faith.

MESSAGE FROM THE DIRECTOR OF TEACHING AND LEARNING

It is always exciting to make plans for the future. You are now at that significant point in your life where you are considering what your post-school options might be - and what your future might look like. Some of you know you need a strong ATAR as the key to your course of choice at university, others will be refining interview and folio skills for entry to T.A.F.E courses and others will be developing resumes and practicing interviews skills for successful entry into the work force. Some of you may be planning a Gap year, a discipleship course, a United Nations Development Project, or a volunteer role overseas perhaps. The possibilities are endless, and the skills you learn through your VCE years; higher order thinking and analysis, self-directedness, communication, creativity, team work, interpersonal skills and curiosity prepare you for them.

Choosing subjects and courses should be interesting and can often be complex. It is important to make decisions that reflect God's gifting and purpose for you, provide maximum flexibility for the future and based on the best information.

This guide provides general information about the VCE, assessment and reporting, tertiary entrance and summaries of the content and assessment of the VCE studies on offer and advice about how to choose the best subjects for you. As a Year 10 student you will use this guide to learn about the VCE and map out a program of study for your final two years at Lighthouse. As a Year 11 student, you will use this guide to re-assess your student program as you move into year 12 and completion of your VCE.

Although this book is a comprehensive guide, your teachers, and other Senior Staff, are available to help you track down the information you need. Please use the resources available to you at Lighthouse, they are provided with you in mind.

Expect to work hard, your VCE years will be busy and challenging because you are being shaped and refined by God for a unique purpose. Take care of you; eat well, sleep well, stay active, take time each day to pray, relax and spend time with the people who love you.

God bless you for the next exciting stage in your journey! We will support you every step of the way!

Margaret Jewell
Director of Teaching and Learning

For I know the plans I have for you" declares the Lord "plans to prosper you and not to harm you, plans to give you hope and a future." (Jeremiah 29:11)

MESSAGE FROM THE ZENITH COORDINATORS

Trust in the Lord with all your heart and lean not on your own understanding; in all your ways submit to him, and he will make your paths straight. (Proverbs 3:5-6 (NIV))

Lighthouse Christian College offers broad and flexible academic and vocational programs for our Zenith (VCE) year 11-12 students providing high level support both spiritually as well as academically.
Our VCE/VCAL program enables our students to strive for excellence in all areas; prepares and challenges students to think globally and be responsible citizens. Small class sizes ensure that students receive personalised attention and the guidance they deserve, in a safe, secure and supportive teaching and learning environment.

Students are provided with opportunities to develop their leadership skills which enables them to grow in the fruits of the Spirit (Galatians 5:22-23) with resilience and integrity.

This Zenith (VCE) Handbook is a starting point to help parents and students make the right subject choices for Years 11 and 12. The Victorian Certificate of Education (VCE) is a two-year program that is usually completed over the final years of secondary education. Guided by our professional practitioners, students are encouraged to carefully choose their subjects based on their abilities and strengths, their interests, possible career options and prerequisites for tertiary studies. Whilst it is possible to make some subject changes along the way, getting it right from the start, is always the best option.

It is a journey that continues throughout life and prepares the students for eternity.

From a pastoral care perspective, students are supported through a range of activities and programs, which enable them to develop holistically. A strong pastoral care approach supports our students, complementing their academic and career objectives. Caring and professional relationships between staff and students are key focus at Lighthouse, where we listen to the student voice and enable them to participate in their learning. Students are assigned leadership roles and responsibilities and given training in team management, strategic and event management and effective communication.

This focus on leadership, challenge and initiative is extended to their time on the Zenith camp, which fosters excellent rapport and student morale.

Students receive study skills training and advice as part of a comprehensive program, which allows them to reflect on their personal strengths and weaknesses and gain insight into effective, proven strategies. Our camps program gives students an educational and social experience, broadening their horizons. The camps are centred on a Humanities program, exploring key aspects of topography, culture and history of these capital cities.

Mrs Reena Thomas
Zenith Coordinator (Academic)

Mr Paul Donovan
Zenith Coordinator (Pastoral)

LEADERSHIP OPPORTUNITIES

Students have a number of leadership opportunities while at Lighthouse Christian College. Students are selected for the roles of: Captain, Vice Captain, Performing Arts Captain and House Captains. We provide students opportunities to try out their leadership skills not only during College events but we expect them to problem solve and advocate on behalf of the student body. Student selected for leadership roles have the opportunity to attend leadership conferences where they mingle with other student leaders across the state and refine their ideas about what young leadership involves in our current society. We are proud of the tradition of leadership established at the College and many of our past leaders have gone on to significant roles in their career journey.

CO-CURRICULAR

Students in the VCE have the opportunity to participate in a myriad of activities above and beyond their studies. From the SRC to Chapel band the leadership aspirations and musical talents are well catered for. Students at senior levels have taken part in activities such as our International Food Festival, missions trips, business stalls and running a café. We also have an extensive sporting program beginning with our athletics carnival, which is full of colour and fanfare and culminating in our participation in the Christian Schools Network Sporting events. At these events students get to pit their skills of their contemporaries in badminton, football, soccer and tennis among other sports.

THE VICTORIAN CERTIFICATE OF EDUCATION (VCE)

The rules relating to the VCE are set by the Victorian Curriculum and Assessment Authority (VCAA). To be awarded the VCE students must satisfactorily complete at least 16 units of study. This must include a minimum of:

- An approved combination of three units from the group of English studies which will include English Units One and Two and English Units 3 and 4.

- 3 sequences of Units 3 and 4 studies other than English

Each study consists of four semester length units:

- **Units 1 and 2** may, in some studies be taken separately. Units 1 and 2 are assessed internally

- **Units 3 and 4** must be taken as a sequence. Units 3 and 4 are assessed externally

Lighthouse VCE Program

The VCE program at Lighthouse is designed to provide breadth of study through Units 1 and 2 and depth of study through Units 3 and 4. This will enable students to pursue entry into their preferred tertiary courses. The usual program is for students to undertake 22 units over two years consisting of:

- **Year 11**: 6 VCE units per semester at Unit 1 and 2 OR 6 VCE units per semester which may include one Unit 3 and 4 sequence and:

- **Year 12**: 5 VCE units per semester

Some students undertake extra Unit 1 and 2 studies in Year 10, but it is not necessary to stretch VCE studies over three years or to accumulate extra VCE units.

Planning your studies

A VCE program should contain studies you enjoy and will do well in. It should also contain pre requisite subjects; that is subjects you will need in order to satisfy tertiary entrance requirements in particular courses. To gain entry into tertiary courses, students must have an S (satisfactory completion) in both Units 3 and 4 of their English study. Please refer to page 22 for further information about tertiary entrance.

STUDIES ON OFFER TO YEAR 11 AND 12 STUDENTS AT LIGHTHOUSE CHRISTIAN COLLEGE IN 2018

Unit 1 and 2	Unit 3 and 4
Accounting	Accounting
Art	Art
Biology	Biology
Business Management	Business Management
Chemistry	Chemistry
English: • English as an Additional Language	English: • English as an Additional Language
Food Studies	**Food Studies**
Geography	**Geography**
Health and Human Development	Health and Human Development
History	**History**
Language Other Than English: • Chinese First Language • Chinese Second Language	Language Other Than English: • Chinese First Language • Chinese Second Language
Legal Studies	Legal Studies
Literature	Literature
Mathematics Studies: • Foundation Mathematics • General Mathematics • Mathematical Methods • Specialist Mathematics	Mathematics Studies: • Further Mathematics • Mathematical Methods • Specialist Mathematics
Music Performance	Music Performance
Physical Education	Physical Education
Physics	Physics
Psychology	Psychology
Religion and Society	**Religion and Society**
Theatre Studies	Theatre Studies
Visual Communication and Design	Visual Communication and Design
VET in the VCE: Vetamorphus *A range of options through VET cluster	VET in the VCE: Vetamorphus *A range of options through VET cluster
APEX - Victorian Certificate of Applied Learning (VCAL)	N/A

VCE units will only run subject to a minimum number of students

***Subjects in bold type are new subjects being offered in 2018**

OTHER EDUCATIONAL OPPORTUNITIES WITHIN THE VCE PROGRAM

VET STUDIES

VET Studies. All VET in the VCE programs have full VCE study status and contribute as units towards the satisfactory completion of the VCE. The qualifications are composed of units of competence. There is a wide variety of VET studies ranging from Arts Media and Automotive to Community Services, Engineering, Retail and Animal Studies. Please speak to the Careers Advisor or Director of Teaching and Learning for further information. Up to 8 of the units of study may be VET units obtained over two programs.

LANGUAGES OTHER THAN ENGLISH

Languages Other Than English: External Studies through the Victorian School of Languages. Students will attend classes at another location but it is the responsibility of Lighthouse to enrol the student on the VCAA VASS database. Should a student wish to study an external LOTE they should indicate this on the VCE Subject Planning sheet.

DISTANCE EDUCATION

Distance Education. Where there are insufficient numbers for a subject to be taught at the College, or if there is a clash of subjects in the VCE blocks, it may be possible to undertake a subject through Distance Education. Eg History of Revolutions, Economics

Choosing to study through Distance Education does incur additional costs to parents. However, if Distance Education is the best way to resolve a clash on the timetable, then Lighthouse will meet half the cost and the parents meet the other half.

UNIVERSITY ENHANCEMENT STUDIES

University Enhancement Studies. High achieving Year 12 students who have completed a Unit 3 and 4 study in Year 11 may be eligible for enrolment in a University Enhancement study. This enables a student to undertake a first year university subject whilst completing VCE. A university enhancement study counts both as university credit and as a sixth subject in the calculation of the ATAR. Possible enhancement studies include:

- Biology
- Mathematics
- Psychology

UNITS 3 AND 4 STUDIES IN YEAR 11 (ACCELERATION)

When considering subjects for Year 11, some Year 10 students **may** be eligible to apply to study **ONE** accelerated Unit 3 and 4 study. Students must have completed Units 1 & 2 during Year 10. The subjects offered for acceleration are: Legal Studies & Psychology. Students whose academic performance in Year 10 indicates that they have developed a high level of skill, knowledge and understanding may be considered.

Acceleration is a serious academic matter and ultimately only for those students who are performing at high academic levels and demonstrating effective time and self-management skills. A student's Semester One report will be a key document in assisting with the decision making process. The Director of Teaching and Learning along with Faculty Coordinators and key VCE staff will oversee acceptance of enrolment in any program involving Unit 3 and 4 studies in Year 11.

Criteria a student must meet:

- Level of performance closest to the one acceleration is being applied for: a minimum of **A** across all areas of assessment.
- Level of performance in Year 10 English: a minimum of a **B+** across all areas of assessment
- Level of performance in other subjects: a minimum of **B** across all areas of assessment.

Other important factors which will be considered:

- Demonstrated evidence of necessary skills, understandings and capabilities to undertake a Unit 3 and 4 sequence.
- Interest and motivation
- Evidence of sound organisational skills and a strong work/study ethic.

Appeal Process

A student who believes they have reasonable grounds to appeal a decision may do so in writing.

The application must include supporting evidence as to why the student should be allowed to accelerate.

An interview which includes parents and the College Principal will form part of this process.

THE LANGUAGE OF THE VCE

The language of the VCE may sound confusing at first. This glossary will help you until the language becomes familiar to you.

Australian Tertiary Admissions Rank: Represents an Australia-wide tertiary admissions rank. The ATAR is an overall percentile ranking calculated in steps of 0.05, reflecting the comparative performance of each successful VCE candidate amongst the relevant age group in that given year.

Authentication: This refers to the process of satisfying the teacher that the work is the work of the student. The student signs a declaration stating that the work is her/his own, works under the supervision of the teacher and confers with the teacher at various stages of completion of the work. He/she acknowledges all sources and types of help received. The Victorian Curriculum and Assessment Authority stipulates authentication procedures and Lighthouse sets policy and procedures accordingly.

CourseLink: A software program available on the VTAC site which allows students to enter their proposed VCE program and to check all the prerequisite subjects for courses in their career interest areas. Year 10 and 11 students should use this program before finalising their subject choices. This is accessed at **www.vtac.edu.au**

Examination: All Unit 3 and 4 VCE studies offered by Lighthouse include one examination. Examinations are set and marked by the Victorian Curriculum and Assessment Authority

General Achievement Test (GAT) All students undertaking one or more Unit 3 and 4 studies are required to sit the General Achievement Test (GAT). This test is designed to help ensure that schools across the state fairly and correctly assess school-assessed tasks and school-assessed coursework, that is, according to certain criteria for various grade levels. It is also used to assess the accuracy of external marking of individual students' examinations. Students should do the best they can on the GAT and familiarise themselves with the instructions and types of questions that may appear. The Victorian Curriculum and Assessment Authority supplies students with their GAT scores at the end of the year.

Graded Assessment. All VCE studies have three graded assessments for each Unit 3 and 4 study.

Level of Performance. For each Unit 1 and 2, students will receive a letter grade indicating the level of performance in various Lighthouse designed assessment tasks. For Units 1 and 2 studies the level of performance is decided by the School. For Units 3 and 4, levels of performance for School Assessed Course work are provided as feedback via letter grades or scores out of a total. **These levels of performance can only be used as a guideline as the Victorian Curriculum and Assessment Authority has responsibility for adjusting the levels of performance in accordance with examination and in some cases GAT scores.**

Prerequisite Studies. These are the studies nominated by Universities and TAFEs as studies which must be satisfactorily completed by ALL applicants seeking admission to their courses. Entry requirements change. Refer ONLY to the relevant VICTER/Tertiary Entrance Guide and Director of Teaching and Learning and Careers Advisor.

'S' or 'N' These letters stand for satisfactorily completed (S) or not satisfactorily completed. (N). Students will receive S or N for each unit of study and for each outcome within each unit.
Students satisfactorily complete a unit if they satisfactorily demonstrate achievement of all outcomes as per the Victorian Curriculum and Assessment Authority study design and if they meet School stipulated attendance requirements.

School Assessed Coursework
During Units 3 and 4 staff will provide graded, descriptive and verbal feedback to students about their on-going performance.

> However the College wishes to draw your attention to the fact that the total scores for coursework assessment tasks may change as a result of Statistical Moderation carried out by the Victorian Curriculum and Assessment Authority.

During Units 3 and 4 in each study staff will give assessment tasks for students to carry out, generally during a timetabled class. If a student is absent for any reason (illness, sport, excursion, holidays, or other personal business) they will be required to carry out another similar coursework assessment task of comparable difficulty at a time specified by the College.

Sequence. A sequence is a Unit 3 followed by Unit 4. Award of the VCE requires that a student successfully completes three Unit 3 and 4 sequences apart from Unit 3 and 4 of English. Students must complete Units 3 and 4 in the one year and obtain an 'S' for both units in order to be given a study score.

Statistical Moderation. Moderation is a process ensuring that the same assessment standards are applied to students from every school doing a particular study. Statistical moderation is a process for adjusting schools' assessments to the same standard, while maintaining the students' rank order given by the school. The Victorian Curriculum and Assessment Authority uses statistical moderation to ensure the coursework assessments given by different schools are comparable throughout the state. Students and parents are provided with details of statistical moderation via briefings and handbooks. Further information is available from the Victorian Curriculum and Assessment Authority (VCAA) website www.vcaa.vic.edu.au

Unit A unit consists of a semester's work and involves 100 hours of study of which 50-60 hours will be class time and the remainder as individual student homework, research and study time. Units 1 and 2 are designed to be "self-contained".

VASS This is the name of the internet based VCE administrative software system used by schools to enter VCE enrolments and results directly onto the VCAA central database.

Victorian Tertiary Admissions Centre. This is the organisation that administers Victoria's joint selection system on behalf of universities, TAFE institutes and some private providers. VTAC's job includes organising the application procedure, receiving and processing applications, forwarding the application to the relevant tertiary institutions, making offers to students on behalf of tertiary institutions and publishing information students will use in planning VCE programs. VTAC is not a selection authority and it does not determine selection criteria.

Vocational Education and Training (VET)
Nationally recognised vocational certificate integrated within the VCE.

THE VCE STUDENT AND HOMEWORK

Homework is intrinsically linked to, and grows out of work done in the classroom. At the VCE level, homework is essential to a student's progress and success.
Homework tends to be task orientated, teacher directed and has a set completion date.

Study tends to be student centred, self-initiated and on-going in nature.

Suggested homework times are:

Year 11	2.5 hours per night on weekdays
	5 hours on weekends
Year 12	3-4 hours per night on weekdays
	6 hours on weekends

Students should complete homework and study each night. Whilst the amount of homework each night may vary, each student should allocate time to complete set tasks as well as study.
Students learn in Year 10 to plan their own homework timetable and use their school diary in a more independent manner. This gives them flexibility and helps them learn self-discipline which is essential for success at the VCE level.

Our Advice for students:

- Set learning and achievement goals for each subject. Write them down
- Use your diary to record and prioritise tasks
- Establish a suitable study environment at home, a quiet, well-lit room. There is no hope of serious study in front of the television or with one eye on *Facebook*.
- Draw up a home-study timetable. Factor in church, work, family commitments and leisure time into the timetable.
- Read, annotate and re read your English texts throughout the year so that they become a part of you.
- Read the opinion section of a newspaper (either online or paper version) EVERY day.
- Identify key passages and quotations-try to avoid using examples in study guides everyone across the state will use these. Make your work rise above.
- Before each study session, set yourself certain simple attainable goals. During that session keep checking that you are really concentrating and that you have grasped the new material studied. When you are confronted with a problem make a note of it and ask your teacher for help the following day.
- Keep refining your notes and arrange your summaries into clear and concise learning guides. The process of summarisation enables the material covered to be consolidated.
- Practice past exam papers.

- Prepare and use Mnemonics to help you remember information
- Prepare revision charts and blu-tack to walls or outside of the shower
- Attend revision lectures-NEAP, School of Excellence and VATE provide excellent ones.
- Practice writing essays gradually building up speed and quality. VCE success is a marathon, not a sprint.
- Drink plenty of water
- Remove electrical devices from your bedroom-they interfere with sleep.

Our Advice for parents

- Encourage and support
- Take an active interest in your child's homework and study
- Ask questions and discuss topics
- Read and discuss English texts
- Assist in the location and understanding of information
- Ensuring your son/daughter's wellbeing- nutrition, hydration, sleep rest and relaxation time
- Notifying the School if the student is suffering problems which could affect study plans

Following Up on Overdue Work

Students are expected to meet due dates set by teachers for the submission of work. Failure to do so affects the on-going learning of the individual and may adversely affect the learning of other students as teachers often feel they need to delay the return and explanation of work to accommodate students who submit work past the due date. Students who submit work past the due date without a note will be issued with a detention.

VCE students

Students undertaking VCE studies are expected to meet VCE attendance and work submission requirements. Students are informed of dates of in-class assessments and due dates for assessment tasks**. If a student is sick on the day of an assessment task, a doctor's certificate is required in order for the assessment task to be re-scheduled. The subject teacher will inform parents in writing if assessment tasks have not been submitted or if an in-class assessment activity has not been undertaken.**

Students must demonstrate satisfactory completion of every learning outcome in order to satisfactorily complete a unit of study. An 'N' (not satisfactory) on any one or more outcome(s) means an 'N' for the assessment in entire unit.

REPORTING

The form of reporting for the VCE is both detailed and informative. Students will receive school based reports for Units 1 and 2, outlining satisfactory completion of learning outcomes and detailing levels of performance in the school assessment tasks. At Units 3 and 4 levels the school will issue a report at the completion of the first semester outlining satisfactory completion of learning outcomes and providing comments regarding the student's overall progress.

The VCAA will provide:

1. A statement of results indicating satisfactory completion (S) or unsatisfactory completion (N) for each unit attempted.

2. A statement of results in the School Assessed Tasks. It is anticipated that they will be graded on a ten-point scale A+ to E, UG (Ungraded) or NA (Not Assessed).

3. A statement of results for the General Achievement Test (GAT).

ATTENDANCE REQUIREMENTS AND THE VCE

The Victorian Curriculum and Assessment Authority is serious about class and School attendance. Work completed during class time is necessary to enhance student understanding and for the teacher to be able to authenticate the student work.
Students are expected to attend 95% of all timetabled classes, devotions, excursions and assemblies and be punctual at all times. In circumstances where students have completed the work but have significantly breeched attendance rules, an 'N' (Not Satisfactory) may be issued. Decisions in relation to school rules are not subject to appeal to VCAA.
If the absence is explained and a SAC has been missed on the day of absence, then for the SAC to be re-scheduled documentary evidence such as a Medical Certificate or a letter from a Psychologist, School Chaplain or other professional must be provided.

Please refer Appendix 1 (page 139)

VCE Study Periods

Students in Year 11 and 12 may have several unallocated or study periods per weekly cycle. During these periods students are expected to study or complete class based tasks. If students are in year 11, they must remain on campus for these study periods. Year 12 students may study at home provided they have parental permission and have signed out. Parents must sign the application to study offsite prior to this being permitted.

Year 12 students have been provided access to a common room, which includes a fridge, microwave, a comfortable cosy space for lunch and recess. They may use this area to study in during their study periods, provided they uphold the requirements of the Common Room Agreement.
In the Zenith building, when it is available, the proposal is to allocate space for both Year 11 and 12 students as study area.

Please refer Appendix 2 (page 142)

After-school class and holiday class

Year 11-12 students undertaking a Unit 3 or 4 class may be required to attend after school classes and additional tuition offered in mid term and mid year breaks. Teachers will provide additional tuition during the first week of each term break. In the term 3 break, practice examinations will be conducted as per VCAA specifications. These are also compulsory and important events for Year 11 and 12 students.
After school classes for Unit 3/4 will run from 3.30–4.30 and each subject is scheduled on a two-week cycle, commencing Term 3.

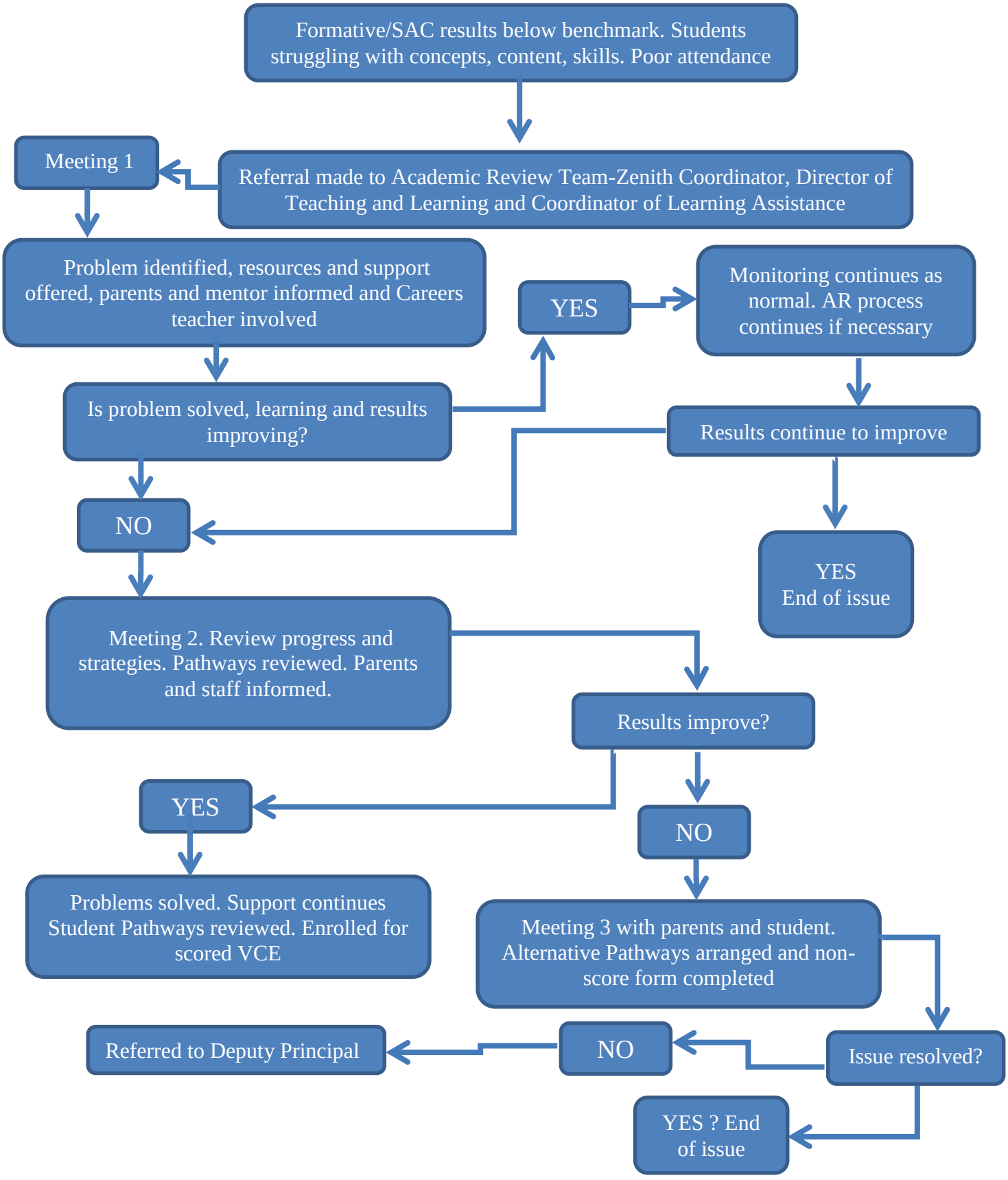
ACADEMIC REVIEW PROCEDURES

To quickly identify learning difficulties that VCE students may experience, to support these students in their learning and to ensure information on academic progress is effectively communicated with parents, a small committee has been established. This Academic Review Committee consists of the following people:

Director of Teaching and Learning	Mrs M Jewell
Zenith Coordinator (Academic)	Mrs R Thomas
Zenith Coordinator (Pastoral Care) – as required	Mr P Donovan
The Learning Education Support Coordinator	
The Careers' Teacher	
The relevant class teacher	

This committee meets monthly to monitor student progress.

VCE ACADEMIC SUPPORT AND REVIEW FLOWCHART – A PROCESS TO ADDRESS LEARNING DIFFICULTIES AND POOR RESULTS AT THE VCE LEVEL



TERTIARY ENTRANCE

The minimum entrance requirement for all tertiary institutions is the satisfactory completion of the VCE. The Victorian Tertiary Admissions Centre (VTAC) calculates the ATAR and distributes the offers on behalf of tertiary institutions.

Selection into tertiary courses is based on:

- The Australian Tertiary Admissions Rank (ATAR)
- Completion of prerequisite VCE studies, and in some instances a minimum score (relative position)
- Completion of special requirements, such as attendance at an interview or submission of a folio of work.

This information is provided in the current year's VTAC guide and relevant VICTER publication or from the Director of Teaching and Learning, Zenith Coordinator and Careers Advisor.

VICTER Guides is a publication which summarises entrance requirements for universities, TAFE institutions and private providers that participate in the VTAC selection system. For students in Year 10, 2017 their Tertiary Entrance Guide is labelled **VICTER 2020. Published in *The Age* and *The Herald Sun*.**

The ATAR is calculated using this formula:

- The Victorian Curriculum and Assessment Authority provides VTAC with each student's study scores (relative position) which indicates that students position in the cohort of students taking that study.
- VTAC adjusts these scores to reflect differences in the cohort of students taking each study compared to the difficulty of other studies. This process is called scaling.
- The scaled study scores are used to calculate the ATAR:
    - The primary four studies- English plus the next best three scaled scores **plus**
    - 10% of the fifth and sixth scaled study scores

University enhancement studies count as the sixth study and students receive a possible bonus of 4.5, 5 or 5.5 points towards the ATAR

VET in the VCE

Students may obtain study scores in approved **VET** in the VCE programs. Students enrolled in a Unit 3 and 4 study of these certificates may include the VCE VET Unit 3 and 4 sequence with a study score in the primary four of the ATAR.

Students who complete Vetamorphus will not receive a study score for the subject and it cannot be counted in the primary four of the ATAR. However, 10% of the primary four will be included in the ATAR against Vetamorphus as a fifth or sixth study.

Students completing Units 3 and 4 studies will receive a criteria-based letter grade from the Victorian Curriculum and Assessment Authority and a study score out of 50 for each study attempted.

Additional Requirements for entry to Health, Medical and Dentistry courses.

- For entry into medical, dentistry and health science courses, students must sit the Undergraduate Medicine and Health Science Admissions Test **(UMAT).** Registrations for the test open in April 2018. More information can be found at: www.umat.acer.edu.au

COSTS ASSOCIATED WITH THE VCE

Students are required to purchase the following items:

- VCE Study guides
- School Electronic Device – Lenovo Thinkpad
- Stationery
- Textbooks

ADDITIONAL UNIFORM ITEMS

- VCE college jumper (subject to size)
- VCE tie
- White shirt (boys only)
- VCE skirt (subject to size)
- VCE socks
- Sports uniform – Polo Shirt and Shorts

VOCATIONAL EDUCATION AND TRAINING COURSES

Parents are responsible for the fees associated with their child undertaking a VET course.

CREATING YOUR VCE PROGRAM

A checklist for Year 10 students

- List your current career aspirations and interests on the VCE Planning sheet found at the back of this book. ☐

- Use a range of career resources to identify the tertiary courses available to enter these career areas. ☐

- Identify any specific tertiary pre requisites subjects for these courses. Refer to the relevant VICTER guide. For **Year 10 students this is VICTER 2020**, for **Year 11 students this is VICTER 2019.** ☐

- If you have no specific career area in mind, review the subjects you enjoy and are most interested in at school and possibly explore tertiary courses of a generalist nature eg Arts, Science and Commerce degrees. Please speak to the Director of Teaching and Learning, Zenith Coordinator and the Careers Advisor for further guidance. ☐

- You should take note of the current ATAR required to previously gain entry to these courses. Please note, ATARs change from year to year so the figures you read now act only as guidelines. ☐

- List the tertiary courses you are interested in on your VCE Subject Selection Planning sheet along with the pre requisite Unit 3 and 4 subjects you require. ☐

- Read the descriptions of all VCE studies carefully. Aim for variety in your program by selecting studies that build on your strengths and interests. ☐

- Complete the VCE Subject Selection Planning sheet Year 11 2018 which is at the back of this book. This will include the name of any proposed Unit 3 and 4 subject you want to study in Year 11 and you have met the grade criteria for. This is your proposed program. ☐

- Bring this program to your VCE selection interview where it will be discussed with the Careers Advisor and the Launch Coordinator ☐

You may make adjustments to the program in response to this interview but only consistent with VCAA enrolment policies.

Note carefully when selecting subjects through the portal remember studies are arranged according to Pathways. Choose the block for English last.

VCE

UNIT DESCRIPTIONS

FOR STUDIES ON OFFER

TO STUDENTS IN 2018

ACCOUNTING

Thematic Statement
We have to account to God for everything, including the gifts that He is continually blessing us with. Proverbs 3: 9, 10 says, “Honour the Lord with your possessions and with the first fruits of all your increase so your barns will be filled with plenty and your vat will overflow with new wine.” The Bible has many verses that deals with how we should handle money and how we have to account to God what is due to God.

Rationale
Small business’ need to record and maintain accounting information to be able to make decisions based on their performance. Students will deal with the recording, reporting and providing advice to business owners.

Entry

Grade Boundaries:
Accounting Units 3 & 4: Achieving 70% in Accounting Units 1 & 2

ACCOUNTING UNITS 1 & 2

Unit 1

Areas of Study

1. Going into a Business
2. Recording Financial Data and Reporting Accounting Information

Unit 2 – Operating a Business

Areas of Study

1. ICT in Accounting
2. Evaluation of Business Performance

Unit 1 Outcomes	Unit 2 Outcomes
1. Describe the resources and explain and apply the knowledge and skills necessary to set up 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	1. Record and report financial data and information for a sole trader. 2. Record and report financial data and information using 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.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
Demonstration of achievement of outcomes one and two must be based on the student's performance on a selection of assessment tasks: • A folio of exercises (manual and ICT) • A test (manual and/or ICT) • An assignment (manual and/or ICT) • A case study (manual and/or ICT) • A classroom presentation (oral or multimedia) • A report (written, oral or multimedia)	Demonstration of outcomes one, two and three must be based on the student's performance on a selection of assessment tasks: • Exercise/s using a commercial accounting software package • A folio of exercises (manual and ICT) • A test (manual and/or ICT) • An assignment (manual and/or ICT) • A case study (manual and/or ICT) • A classroom presentation (oral or multimedia) • A report (written, oral or multimedia)

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of achievement
Individual school decision on levels of achievement.

ACCOUNTING UNITS 3 & 4

Unit 3 – Recording and Reporting for a Trading Business

Areas of Study

1. Recording of Financial Data
2. Balance Day Adjustments and Interpreting Reporting of Accounting Information

Unit 4 – Control and Analysis of Business Performance

Areas of Study

1. Extension of Recording and Reporting.
2. Financial Planning and Decision Making.

Unit 3 Outcomes	Unit 4 Outcomes
1. Record financial data into appropriate accounting records using a double entry accrual-based system for a single activity sole trader, and explain related aspects of this accounting system. 2. Record balance day adjustments, prepare financial reports and explain related aspects of the accounting system.	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.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
The student's performance on each outcome should be assessed using one or more of the following tasks: • Structured questions • A folio of exercises (manual and ICT) • A case study (manual and/or ICT) • A test (manual and/or ICT)	The student's performance on each outcome should be assessed using one or more of the following tasks: • Structured questions • A folio of exercises (manual and ICT) • A case study (manual and/or ICT) • A test (manual and/or ICT) End of year Examination

Levels of Achievement

The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of VCE Accounting students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination.

ART

UNITS 1 & 2

Unit 1
In this unit students focus on artworks as objects and examine how art elements, art principles, materials and techniques and artistic processes communicate meaning. They examine artists in different societies and cultures, and historical periods, and develop their own viewpoints about the meanings and messages of artworks. Students explore the practices of artists who have been inspired by ideas relating to personal and cultural identity. They study at least three artists and at least one artwork from each of the selected artists.

Students apply the Structural Framework and the Personal Framework to interpret the meanings and messages of artworks and to document the reflection of their own ideas and art making. They learn how to formulate and substantiate personal opinions about the artworks. In their practical work, students explore areas of personal interest and the characteristics of materials, techniques and the art process. Students develop an understanding of the use of visual language to document their exploration and development of ideas, techniques and processes in a visual diary

Area of Study 1 – Art and Meaning.
In this area of study students are introduced to the Structural and the Personal Framework to support the interpretation of the meanings and messages of artworks, both as intended by the artist and as interpreted by the viewer. Students learn that the analysis of an artwork using the Structural Framework can enhance their understanding and interpretation. They gain an understanding that art may reflect the artist's interests, experiences and thinking through applying the Personal Framework to read possible meanings of artworks. They also develop an understanding that the interpretation of the meanings and messages of art may be personal response by the artist and/or the viewer, and that viewpoints can be substantiated using a range of sources. Students study at least three artists and at least one artwork from each artist to examine both historical and contemporary artworks. The artists may be selected from a range of societies and cultures including artworks by Aboriginal and Torres Strait Islander artists.

Area of Study 2 – Artmaking and Personal Meaning
In this area of study students are encouraged to develop and apply skills while exploring areas of individual interest to create artworks. Students undertake a range of experiences that offer different ways of working and develop an understanding about how to use the art process. They build confidence through the exploration of techniques, materials and processes. Students create and develop a range of visual responses using imagination and observation in a selection of tasks. They investigate the artistic practices of selected artists or styles as inspiration for the development of their own visual responses. Student engage in creative and technical processes with a range of materials and art forms and use a visual diary to document their reflections, exploration of ideas, and experimentation with materials and techniques. They reflect on their own art making and examine how they have developed their visual language. They use Structural Framework and the Personal Framework to analyse and evaluate their visual responses.

Unit 2

In this unit students use the Cultural Framework and the Contemporary Framework to examine the different ways that artists interpret and present social and personal issues in their artistic practice. They apply the Cultural Framework and the Contemporary Framework as appropriate to the selection of artworks.

In students' own artistic practice, they continue to use the art process and visual language to explore and experiment with materials and techniques and to develop personal and creative responses. They explore the way cultural contexts and contemporary ideas and approaches to art have influence their artwork.

Students investigate how artworks can be created as forms of expression for specific cultural and contemporary contexts. Students may research contemporary artworks, public art, community and collaborative artworks, art produced for festivals, newspaper cartoons, art prizes, curated exhibitions, performance art, ephemeral and environmental art and street art. Artworks can celebrate specific events, ideas or beliefs or they can commemorate people, institutions, social movements and events. They can reinforce a social group's sense of power and authority or they can challenge social attitudes and assumptions. Students begin to see the importance of the cultural context of artworks and analyse the varying social functions that art can serve.

Students use the Contemporary Framework to examine artworks from different periods of time and cultures. In current contemporary artistic practice, many artists have reinterpreted traditional art forms and familiar representation, re-examining the traditions of realism and abstraction in conceptual artworks that challenge ideas about art. Contemporary art and ideas may involve diverse and alternative approaches to making and presenting art. These practices may also include practices of appropriation, collaboration, participation and questioning of the notion of authorship of artworks.

Area of Study 1 – Contemporary Artworks and Culture

In this area of study students focus on the ways in which art reflects and communicates the values, beliefs and traditions of the societies for and in which it was created. Particular emphasis is placed on the influence of contemporary materials, techniques, ideas and approaches to making and presenting artworks. Students explore and investigate the ways in which the world has changed and continues to change over time, the factors that influence these changes and their artistic practice. From the range of artists theme/s to compare artworks must be based on a common theme.

Students must:

- Apply the Cultural Framework and the Contemporary Framework in their analysis and interpretation of artworks of at least four artists.
- Study at least two artworks produced from 1990 onwards.

Area of Study 2 – Art Making and Contemporary Culture

In this area of study students explore areas of personal interest related to culture and contemporary practices. They use the art process and experiment with visual language to develop, present and document their ideas. Observations, imagination, ideas and concepts inspired by cultural or contemporary sources, such as the artists and artworks being studied in Area of Study 1, may be starting points to experiment with techniques, materials, processes and art forms. Students use all the Analytical Frameworks as appropriate to analyse visual qualities, concepts and meaning in their artworks and to document their artistic practice in a visual diary. They reflect on their own art making, and identify and discuss how they have used the art process and developed their visual language. Students examine and discuss their artistic practice and reflect on how cultural and contemporary aspects are evidenced in their artworks.

Unit 1 Outcomes	Unit 2 Outcomes
1. Students analyse a variety of artworks from different time periods using the Structural and Personal Frameworks. 2. Students develop a folio of work where they develop skills and explore ideas in an area of interest that leads to possible resolutions.	1. Students analyse the work of at least three artists using the Cultural and Contemporary Frameworks. 2. Students produce a folio and artwork exploring areas of personal interest related to their cultural identification.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
1. Written response – completed under test conditions in class, due week 7 term one 2. Part A – Exploration of artists. Part B – Exploration of elements and principles due week 8 term one. Part C – Exploration of personal themes due week 1 term 2 Part D – Exploration of materials and techniques due week 3 term 2 Part E – Final piece of art work due week 7 term 2. .	1. Written response to be completed in class, week 5 term three. 2. Part A – Exploration of personal connection to culture, due week 2 term 3. Part B – Exploration of elements and principles due week 6 term 3. Part C – Exploration of materials and techniques due week 10 term 3 Part D – Final piece of art work due week 3 term 4.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of achievement
Individual school decision on levels of achievement.

ART UNITS 3 AND 4

Unit 3
In this unit students study selected artists who have produces works before 1990 and since 1990. Students use the Analytical Frameworks for analyzing and interpreting the meaning of artworks. Applied together, these Analytical Frameworks enable students to appreciate how an artwork may contain aspects and layers of meaning and to acknowledge the validity of diverse interpretations.

Students link their growing theoretical understanding of art in Area of Study 1 to their own practice in Area of Study 2. Students apply imagination and creativity to develop their ideas through the art process and visual language. Their art making is supported through investigation, exploration and application of a variety of materials, techniques and processes. Students develop confidence in using the language and content of the Analytical Frameworks in the reflection of the structural, personal, cultural and contemporary aspects of their own developing artworks.

In this unit, contemporary art is considered to be that which has been produced since 1990 and reflects the current way some artists create artworks with a new approach to media, techniques, purpose and presentation. Contemporary art and ideas may involve diverse and alternative approaches to making and presenting art. Diverse ideas and approaches are explored in relation to societal changes, including postmodernism, post colonialism, globalization and environmental issues.

Area of Study 1 – Interpreting Art.
In this area of study students respond to and critically interpret the meanings and messages of artworks. They develop, examine and analyse their own and others' opinions and use evidence to support different points of view. Students undertake research to support their analysis and critique. Using appropriate terminology, they compare artworks produced before 1990 with artworks produced since 1990.

When selecting artworks for study, it is recognized that the Analytical Frameworks can be applied to all artworks in varying degrees. Students demonstrated depth of analysis by drawing on specific aspects of the frameworks to support their interpretations of artworks.

Area of Study 2 – Investigation and Interpretation through Art Making.
In this area of study students use the art process to develop their own art responses inspired by ideas, concepts and observations. They apply imagination and creativity as they explore and develop visual language through the investigation and experimentation of materials, techniques, processes and art forms. Students engage in ongoing exploration, experimentation, reflection, analysis and evaluation as they progressively develop and refine their ideas. They document and analyse their thinking and working practices throughout the art process, using the language and context of selected and identified Analytical Frameworks to guide their reflection. They use appropriate technical skill to produce a body of work with at least one finished artwork at the end of Unit 3. Students employ appropriate health, safety and sustainable practices in the development of their practical work.

Unit 4
In this unit students study artworks and develop and expand upon personal points of view. They support their point of view and informed opinions about art ideas and issues with evidence. They build their learning and conceptual understanding around the discussion of broad themes, ideas and issues related to the role of art in society and consider how ideas and issues are communicated through artworks. They discuss how art may affect and change the way people think. Attributed commentaries and viewpoints may include information from online programs, printed and online material in newspapers, periodicals, journals, catalogues or texts by art critics, curators and historians. Sources

should be reliable, recognized and relevant and reflect viewpoints that enrich the discussion about the artworks in relation to an art idea and related issues.

From this research students choose an art idea and issue to explore. Students select the artwork/s of at least one artist not previously studied in Unit 3, and use this artwork/s and selected related commentaries and viewpoints to discuss the chosen art idea and related issues.

In relation to their developing artwork, students continue to build upon the ideas and concepts begun in Unit 3 and further develop their artistic practice. They focus on the development of a body of work using the art process that demonstrates creativity and imagination, the evolution and resolution of ideas and the realization of appropriate concepts, knowledge and skills. At the end of this unit, student present a body of work and at least one finished artwork accompanied by documentation of artistic practice. Students select appropriate aspects of the Analytical Frameworks as a structure for the reflection and documentation of their artworks.

Area of Study 1 – Discussing and Debating Art.
In this area of study students discuss art ideas and issues and the varying interpretations about the role of art in society. Students select a statement about an art idea and related issues that they research, analyse and interpret. They refer to a range of resources and viewpoints to examine opinions and arguments, and refer to artists and artworks to support and develop their own ideas. The range of commentaries and viewpoints may both support and challenge the selected art idea and related issues.

Students use relevant aspects of the Analytical Frameworks to provide structure for their analysis and discussion.
In this area of study students must investigate:

- One art idea and related issues.
- At least one artist not studied in Unit 3 and a minimum of one artwork by that artist.
- A range of viewpoints as presented in attributed commentaries relating to the selected art idea and related issues and artwork/s.

Area of Study 2 – Realisation and Resolution.
In this area of study students continue to develop the body of work begun in Unit 3 by using the art process and work toward resolved ideas and concepts leading to at least one finished artwork, in addition to the work that was completed for Unit 3. They reflect on personal concepts and ideas as they progressively develop and refine their artworks. Students continue to use the Analytical Frameworks to document their artistic practice, reflecting on exploration, experimentation, further development, refinement and resolution of a body of work.

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to use the Analytical Frameworks to analyse and interpret artworks produced before 1990 and since 1990, and compare the meanings and messages of these artworks. To achieve this outcome the student will draw on key knowledge and key skills outlined in Area of Study 1. 2. On completion of this unit the student should be able to use the art process to produce at least one artwork, and use the Analytical Frameworks to document and evaluate the progressive development and refinement of their artistic practice.	1. On completion of this unit the student should be able to examine and analyse an art idea and its related issues to inform their viewpoint. Students discuss and debate art issues. They research, analyse and interpret artworks related to their discussion. They refer to a range of resources and commentaries to examine and debate opinions and arguments, and refer to artists and artworks to support their points of view. They use relevant aspects of the analytical frameworks to provide structure for their analysis. 2. On completion of this unit the student should be able to apply the art process to progressively communicate ideas, directions and personal concepts in a body of work that includes at least one finished artwork and use selected aspects of the Analytical Frameworks to underpin reflections on their art making.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Written response due week 4 term two. 2. Folio of developmental work – Not formally assessed until Unit 4.	1. Written response completed during class time week 6 term three. 2. Folio of development and resolved artworks due end of term three.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Art students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. The percentage of each part of the course in relation to the final study score for unit 3 & 4 are as follows:

- Unit 3 School Assessed course work (theory): 10 percent
- Unit 4 School Assessed course work (theory): 10 percent
- Unit 3 & 4 School Assessed Task (practical): 50 percent
- End of year examination: 30 percent

BIOLOGY

Thematic Statement
God shows special care for all his creatures not just man alone and His care is exercised towards them (Psalm 104:10-23) He has fitted them into His created world in a loving and benevolent way yet they exist in a fallen and sin cursed world as a result of man's transgression. In the study of Biology we begin to gain an understanding of the common origins of man and other created creatures (formed out of the ground) and the disunity that occurs between them due to God's separate creation and purpose for different parts of the biological world.

In a Christian study of Biology we must recognize man's position under God as ruler of creation and the animal's direct relationship to God, both of which must be considered in unison. Thus, Biology becomes an important source of information about the natural world and the place of people within it. As Christians, we must develop increasing awareness within our community of the need to understand and sustain the complex interaction of life on earth.

In particular, we have a need to study the human body, its workings, development and changes and how these interact with the rest of the created order. This should prepare students to evaluate then contribute to discussion on important issues such as medical research, genetics, conservation, etc from a Biblical world view.

Rationale
VCE Biology enables students to investigate the processes involved in sustaining life at cellular, system, species and ecosystem levels. In understanding 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 endeavor 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.

Entry
There are no prerequisites for entry to Units 1, 2 & 3. Students must undertake Unit 3 prior to undertaking Unit 4. Students entering Unit 3 without Units 1 and/or 2 may be required to undertake additional preparation as prescribed by their teacher. Units 1 to 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.

BIOLOGY UNITS 1 & 2

Unit 1 – How Do Living Things Stay Alive?
In this unit students are introduced to some of the challenges to an organism in sustaining life. Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, and the requirements for sustaining cellular processes in terms of inputs and outputs. They analyse types of adaptations that enhance the organism's survival in a particular environment and consider the role homeostatic mechanisms play in maintaining the internal environment. Students investigate how a diverse group of organisms form a living interconnected community that is adapted to, and utilises, the abiotic resources of its habitat. The role of a keystone species in maintaining the structure of an ecosystem is explored. Students consider how the planet's biodiversity is classified and the factors that affect the growth of a population.

A student practical investigation related to the survival of an organism or species is undertaken in Area of Study 3. The investigation draws on content from Area of Study 1 and/or Area of Study 2.

Unit 2 – How is Continuity of Life Maintained?
In this unit students focus on cell reproduction and the transmission of biological information from generation to generation. Students learn that all cells are derived from pre-existing cells through the cell cycle. They examine the process of DNA replication and compare cell division in both prokaryotic and eukaryotic organisms. Students explore the mechanisms of asexual and sexual reproductive strategies, and consider the advantages and disadvantages of these two types of reproduction. The role of stem cells in the differentiation, growth, repair and replacement of cells in humans in examined, and their potential use in medical therapies is considered.

Students use chromosome theory and terminology from classical genetics to explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. They explore the relationship between genes, the environment and the regulation of genes in giving rise to phenotypes. They consider the role of genetic knowledge in decision making about the inheritance of autosomal dominant, autosomal recessive and sex-linked genetic conditions. In this context the uses of genetic screening and its social and ethical issues are examined.

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

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to investigate and explain how cellular structures and systems function to sustain life.	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.
2. On completion of this unit the student should be able to explain how various adaptation 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.	2. On completion of this unit the student should be able to apply an understanding of genetics to describe patterns of inheritance, analyse pedigree chards, predict outcomes of genetic crosses and identify the implications of the uses of genetic screening and decision making related to inheritance. To achieve this outcome the student will draw on key knowledge outlined in Area of Study 2 and the related key science skills.
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.	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.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
• Annotations of a practical work folio of activities and investigations • Test • Scientific poster of student investigation • Maintenance of logbook	• Reflective learning blog related to activities and issues • Bioinformatics exercise • Digital presentation on research investigation • Maintenance of logbook

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

BIOLOGY UNITS 3 AND 4

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 of whether animal, plant, fungus or microorganism. The convergence of cytology, genetics and biochemistry makes cell biology one of the most rapidly evolving disciplines in contemporary biology.

In this unit students investigate the workings of the cell from several perspectives. They explore the importance of the insolubility of the plasma membrane in water and its differential permeability to specific solutes in defining the cell, its internal spaces and the control of the movement of molecules and ions in and out of such spaces. Students consider base pairing specificity, the binding of enzymes and substrates, the response of receptors to signaling molecules and reactions between antigens and antibodies to highlight the importance of molecular interactions based on the complementary nature of specific molecules.

Students study the synthesis, structure and function of nucleic acids and proteins as key molecules in cellular processes. They explore the chemistry of cells by examining the nature of biochemical pathways, their components and energy transformations. Cells communicate with each other using a variety of signalling molecules. Students consider the types of signals, the transduction of information within the cell and cellular responses. At this molecular level students study the human immune system and the interactions between its components to provide immunity to a specific antigen.

Unit 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. The accumulation of changes over time is considered as a mechanism for biological evolution by natural selection that leads to the rise of new species. Students examine change in life forms using evidence from paleontology, biogeography, developmental biology and structural morphology. They explore how technological developments in the fields of comparative genomics, molecular homology and bioinformatics have resulted in evidence of change through measurements of relatedness between species.

Students examine the structural and cognitive trends in the human fossil record and the interrelationships between human biological and cultural evolution. The biological consequences, and social and ethical implications, of manipulating the DNA molecule and applying biotechnologies is explore for both the individual and the species.

A student practical investigation related to cellular processes and/or biological change and continuity over time is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4, and is assessed in Unit 4, Outcome 3.

Unit 3 Outcomes	Unit 4 Outcomes
1. 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. 2. 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.	1. Analyse evidence for evolutionary change, explain how relatedness between species is determined, and elaborate on the consequences of biological change in human evolution. 2. 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. 3. 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.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
The student's level of achievement in Unit 3 will be determined by school-assessed coursework	The student's level of achievement in Unit 4 will be determined by school-assessed coursework and end-of-year examination.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Biology students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. The percentage of each part of the course in relation to the final study score for unit 3 & 4 are as follows:

- Unit 3 School Assessed course work: 16 percent
- Unit 4 School Assessed course work: 24 percent
- End of year examination: 60 percent

BUSINESS MANAGEMENT

Thematic Statement

The Bible has numerous verses that discuss the importance of the good management of business or money. In Luke 14, verse 28, Jesus asks the crowd *"would any of you think of building a tower without first sitting down and calculating the cost."* Jesus also told the parable of a man of noble birth, who called 10 of his servants to account for his money. He then rewarded the servants according to how well they managed the money that was given to them. Jesus also told a similar story about three servants and the talents (a denomination of money) they were asked to manage.

Rationale

This study is invaluable for students who want a good understanding of the business world. The business world is made up of a wide variety of organisations that vary in size, ownership, objectives, resources and location. Business Management examines the ways in which people at different levels within a business organisation manage the resources to achieve the objectives of the organisation.

Entry

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

BUSINESS MANAGEMENT UNITS 1 & 2

Unit 1

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. New business ideas are formed through a range of sources, such as identifying a gap in the market, technological developments and changing customer needs. Students explore some of the issues that need to be considered before a business can be established.

Area of Study 2 – External Environment
The external environment consists of all elements outside a business that may act as pressures or forces on the operations of a business. 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
The internal environment affects the approach to and success of business planning. The owner will generally have more control over the activities, functions and pressures that occur within a business. These factors, such as business models, legal business structures and staffing, will also be influenced to some extent by the external environment and consider how planning decisions may have an effect on the ultimate success of a business.

Unit 2

This unit focuses on the establishment phase of a business' life. Establishing a business involves complying with legal requirements as well as making decisions about how best to establish a system of financial record keeping, staff the business and establish a customer base. In this unit students examine the legal requirements that must be satisfied to establish a business. They investigate the essential features of effective marketing and consider the best way to meet the needs of the business in terms of staffing and financial record keeping. Students analyse various management practices in this area by applying this knowledge to contemporary business case studies from the past four year.

Area of Study 1 – Legal Requirements and Financial Considerations
It is essential to deal with legal and financial matters when establishing a business. 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 requirement are not met.

Area of Study 2 – Marketing a Business

Establishing a strong customer base for a business is an important component of success. 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 presences, 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

Staff are one of the business' greatest assets and are an important consideration when establishing a business. The quantity and quality of staff has a direct link to business productivity and the achievement of business objectives. In this area of study students examine the staffing requirements that will meet the needs and objectives of the business and contribute to productivity and effectiveness. They research the processes undertaken by the business with relation to the recruitment, selection and induction of staff. 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.

Unit 1 Outcomes	Unit 2 Outcomes
1. Describe how and why business ideas are created and developed, and explain the methods by which a culture of business innovation and entrepreneurship may be fostered in a nation	1. Identify and explain a legal and financial consideration when commencing a business
2. Describe the external environment of a business and explain how the macro and operating factors within it may affect business planning.	2. Analyse effective marketing strategies and processes.
3. Describe the internal business environment and analyse how factors from within it may affect business planning.	3. Apply and analyse effective staffing strategies and tactics.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
1. Case study analysis 2. Business research (print and online) 3. Development of a business plan 4. Interview and report of contact with business 5. Business simulation exercise 6. School based short-term business activity 7. Essay 8. Test 9. Computer modelling 10. Business survey and analysis 11. Analytical exercise 12. Mid-year Examination	1. Case study analysis 2. Business research (print and online) 3. Development of a business plan 4. Interview and report of contact with business 5. Business simulation exercise 6. School based short-term business activity 7. Essay 8. Test 9. Computer modelling 10. Business survey and analysis 11. Analytical exercise 12. End of year Examination

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

BUSINESS MANAGEMENT UNITS 3 & 4

Unit 3

In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relations between each of these. Students investigate strategies to manage both staff and business operations to meet objectives. Students develop an understanding of the complexity and challenge of managing businesses and through the use of contemporary business case studies from the past four years have the opportunity to compare theoretical perspectives with current practice.

Area of Study 1 – Business Foundations
This area of study introduces students to the key characteristics of businesses and their stakeholders. Student 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. They consider Maslow's Hierarchy of Needs, Locke and Latham's Goal Setting Theory and Lawrence and Nohria's Four Drive Theory of motivation. Using the theories and motivation strategies students propose and justify possible solutions to employee management in contemporary business case studies. Students gain an overview of workplace relations, including the main participants and their roles in the dispute resolution process.

Area of Study 3 – Operations Management
The production of goods and services is the core objective of businesses. Effective management of the process of transforming inputs into outputs is vital to the success of a business, both in terms of maximizing the efficiency and effectiveness of the production process and meeting the needs of stakeholders. 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.

Unit 4

Businesses are under constant pressure to adapt and change to meet their objectives. In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management. Using a contemporary business case study from the past four years, student evaluate business practice against theory.

Area of Study 1 – Reviewing Performance – The Need for Change
In this area of study students develop their understanding of the need for change. Managers regularly review and evaluate business performance through the use of key performance indicators and use the results to make decisions concerning the future of a business. Managers can take both a proactive and reactive approach to change. Students investigate the ways a business can search for new business opportunities as a source of future business growth and consider current forces for change on a business. They apply Lewin's Force Field Analysis theory to contemporary case studies and consider approaches to strategic management, using Porter's (1985) Generic Strategies.

Area of Study 2 – Implementing Change
In this area of study students explore how businesses respond to evaluation data. It is important for managers to know where they want to be positioned for the future before implementing a variety of strategies to bring about the desired change. Students consider the importance of leadership in change management, how leaders can inspire change and the effect change can have on the stakeholders in a business. They consider the principles of Seng's Learning Organisation and apply the Three Step Change Model (Lewin) in implementing change in a business. 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.

Unit 3 Outcomes	Unit 4 Outcomes
1. Discuss the key characteristics of businesses and stakeholders, and analyse the relationship between corporate culture, management styles and management skills.	1. Explain the way business change may come about, use key performance indicators to analyse the performance of a business, discuss the driving and restraining forces for change and evaluate management strategies to position a business for the future.
2. Explain theories of motivation and apply them to a range of contexts, and analyse and evaluate strategies related to the management of employees.	2. Evaluate the effectiveness of a variety of strategies used by managers to implement change and discuss the effect of change on the stakeholders of a business.
3. Analyse the relationship between business objectives and operations management, and propose and evaluate strategies to improve the efficiency and effectiveness of business operations.	

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Structured questions. 2. Test open book analysis of a case study. 3. Media Analysis.	1. Structured questions. 2. Test open book analysis of a case-study. 3. End of year examination (Units 3 &4)

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Business Management students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination.

CHEMISTRY

Chemistry is a key science in explaining the workings of God's creation through an understanding of the properties and interaction of substances that make up matter. "Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear" (Hebrews 11:3). Most processes, from the formation of molecules in outer space to the complex biological interactions occurring in cells, can be described by chemical theories. Although there are no sharp boundaries between sciences such as chemistry, physics and biology, chemistry is used to explain natural phenomena at the molecular level, as well as create new materials such as medicines and polymers. The development of modern society has been intimately linked with the successful integration of chemical knowledge into new technologies. This continues with emerging fields such as biotechnology and nanotechnology.

Aims of the Course

This study is designed to enable students to:

- strengthen their faith in our all-wise and all- powerful God by developing their understanding of the language, processes and major ideas of chemistry;
- understand the precision and design of the physical world that God created, through experimental evidence in developing and generating new ideas and knowledge in chemistry;
- develop an appreciation for God's natural gifts, through their understanding of the ways in which chemical knowledge is organised, challenged, revised and extended;
- develop skills in the design and safe conduct of practical investigations including risk assessment, hazard identification and waste management and to use them wisely as a good steward;
- develop the skills and knowledge required to complete experimental processes and procedures and undertake research investigations to learn many truths about God's world;
- assess the quality of assumptions and the limitations of models, data and conclusions that will enable them to see the relation and agreement between God's world and His word, the Bible;
- conduct practical investigations to collect, interpret, and analyse data and evidence, and present conclusions, develop skills in the effective communication of chemical ideas to a range of audiences and be aware of the ethics of scientific research that apply to investigations in chemistry;
- be aware of the social, economic and environmental impacts of current and emerging areas of chemistry and associated technologies.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Students entering Unit 3 without Units 1 and/or 2 may be required to undertake additional readings. Units 1 to 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.

To successfully understand Chemistry you will need very good Mathematics skills. It is therefore expected that you will study Mathematical Methods to compliment your study of this subject.

Grade Boundaries:

Chemistry Units 3 & 4: Achieving 70% in Chemistry Units 1 & 2

CHEMISTRY UNITS 1 & 2

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 and consider how spectral evidence led to the Bohr model and subsequently to the Schrödinger model. Students examine the periodic table as a unifying framework into which elements are placed based upon similarities in their electronic configurations. In this context students explore patterns and trends of, and relationships between, 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 apply their knowledge of the electronic structures of compounds are formed, explore their crystalline structures and investigate how changing environmental conditions may change their properties. 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.

Areas 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 make from non-metals including molecular substances, covalent lattices, carbon nanomaterials, organic compounds and polymers. Students investigate the relationship between the electronic configurations of non-metallic atoms and the resultant structures and properties of a range of molecular substances and covalent lattices. 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. They apply rules of systematic nomenclature to each of these chemical families. Students investigate useful materials that are made from non-metals, and the use of carbon-based nanoparticles for specific applications. Student apply quantitative concepts to molecular compounds, including mole concept and percentage composition by mass, and determine the empirical and molecular formulas of given compounds.

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. As a result, patterns and relationships in structures and properties of substances have been identified, applied and modified, and a vast range of useful materials and chemicals has been produced. This research and development is ongoing and new discoveries are being made at an accelerating rate. In this area of study students apply and extend their knowledge and skills developed in Area of Study 1 and/or Area of Study 2 to investigate a selected question related to materials. They apply critical and creative thinking skills, science inquiry skills and communication skills to conduct and present the findings of an independent investigation into one aspect of the discoveries and research that have underpinned the development, use and modification of useful material or chemicals. Students undertake a research investigation relevant to one of the following ten options. A question from the list under each option may be selected or students may develop their own research question relevant to Area of Study 1 and/or Area of Study 2 in conjunction with their teacher. For the selected questions, students outline, analyse and evaluate the relevant evidence to support their conclusions.

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 balance 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.

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, both in the laboratory and in the field, 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. They measure the solubility of substances in water, explore the relationship between solubility and temperature using solubility curves and learn to predict when a solute will dissolve or crystallise out of solution. 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 gravimetric and volumetric analyses of aqueous solutions and water samples. Instrumental techniques include the use of colorimetry and/or UV-visible spectroscopy to estimate the concentrations of coloured species in solution, atomic absorption spectroscopy data to determine the concentration of metal ions in solution and high performance liquid chromatography data to calculate the concentration of organic compounds in solution.

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. The investigation relates to knowledge and skills developed in Area of Study 1 and/or Area of Study 2 and is conducted by the student through laboratory work and/or fieldwork. The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data (which may include collecting water samples), organise and interpret the data and reach a conclusion in response to the question.

Unit 1 Outcomes	Unit 2 Outcomes
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.	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.
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.	2. On completion of this unit the students should be able to measure amounts of dissolved substances in water and analyse water samples for salts, organic compounds and acids and bases.
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.	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.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
Students will be given tasks selected from the following list: 1. Outcomes 1 & 2 • 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	Students will be given tasks selected from the following list: 1. Outcomes 1 & 2 • 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 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

2. Outcome 3 • A report of an independent investigation of a topic selected from Area of Study 1 and/or Area of Study 2, using an appropriate format, for example digital presentation, oral communication or written report. 4. Tests and Examination	2. Outcome 3 • A report of an independent investigation of a topic selected from Area of Study 1 and/or Area of Study 2, using an appropriate format, for example digital presentation, oral communication or written report 3. Tests and Examination

CHEMISTRY UNITS 3 AND 4

Unit 3 – How Can Chemical Processes be Designed to Optimise Efficiency?

Area of Study 1 – What are the Options for Energy Production?
In this area of study students focus on analysing and comparing a range of energy resources and technologies, including fossil fuels, biofuels, galvanic cells and fuel cells, with reference to the energy transformations and chemical reactions involved, energy efficiencies, environmental impacts and potential applications. Students use the specific heat capacity of water and thermochemical equations to determine the enthalpy changes and quantities of reactants and products involved in the combustion reactions of a range of renewable and non-renewable fuels. Students conduct practical investigations involving redox reactions, including the design, construction and testing of galvanic cells, and account for differences between experimental findings and predictions made by using the electrochemical series. They compare the design features, operating principles and uses of galvanic cells and fuel cells, and summarise cell processes by writing balanced equations for half and overall cell processes.

Area of Study 2 – How can the Yield of a Chemical Product be Optimised?
In this area of study students explore the factors that increase the efficiency and percentage yield of a chemical manufacturing process while reducing the energy demand and associated costs. Students investigate how the rate of a reaction can be controlled so that it occurs at the optimum rate while avoiding unwanted side reactions and by-products. They explain reactions with reference to the collision theory including reference to Maxwell-Boltzmann distribution curves. The progression of exothermic and endothermic reactions, including the use of a catalyst, is represented using energy profile diagrams. Students explore homogeneous equilibrium systems and apply the equilibrium law to calculate equilibrium constants and concentrations of reactants and products. They investigate Le Chatelier's principle and the effect of different changes on an equilibrium system and make predictions about the optimum conditions for the production of chemicals, taking into account rate and yield considerations. Students represent the establishment of equilibrium and the effect of changes to cells with reference to their basic design features and purpose, their operating principles and the energy transformations that occur. They examine the discharging and recharging processes in rechargeable cells, and apply Faraday's laws to calculate quantities in electrochemistry and to determine cell efficiencies.

Unit 4 – How are Organic Compounds Categorised, Analysed and Used?

Area of Study 1 – How can the Diversity of Carbon Compounds be Explained and Categorised?
In this area of study students explore why such a vast range of carbon compounds is possible. They examine the structural features of members of several homologous series of compounds, including some of the simpler structural isomers, and learn how they are represented and named. Students investigate trends in the physical and chemical properties of various organic families of compounds. They study typical reactions of organic families and some of their reaction pathways, and write balanced chemical equations for organic syntheses. Students learn to deduce or confirm the structure and identity of organic compounds by interpreting data from mass spectrometry, infrared spectroscopy and proton and carbon-13 nuclear magnetic resonance spectroscopy.

Area of Study 2 – What is the Chemistry of Food?
Food contains various organic compounds that are the source of both the energy and the raw materials that the human body needs for growth and repair. In this area of study students explore the importance of food from a chemical perspective. Students study the major components of food with reference to their structures, properties and functions. They examine the hydrolysis reactions in which foods are broken down, the condensation reactions in which new biomolecules are formed and the

role of enzymes, assisted by coenzymes, in the metabolism of food. Students study the role of glucose in cellular respiration and investigate the principles of calorimetry and its application in determining the differences in structures of natural and artificial sweeteners, the chemical significance of the glycemic index of foods, the rancidity of fats and oils, and the use of the term 'essential' to describe some amino acids and fatty acids in the diet.

Area of Study 3 – Practical Investigation

A student-designed or adapted practical investigation related to energy and/or food is undertaken in either Unit 3 or Unit 4, or across both Units 3 and 4. The investigation relates to knowledge and skills developed across Unit 3 and/or Unit 4. The investigation requires the student to identify an aim, develop a question, formulate a hypothesis and plan a course of action to answer the question and that complies with safety and ethical requirements. The student then undertakes an experiment that involves the collection of primary qualitative and/or quantitative data, analyses and evaluates the data, identifies limitations of data and methods, links experimental results to science ideas, reaches a conclusion in response to the question and suggests further investigations which may be undertaken. Findings are communicated in a scientific poster format according to the template provided. A practical logbook must be maintained by the student for record, authentication and assessment purposes.

Unit 3 Outcomes	Unit 4 Outcomes
1. 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.	1. 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.
2. 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.	2. 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. 3. Design and undertake a practical investigation related to energy and/or food, and present methodologies, findings and conclusions in a scientific poster.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
Students will be given tasks selected from the following list: 1. Analysis and evaluation of stimulus material Or A report on laboratory investigation. Or A comparison of two electricity-generating cells. Or A reflective journal/blog related to selected activities or in response to an issue. 2. At least one task selected from: • Annotations of at least two practical activities from a practical logbook. • A report of a student investigation • An evaluation of research • Analysis of data including generalisations and conclusions • Media analysis/response • A graphic organiser illustrating a chemical process • An analysis of an unfamiliar chemical manufacturing process or electrolytic cell • A response to a set of structured questions.	Students will be given tasks selected from the following list: 1. At least one task selected from: • Annotations of at least two practical activities from a practical logbook • A report of a student investigation • Analysis of data including generalisations and conclusions • Media analysis/response • A response to a set of structured questions • A reflective learning journal/blog related to comparison of organic structures or pathways. 2. Response to stimulus material Or A report of a laboratory investigation Or A comparison of food molecules Or A reflective learning journal/blog related to selected activities or in response to an issue. 3. A structured scientific poster according to the VCAA standard template

Levels of Achievement

- Unit 3 School-assessed coursework: 16 percent
- Unit 4 School-assessed coursework: 24 percent
- End of year examination: 60 percent

ENGLISH

Rationale
Effective participation in Australian society depends on an ability to understand the various uses of the English language and to employ them effectively for a range of purposes.

Lighthouse Christian College seeks to develop the language skills of students to enable them to become responsible, creative and positive members of society, who are able to coherently articulate their faith in Jesus Christ.

The study of English 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.

Students have different social and cultural backgrounds. This study is designed to recognise and value this diversity and to foster self-esteem in all students by enabling them to use the English language confidently.

To emphasise the importance of treating language development as an integrated process, the study promotes classroom activities which integrate the skills of reading, writing, speaking, listening and thinking. It supports a focus on learning situations in which students take increasing responsibility for their language development.

Structure
The study is made up of 4 units.

ENGLISH UNITS 1 AND 2

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

Areas of Study
1. Reading and Creating Texts
2. Analysing and Presenting Argument

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

Areas of Study
1. Comparing Texts
2. Analysing and Presenting Argument

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to produce analytical and creative responses to texts.	1. On completion of this unit the student should be able to compare the presentation of ideas, issues and themes in two texts.
2. On completion of this unit the student should be able to analyse how argument and persuasive language can be used to position audiences, and create their own texts intended to position audiences.	2. On completion of this unit the student should be able to identify and analyse how argument and persuasive language are used in text/s that attempt to influence an audience, and create a text which presents a point of view.

Units 1 & 2 Assessment Tasks
1. Produce an analytical and a creative response to a text.
2. Analyse how arguments can position audiences and create texts that position audiences.
3. Compare the presentation of ideas, issues and themes in two texts.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

ENGLISH UNITS 3 AND 4

Unit 3
The focus of this unit is on reading and responding both orally and in writing to a range of texts. Analyse how the authors of texts create meaning and the different ways in which texts can be interpreted.

Areas of Study
1. Reading and Responding
2. Analysing Argument
3. Listening to texts (EAL only)

Unit 4
The focus of this unit is on reading and responding in writing to a range of texts in order to analyse their construction and provide an interpretation.

Areas of Study
1. Reading and Creating
2. Analysing and Presenting

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to produce an analytical interpretation of a selected text, and a creative response to a different selected text. 2. On completion of this unit the student should be able to analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.	1. On completion of this unit the student should be able to produce a detailed comparison which analyses how two selected texts present ideas, issues and themes. 2. On completion of this unit the student should be able to construct a sustained and reasoned point of view on an issues currently debated in the media.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Produce an analytical interpretation of a selected text, and a creative response to a different selected text. 2. Analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media.	1. Produce a detailed comparison which analyses how two selected texts present ideas, issues and themes. 2. Construct a sustained and reasoned point of view on an issue currently debated in the media.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of English students' level of achievement will be determined by school-assessed coursework and an end-of-year examination. Percentage contributions to the study score in English are as follows:

- Unit 3 school-assessed coursework: 25 percent
- Unit 4 school-assessed coursework: 25 percent
- End of year examination: 50 percent

ENGLISH AS AN ADDITIONAL LANGUAGE

Eligibility for English as an Additional Language (EAL) status at Units 1 and 2 level is a matter for school decision. At Units 3 and 4 level students need to meet the Victorian Curriculum and Assessment Authority criteria for enrolment in EAL. VCE English as an Additional Language is suitable for students who will typically have English language proficiency at a minimum International English Language Testing System (IELTS) 4 level or its equivalent.

Rationale

The English language is central to the way in which students understand, critique and appreciate their world, and to the ways in which they participate socially, economically and culturally in Australian society.

The study of English encourages the development of literate individuals capable of critical and imaginative thinking, aesthetic appreciation and creativity. The mastery of the key knowledge and skills described in this study design underpins effective functioning in the contexts of study and work as well as productive participation in a democratic society in the twenty-first century.

Pre-requisites

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education.

Levels of Achievement

Units 1 and 2

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

Units 3 and 4

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to produce an analytical interpretation of a selected text, and a creative response to a different selected text. 2. On completion of this unit the student should be able to analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media. 3. On completion of this unit the student should be able to comprehend a spoken text.	1. On completion of this unit the student should be able to produce a detailed comparison which analyses how two selected texts present ideas, issues and themes. 2. On completion of this unit the student should be able to construct a sustained and reasoned point of view on an issue currently debated in the media.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Produce an analytical interpretation of a selected text, and a creative response to a different selected text. 2. Analyse and compare the use of argument and persuasive language in texts that present a point of view on an issue currently debated in the media. 3. Show comprehension of a spoken text.	1. Produce a detailed comparison which analyses how two selected texts present ideas, issues and themes. 2. Construct a sustained and reasoned point of view on an issue currently debated in the media.

The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 & 4. In the study of English as an Additional Language students' level of achievement will be determined by school-assessed coursework and an end of year examination.

Percentage contributions to the study score in English as an Additional Language are as follows:

- Unit 3 school-assessed coursework: 25 percent
- Unit 4 school-assessed coursework: 25 percent
- End of year examination: 50 percent

FOOD STUDIES

VCE Food Studies is the study of food and its effects on our daily lives. It takes an interdisciplinary approach to the exploration of food, with an emphasis on extending food knowledge and skills and building individual pathways to health and wellbeing through the application of practical food skills. VCE Food Studies provides a framework for informed and confident food selection and food preparation within today's complex architecture of influences and choices.

Students explore food from a wide range of perspectives. They study past and present patterns of eating, Australian and global food production systems and the many physical and social functions and roles of food. They research economic, environmental and ethical dimensions of food and critically evaluate information, marketing messages and new trends. Students devise practical ways to transform their knowledge into positive food skills and behaviours that develop resilience in themselves as consumers of food.

Practical work is integral to Food Studies. In the context of Food Studies, practical activities could include cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling and taste-testing, guest speakers, industry visits, market tours, product analysis or scientific experiments.

Rationale

Australia has a varied and abundant food supply, and food and cooking have become mainstays of digital media and publishing. Paradoxically, however, many people do not have access to a secure varied food supply and many Australians, amid a variety of influences, consume food and beverage products that may harm their health. This study examines the background to this abundance and its associated problems. It fosters broad awareness and prompts resilient solutions. VCE Food Studies is designed to build the capacities of students to make informed, sustainable and healthy food choices. Students develop their understanding of food whiles acquiring skills that enable them to take greater ownership of their food decisions and eating patterns. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, food manufacturing and hospitality.

FOOD STUDIES UNITS 1 AND 2

Unit 1 – Food Origins
This unit focuses on food from historical and cultural perspectives. Students investigate the origins and roles of food through time and across the world. In Area of Study 1 students explore how humanity has historically sourced its food, examining the general progression from hunter-gatherer to rural-based agriculture, to today's urban living and global trade in food. Students consider the origins and significance of food through inquiry into particular food-producing regions of the world.

In Area of Study 2 students focus on Australia. They look at Australian indigenous food prior to European settlement and how food patterns have changed since, particularly through the influence of food production, processing and manufacturing industries and immigration. Students investigate cuisines that are part of Australia's culinary identity today and reflect on the concept of an Australian cuisine.

They consider the influence of technology and globalisation on food patterns. Throughout this unit students complete topical and contemporary practical tasks to enhance, demonstrate and share their learning with others.

Unit 2 – Food Makers
In this unit students investigate food systems in contemporary Australia. Area of Study 1 focuses on commercial food production industries, while Area of Study 2 looks at food production in small-scale domestic settings, as both a comparison and complement to commercial production. Students gain insight into the significance of food industries to the Australian economy and investigate the capacity of industry to provide safe, high-quality food that meets the needs of consumers.

Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial products. They consider the effective provision and preparation of food in the home, and analyse the benefits and challenges of developing and using practical food skills in daily life. In demonstrating their practical skills, students design new food products and adapt recipes to suit particular needs and circumstances. They consider the possible extension of their role as small-scale food producers by exploring potential entrepreneurial opportunities.

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to identify and explain major factors in the development of a globalised food supply, and demonstrate adaptations of selected food from earlier cuisines through practical activities.	1. On completion of this unit the student should be able to describe Australia's major food industries, analyse relationships between food suppliers and consumers, discuss measures in place to ensure a safe food supply and design a brief and a food product that demonstrates the application of commercial principles.

2. On completion of this unit the student should be able to describe patterns of change in Australia's food industries and cultures, and use foods indigenous to Australia and those introduced through migration in the preparation of food products.	2. On completion of this unit the student should be able to compare and evaluate similar foods prepared in different settings, explain the influences on effective food provision and preparation in the home, and design and create a food product that illustrates potential adaption in a commercial context.

Unit 1 Assessment Tasks	**Unit 2 Assessment Tasks**
1. A range of practical activities, with records that reflect on two of the practical activities that use ingredients found in earlier cultures. Records can include production plans and evaluations of products or analysis of dietary intake. In addition, at least one task for the assessment of outcome one should be selected from the following: • A short written report: media analysis, research inquiry, historical timeline, comparative food-testing analysis or product evaluation. • An oral presentation • A practical demonstration • A video or podcast 2. A range of practical activities, with records that reflect on two of the practical activities that use ingredients indigenous to Australia and/or ingredients introduced through migration. Records can include production plans and evaluations of products or analysis of dietary intake. In addition, at least one task for the assessment of outcome two should be selected from the following: • A short written report: media analysis, research inquiry, historical timeline, comparative food-testing analysis or product evaluation • An oral presentation • A practical demonstration • A video or podcast	1. Design and develop a practical food solution in response to an opportunity or a need in the food industry or school community. 2. Design and develop a practical food solution in response to an opportunity or a need in a domestic or small-scale setting.

Satisfactory Completion

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

Levels of Achievement

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

FOOD STUDIES UNITS 3 AND 4

Unit 3 – Food in Daily Life
This unit investigates the many roles and everyday influences of food. Students explore the science of food – they consider the physiology of eating, the microbiology of digestion and appreciating food. They also investigate the functional properties of food and the changes that occur during food preparation and cooking. Students analyse the scientific rationale behind the Australian Dietary Guidelines and the Australian Guide to Healthy Eating and develop their understanding of diverse nutrient requirements.

Students also investigate how communities, families and individuals change their eating patterns over time and how our food values and behaviours develop within social environments. Students inquire into the role of food in shaping and expressing identity and connectedness and the ways in which food information can be filtered and manipulated. They investigate behavioural principles that assist in the establishment of lifelong, healthy dietary patterns. The practical component of this unit enables students to understand food science terminology and to apply specific techniques to the production of everyday food that facilitates the establishment of nutritious and sustainable meal patterns.

Unit 4 – Food Issues, Challenges and Futures
In this unit students examine debates about global and Australian food systems. Students focus on issues related to the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage, and the use and management of water and land.

Students also investigate individual responses to food information and misinformation and the development of food knowledge, skills and habits to empower consumers to make discerning food choices. Students consider how to assess information and draw evidence-based conclusions, and apply this methodology to navigate contemporary food fads, trends and diets. Students' food production repertoire reflects the Australian Dietary Guidelines and the Australian Guide to Health Eating.

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to explain the processes of eating and digesting food and absorption of macronutrients, explain causes and effects of food allergies, food intolerances and food contamination, analyse food selection models, and apply principles of nutrition and food science in the creation of food products.	1. On completion of this unit the student should be able to explain a range of food systems issues, respond to a selected debate with analysis of problems and proposals for future solutions, apply questions of sustainability and ethics to the selected food issue and develop and create a food repertoire that reflects personal food values and goals.
2. On completion of this unit the student should be able to explain and analyse factors affecting food access and choice, analyse the influence that shape an individual's food values, beliefs and behaviours, and apply practical skills to create a rage of healthy meals for children and families.	2. On completion of this unit the student should be able to explain a variety of food information contexts, analyse the formation of food beliefs, evaluate a selected food trend, fad or diet and create food products that meet the Australian Dietary Guidelines.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
Outcome 1 • A range of practical activities and records of two practical activities related to the functional properties of components of food. • Any one or a combination of the following: o A short written report: media analysis, research inquiry, structured questions, case study analysis o An annotate visual report o An oral presentation or a practical demonstration o A video or podcast	Outcome 1 • A range of practical activities and records of two practical activities related to sustainable and/or ethical food choices. • A written report that includes a selected food-related topic, explanation of concerns related to environment, ethics and/or equity, analysis of work being done to solve problems and support solutions, and a conclusion outlining major findings and suggested set of practical guidelines for food consumers.
Outcome 2 • A range of practical activities and records of two practical activities related to healthy meals for children and families. • Any one or a combination of the following: o A short written report: media analysis, research inquiry, structure questions, case study analysis o An annotated visual report o An oral presentation or a practical demonstration o A video or podcast	Outcome 2 • A range of practical activities and records of two practical activities related to healthy food choices based on the Australian Guide to Healthy Eating. • Anyone of the following: o A short written report: media analysis, research inquiry, structure questions, case study analysis o An annotated visual report o An oral presentation or a practical demonstration o A video or podcast

Satisfactory Completion

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

Levels of Achievement

The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of VCE Food Studies students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. Percentage contributions to the study score in Food Studies are as follows:

- Unit 3 school assessed coursework: 30 percent
- Unit 4 school assessed coursework: 30 percent
- End of year examination: 40 percent

GEOGRAPHY

Geography explores the wonder of God's creation. Students develop awe as they consider the vastness and interconnectedness of the Creation and God's continuing delight in sustaining it. Students learn to identify the repercussions of sin on Earth. Selfishness and greed have environmental, social, political and economic consequences.

The study of Geography is a structured way of exploring, analysing and understanding the characteristics of places that make up our world. Geographers are interested in key questions concerning places and geographic phenomena: What is there? Where is it? Why is it there? What are the effects of it being there? How is it changing over time and how could, and should, it change in the future? How is it different from other places and phenomena? How are places and phenomena connected?

Students explore these questions through fieldwork and investigation of a wide range of secondary sources. These methods underpin the development of a unique framework for understanding the world, enabling students to appreciate its complexity, the diversity and interactions of its environments, economics and cultures, and the processes that helped form and transform them.

Ten key geographic concepts underpin the study – place, scale, distance, distribution, movement, region, process, change, spatial association and sustainability. These concepts are used in the exploration of each area of study to assist in the observation, description, interpretation and analysis and explanation of geographic phenomena.

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 its spaces and those in other parts of the world. These spatial perspectives, when integrated with historical, economic, ecological and cultural perspectives, deepen understanding of places, environments and human interactions with these.

Interpretive and analytical skills enable students to interpret information presented in a variety of formats including maps, graphs, diagrams and images.

GEOGRAPHY UNITS 1 AND 2

Unit 1 – Hazards and Disasters
In this unit students undertake an overview of hazards before investigating two contrasting types of hazards and the responses to them by people.

Hazards include a wide range of situations including those within local areas, such as fast moving traffic or the likelihood of coastal erosion, to regional and global hazards such as drought and infectious disease. Students examine the processes involved with hazards and hazard events, including their causes and impacts, human responses to hazard events and interconnections between human activities and natural phenomena. This unit investigates how people have responded to specific types of hazards, including attempts to reduce vulnerability to, and the impact of, hazard events.

Unit 2 – Tourism
In this unit students investigate the characteristics of tourism, with particular emphasis on where it has developed, its various forms, how it has changed and continues to change and its impacts on people, places and environments.

The study of tourism at local, regional and global scales emphasises the interconnection within and between places. There is an interconnection between places tourists originate from and their destinations through the development of communication and transport infrastructure, employment, together with cultural preservation and acculturation. The growth of tourism at all scales requires careful management to ensure environmentally sustainable and economically viable tourism. Students undertake fieldwork in this unit and report on fieldwork using the structure provided.

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to analyse, describe and explain the nature of hazards and impacts of hazard events at a range of scales. 2. On completion of this unit the student should be able to analyse and explain the nature, purpose and effectiveness of a range of responses to selected hazards and disasters.	1. On completion of this unit the student should be able to analyse, describe and explain the nature of tourism at a range of scales. 2. On completion of this unit the student should be able to analyse and explain the impacts of tourism on people, places and environments and evaluate the effectiveness of strategies for managing tourism.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
Suitable tasks for assessment in this unit are: • A fieldwork report of approximately 1500-2000 words And at least one of: • Structured questions • A case study • A report • A folio of exercises	Suitable tasks for assessment in this unit are: • A fieldwork report of approximately 1500-2000 words And at least one of: • Structured questions • A case study • A report A folio of exercises

Satisfactory Completion

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

Levels of Achievement

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

GEOGRAPHY UNITS 3 AND 4

Unit 3 – Changing the Land
This unit focuses on two investigations of geographical change: change to land cover and change to land use.

Students investigate three major processes that are changing land cover in many regions of the world. Students investigate the distribution and causes of these three processes. At a local scale student investigate the scale of change, the reasons for change and the impacts of change. Students undertake fieldwork and produce a fieldwork report using the structure provided.

Unit 4 – Human Population – Trends and Issues
In this unit students investigate the geography of human populations. They explore the patterns of population change, movement and distribution, and how governments, organisations and individuals have responded to those changes in different parts of the world.

Population movements such as voluntary and forced movements over long or short terms add further complexity to population structures and to economic, social, political and environment conditions.

Unit 3 Outcomes	Unit 4 Outcomes
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.	1. On completion of this unit the student should be able to analyse, describe and explain population dynamics on a global scale. 2. On completion of this unit the student should be able to analyse, describe and explain the nature of significant population issues and challenges in selected locations and evaluate responses.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Structured questions and fieldwork report. 2. Analysis of geographic data.	1. Analysis of geographic data 2. Structured questions.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement

The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Geography students' level of achievement will be determined by School-assessed Coursework and an external examination. Percentage contributions to the study score in Geography are as follows:

- Unit 3 school assessed coursework: 25 percent
- Unit 4 school assessed coursework: 25 percent
- End of year examination: 50 percent

HEALTH & HUMAN DEVELOPMENT

Thematic Statement
The study of Health and Human Development provides students with an opportunity to establish a sound Christian foundation in understanding God's plan and purpose for the individual, as well as a corporate responsibility for the well-being of others.

The health and development of the individual are of immense importance to God. God designed us in His image; spirit, soul and body. We are intricately and wonderfully made and every human life has inherent value and is of great worth to God.

However, as flawed individuals, we make decisions that are not always in alignment with God's word. Such decisions do not benefit our health. The impact of sin is widespread and impacts on all humanity. As Christians, not only should we pursue optimum health for our own benefit, we should also be aware of and responsive to the needs of our fellow neighbor on a local and global level.

Our instruction manual for living a healthy life (physically, socially, emotionally, mentally and spiritually) is the Bible, and our model is the life of Jesus.

Rationale
Through the study of VCE Health and Human Development, students investigate health and human development in local, Australian and global communities.

Health is seen to encompass three dimensions: physical, social and mental. Health is a dynamic condition that is influenced by complex interrelationships between individuals and biomedical and behavioural factors, as well as physical and social environments. These interrelationships are reflected in a social view of health that sees health as being created in the settings where people live and work.

The VCE Health and Human Development study approaches the concept of 'development' as a continuum. In Units 1 and 2, development encompasses four dimensions of the individual physical, intellectual, emotional and social development. This notion progresses towards human development at a societal level in Unit 4.

The study of Health and Human Development is based on the premise that health and human development needs to be promoted at an individual level, and within group and community settings at national and international levels, to maximise global development potential. This underpins the structure of the four units of Health and Human Development. The study also promotes the understanding that nutrition plays a major role in influencing both health status and individual human development.

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

HEALTH AND HUMAN DEVELOPMENT UNITS 1 & 2

Unit 1 – The Health and Development of Australia's Youth

Area of Study 1 – Understanding Health and Development
In this area of study students develop an understanding of the concepts of health and individual human development and the interrelationships that exist within and between them. Students become aware of the differing methods for measuring health status. This area of study provides students with the foundation knowledge to explore health and individual human development throughout the unit.

Area of Study 2 – Youth Health and Development
In this area of study students develop an 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

Area of Study 1 – 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.

Area of Study 2 – 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.

Area of Study 3 – 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 1 Outcomes	Unit 2 Outcomes
1. Describe the dimensions of, and the interrelationships within and between, health and individual human development, and analyse the health status of Australia's youth using appropriate measurements. 2. (a) Describe and explain the factors that impact on the health and individual human development of Australia's youth. (b) Outline health issues relevant to Australia's youth and, in relation to a specific health issue, analyse strategies or programs that have an impact on youth health and development.	1. Describe and explain the factors that affect the health and individual human development during the prenatal stage. 2. Describe and explain the factors that affect the health and individual human development of Australia's children. 3. Describe and explain the factors that affect the health and individual human development of Australia's adults.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
1. Outcome 1 – SAC 1 2. Outcome 2 – SAC 2 3. Outcome 3 – SAC 3 Possible formats: Concept Map/Poster, Presentation, Multimedia Presentation, Written Report, Written Test	1. Outcome 1 – SAC 1 2. Outcome 2 – SAC 2 3. Outcome 3 – SAC 3 Possible formats: Poster, Presentation, Multimedia Presentation, Written Report, Written Test.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

HEALTH AND HUMAN DEVELOPMENT UNITS 3 & 4

Unit 3 – Australia's Health

Area of Study 1 – 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.

Area of Study 2 – Promoting Health in Australia

In this area of study students examine different models of health and health promotion. They 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. Students 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

Area of Study 1 – 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 in investigated in relation to achieving sustainable improvements in health status and human development.

Area of Study 2 – Promoting Global Health and Human Development

Students explore 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, globally, as well as Australia's contribution to international health programs through DFAT and contributions to non-government organisations.

Unit 3 Outcomes	Unit 4 Outcomes
1. Compare the health status of Australia's population with other developed countries, explain variations in health status of population groups in Australia and discuss the role of the National Health Priority Areas in improving Australia's health status.	1. Analyse factors contributing to variations in health status between Australia and developing countries, evaluate progress towards the United Nations' Millennium Development Goals.
2. Discuss and analyse approaches to health and health promotion, and describe Australia's health system and the different roles of government and non-government organisations in promoting health.	2. Describe and evaluate programs implemented by international and Australian government and non-government organisations in promoting health, human development and sustainability.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Outcome 1 – SAC 1 – 30 mark	1. Outcome 1 – SAC 1 – 30 marks
2. Outcome 1 – SAC 2 – 30 marks	2. Outcome 1 – SAC 2 – 30 marks
3. Outcome 2 – SAC 3 – 40 marks	3. Outcome 2 – SAC 3 – 40 marks
Test conditions in any of the following formats: Written Report, Data Analysis, Case Study or Written Test.	Test conditions in any of the following formats: Written Report, Data Analysis, Case Study or Written Test.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Health & Human Development students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. Percentage contributions to the study score in Health and Human Development are as follows:

- Unit 3 school assessed coursework: 25 percent
- Unit 4 school assessed coursework: 25 percent
- End of year examination: 50 percent

HISTORY

Rationale

Time is an element of God's creation. God is sovereign and has a grand narrative which he is bringing to fulfilment. His purpose will be achieved through nations and individuals.

The study of VCE History assists students to understand themselves, others and their world, and broadens their perspective by examining people, groups, events, ideas and movements. Through studying VCE History, students develop social, political, economic and cultural understanding. They also explore continuity and change: the world is not as it has always been, and it will be subject to change in the future. In this sense, history is relevant to contemporary issues. It fosters an understanding of human agency and informs decision making in the present.

The study of history fosters the ability to ask searching questions, to engage in independent research, and to construct arguments about the past based on evidence. Historical comprehension enables a source to be understood in relation to its context; that is, students make links between the source and the world in which it was produced.

We can never know the whole past. Historical knowledge rests on the interpretation of sources that are used as evidence. Furthermore, judgements of historical significance made by historians are central to the discipline. Historians do not always agree about the meaning that is taken from the past: historical interpretations are often subject to academic and public debate. The study of history equips students to take an informed position on such matters, helping them develop as individuals and citizens.

Entry

There are no perquisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education.

HISTORY UNITS 1 & 2

Unit 1 – Twentieth Century History 1918-1939
In Unit 1 students explore the nature of political, social and cultural change in the period between the world wars.

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

The period after World War One was characterized by significant social and cultural change in the contrasting decades of the 1920s and 1930s. New fascist governments used the military, education and propaganda to impose controls on the way people lived, to exclude particular groups of people and to silence criticism. In Germany, the persecution of the Jewish people became intensified. In the USSR, millions of people were forced to work in state-owned factories and farms and had limited personal freedom. Japan became increasingly militarized and anti-western. In the USA, the consumerism and material progress of the 190s was tempered by the Great Crash of 1929. Writers, artists, musicians, choreographers and filmmakers reflected, promoted or resisted political, economic and social changes.

Unit 2 – Twentieth Century History 1945-2000
In Unit 2 students explore the nature and impact of the Cold War and challenges and changes to existing political, economic and social arrangements in the second half of the twentieth century.

The establishment of the United Nations in 1945 was intended to take an internationalist approach to avoiding warfare, resolving political tensions and addressing threats to human life and safety. The Universal Declaration of Human Rights adopted in 1948 was the first global expression of human rights.

Despite internationalist moves, the second half of the twentieth century was dominated by the competing ideologies of democracy and communism, setting the backdrop for the Cold War.

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

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to explain the consequences of the peace treaties which ended World War One, the impact of ideologies on nations and the events that led to World War Two	1. On completion of this unit the student should be able to explain the ideological divisions in the post-war period and analyse the nature, development and impact of the Cold War on nations and people, in relation to one or more particular conflicts in the period.
2. On completion of this unit the student should be able to explain patterns of social life and cultural change in one or more contexts, and analyse the factors which influenced changes to social life and culture, in the inter-war years.	2. On completion of this unit the student should be able to explain the causes and nature of challenge and change in relation to two selected contexts in the second half of the twentieth century and analyse the consequences for nations and people.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
• A historical inquiry • An analysis of primary sources • An analysis of historical interpretations • An essay	• A historical inquiry • An analysis of primary sources • An analysis of historical interpretations • An essay

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

HISTORY UNITS 3 & 4
AUSTRALIAN HISTORY

Unit 3 – Transformations: Colonial Society to Nation
In this unit students explore the transformation of the Port Phillip District (later Victoria) from the 1830s through to the end of the tumultuous gold rush decade in 1860. They consider the dramatic changes introduced as the British colonisers swiftly established themselves, taking possession of the land and then its newly discovered mineral riches.

Students examine transformations in the way of life of the Aboriginal peoples and to the environment as the European society consolidated itself. They also consider how new visions for the future created by the gold rush and the Eureka rebellion further transformed the new colony.

Students explore the type of society Australians attempted to create in the early years of the newly federated nation. Much of the legislation debated and passed by the Commonwealth Parliament was relatively advanced and Australia was seen as a social laboratory exploring new forms of rights and benefits for its citizens. Student evaluate the effect that Australian involvement in World War One had on the country's egalitarian and socially progressive aspirations.

Unit 4 – Transformations: Old Certainties and New Visions
In this unit students investigate the continuing development of the nation in the early part of the twentieth century and the dramatic changes that occurred in the latter part of the century. After World War One the process of nation building was renewed. However, world events soon intruded again into the lives of all Australians. The economic crisis of the 1930s followed by another world war redirected the nation's priorities for a time as it struggled to regain economic stability and defeat its military enemies. The experience of both the Depression and World War Two gave rise to renewed thinking by Australians about how to achieve the type of society envisaged at the time of Federation. In Area of Study 1 students focus on one of the crises faced by the nation: The Great Depression 1929-1939 or World War Two 1939-1945.

In Area of Study 2 students explore social, economic and political changes in the latter part of the twentieth century that collectively challenged and/or overturned much of Australia's earlier carefully constructed social and economic fabric. Students examine two changes drawn from: Australia's involvement in the Vietnam War, Aboriginal land rights, equality for women, new patterns of immigration and/or a global economy.

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to analyse the nature of change in the Port Phillip District/Victoria in the period 1834-1860. 2. On completion of this unit the student should be able to analyse the visions and actions that shaped the new nation from 1890-1920, and the changes and continues to these visions that resulted from participation in World War One.	1. On completion of this unit the student should be able to analyse the social, economic and political consequences of a crisis on the nation. 2. On completion of this unit the student should be able to analyse and evaluate two key social, economic and political changes in late twentieth century Australia.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
Each of the following four assessment tasks must be completed over units 3 and 4: • A historical inquiry • An analysis of primary sources • An analysis of historical interpretations • An essay	Each of the following four assessment tasks must be completed over units 3 and 4: • A historical inquiry • An analysis of primary sources • An analysis of historical interpretations • An essay

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of History: Australian History students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. Percentage contributions to the study score in Health and Human Development are as follows:

- Unit 3 school assessed coursework: 25 percent
- Unit 4 school assessed coursework: 25 percent
- End of year examination: 50 percent

LANGUAGES OTHER THAN ENGLISH
CHINESE FIRST LANGUAGE

Chinese is offered at more than one level in the VCE. Entry into these levels is governed by eligibility criteria which are published on the VCAA website and in the current VCE and VCAL Administrative Handbook.

Rationale
Language has always been a tool in the purposes of God. God spoke the world into existence. Language is both the means by which we communicate with each other and can be a barrier to communication. Communication via a common language opens up the door to sharing God's love.

The study of Language Other Than English contributes to the overall education of students, most particularly in the area of communication, but also in the areas of cross-cultural understanding, intercultural learning, cognitive development, literacy and general knowledge. It provides access to the culture of communities which use the language and promotes understanding of different attitudes and values with the wider Australian community and beyond.

The ability to communicate in another language, in conjunction with other skills, may provide opportunities for employment in fields of interpreting, social services, ethnic affairs, the tourism and hospitality industries, international relations, the arts, commerce, technology, science, education etc.

Outcomes
Outcomes define what students will know and be able to do as a result of undertaking the study.

Students demonstrate the achievement of the outcomes based on progressive development of skills in listening, speaking, reading and writing through activities and tasks organised around the areas of study. The areas of study in Units 1-4 focus on the areas of study for language, which are made up of the themes and topics, text types, kinds of writing, vocabulary and grammar. They are common to all four units of the study and are published in the study design. They are tailored to the specific qualities of the language being studied.

CHINESE FIRST LANGUAGE UNITS 1 & 2

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to establish and maintain a spoken or written exchange related to an issue of interest or concern.	1. On completion of this unit the student should be able to participate in a spoken or written exchange focusing on the resolution of an issue.
2. On completion of this unit the student should be able to listen to, read and reorganise information and ideas from spoken and written texts.	2. On completion of this unit the student should be able to listen to, read, and extract and compare information and ideas from spoken and written texts.
3. On completion of this unit the student should be able to produce a personal response to a fictional text.	3. On completion of this unit the student should be able to produce an imaginative piece in spoken or written form.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

CHINESE FIRST LANGUAGE UNITS 3 & 4

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to express ideas through the production of original texts. 2. On completion of this unit the student should be able to analyse and use information from spoken texts. 3. On completion of this unit the student should be able to exchange information, opinions and experiences.	1. On completion of this unit the student should be able to analyse and use information from written texts. 2. On completion of this unit the student should be able to respond critically to spoken and written texts which reflect aspects of the language and culture.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
School-assessed coursework and end of year examinations

- Unit 3 school-assessed coursework: 25 percent
- Unit 4 school-assessed coursework: 25 percent
- Examinations:
    - Oral component: 10 percent
    - Written component: 40 percent

LANGUAGES OTHER THAN ENGLISH CHINESE SECOND LANGUAGE

Chinese is offered at more than one level in the VCE. Entry into these levels is governed by eligibility criteria which are published on the VCAA website and in the current VCE and VCAL Administrative Handbook.

Rationale

The study of a Language Other Than English contributes to the overall education of students, most particularly in the area of communication, but also in the areas of cross-cultural understanding, intercultural learning, cognitive development, literacy and general knowledge. It provides access to the culture of communities which use the language and promotes understanding of different attitudes and values within the wider Australian community and beyond.

The ability to communicate in another language, in conjunction with the other skills, may provide opportunities for employment in the fields of interpreting, social service, ethnic affairs, the tourism and hospitality industries, international relations, the arts, commerce, technology, science, education etc.

Outcomes

Outcomes define what students will know and be able to do as a result of undertaking the study.

Outcomes include a summary statement and the key knowledge and skills that underpin them.

CHINESE SECOND LANGUAGE UNITS 1 & 2

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to establish and maintain a spoken or written exchange related to personal areas of experience.	1. On completion of this unit the student should be able to participate in a spoken or written exchange related to making arrangements and completing transactions.
2. On completion of this unit the student should be able to listen to, read and obtain information from spoken and written texts and translate from characters into English.	2. On completion of this unit the student should be able to listen to, rea, and extract and use information and ideas from spoken and written texts.
3. On completion of this unit the student should be able to produce a personal response to a text focusing on real or imaginary experience.	3. On completion of this unit the student should be able to give expression to real or imaginary experience in spoken or written form.

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

CHINESE SECOND LANGUAGE UNITS 3 & 4

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to express ideas through the production of original texts.	1. On completion of this unit the student should be able to analyse and use information from written texts and translate part of the text(s) into English.
2. On completion of this unit the student should be able to analyse and use information from spoken texts.	2. On completion of this unit the student should be able to respond critically to spoken and written texts which reflect aspects of the language and culture of Chinese-speaking communities.
3. On completion of this unit the student should be able to exchange information, opinions and experiences.	

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified for the unit.

Levels of Achievement
School-assessed coursework and end of year examinations

- Unit 3 school-assessed coursework: 25 percent
- Unit 4 school-assessed coursework: 25 percent
- Examinations:
    - Oral component: 12.5 percent
    - Written component: 37.5 percent

LEGAL STUDIES

Thematic Statement

Our Creator, God, is sovereign over all things. As Australians, we have a responsibility to be good stewards of our country. God has put others in authority over us, i.e. The Queen, Prime Minister, The Law , and other heads of government. The Bible teaches us to respect those in authority and to pray for them. Romans13:1-7, 1 Timothy 2:1-4, Titus 3:1.

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.

Entry

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

LEGAL STUDIES UNITS 1 & 2

Unit 1

The law influences all aspects of society – at home, at work and in the wider community. Laws are used by society to preserve social cohesion, and to ensure the protection of people from harm and from the infringement of their rights. These laws can be grouped according to their source and whether they are criminal or civil in nature. Following an overview of the law in general, this unit focuses on criminal law.

Students examine the need for laws in society. They investigate the key features of criminal law, how it is enforced and adjudicated and possible outcomes and impacts of crime. Through a consideration of contemporary cases and issues, students learn about different types of crimes and explore rights and responsibilities under criminal law. Students also consider the role of parliament and subordinate authorities in law-making, as well as the impact of the Victorian Charter of Rights and Responsibilities on law enforcement and adjudication in Victoria.

Students investigate the processes and procedures followed by courts in hearing and resolving criminal cases. They explore the main features and operations of criminal courts and consider the effectiveness of the criminal justice system in achieving justice.

Unit 2

The civil law regulates the rights and responsibilities that exist between individuals, groups and organisations. If legal rights have been infringed, the aggrieved party may pursue legal action through the court system, through a tribunal, or by using one of the methods of dispute resolution.

Students examine the rights that are protected by civil law, as well as obligations that laws impose. They investigate types of civil laws and related cases and issues and develop an appreciation of the role of civil law in society and how it affects them as individuals.

The unit also focuses on the resolution of civil disputes through judicial determination and alternative methods in courts, tribunals and independent bodies. Students examine these methods of dispute resolution and evaluate their effectiveness.

Individuals can influence a change in the law by taking a case to court. Students focus on cases that have had a broader impact on the legal system and on the rights of individuals. Students develop an appreciation of the role played by such cases and undertake an analysis of relevant legal issues.

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to explain the need for effective laws and describe the main sources and types of law in society.	1. On completion of this unit the student should be able to explain the principles of civil law, law-making by courts, and elements of torts, and apply these to relevant cases.
2. On completion of this unit the student should be able to 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.	2. On completion of this unit the student should be able to explain and evaluate the processes for the resolution of civil disputes.

3. On completion of this unit the student should be able to describe the processes for the resolution of criminal cases, and discuss the capacity of these processes to achieve justice.	3. On completion of this unit the student should be able to explain jone 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. On completion of this unit the student should be able to describe an Australian case illustrating rights issues, and discuss the impact of the case on the legal system and the rights of individuals.

Unit 1 & Unit 2 Assessment Tasks
1. Structured assignment 2. Essay 3. Mock court or role-play 4. Folio and report 5. Case study 6. Test 7. Report (written, visual, oral or multimedia)

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

LEGAL STUDIES UNITS 3 AND 4

Unit 3

In this unit students develop an understanding of the institutions that determine our laws, and their law-making powers and processes. They undertake an informed evaluation of the effectiveness of law-making bodies and examine the need for the law to keep up to date with changes in society.

Students develop an appreciation of the complex nature of law-making by investigating the key features and operation of parliament, and influences on law-making, with a focus on the role of the individual.

Central to the investigation of law-making is the role played by the Commonwealth Constitution. Students develop an understanding of the importance of the Constitution in their lives and on society as a whole, and undertake a comparative analysis with another country. They learn of the importance of the role played by the High Court of Australia in interpreting and enforcing the Constitution, and ensuring that parliaments do not act outside their areas of power nor infringe protected rights.

Students investigate the nature and importance of courts as law-makers and undertake an evaluation of their effectiveness as law-making bodies. They also investigate the relationships that exist between parliaments and courts.

Throughout this unit, student examine relevant cases to support their learning and apply legal principles to these cases.

Unit 4

The legal system provides mechanisms by which legal disputes of both a criminal and a civil nature can be resolved in a fair and just manner. Dispute resolution bodies such as courts and tribunals employ a range of means and processes that enables the resolution of legal disputes.

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

Throughout this unit, students examine current or recent cases to support their learning, and apply legal principles to these illustrative cases.

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to 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 a change can be influenced.	1. On completion of this unit the student should be able to describe and evaluate the effectiveness of institutions and methods for the determination of criminal cases and the resolution of civil disputes.

2. On completion of this unit the student should be able to 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. On completion of this unit the student should be able to describe the role and operation of courts in law-making, evaluate their effectiveness as law-making bodies and discuss their relationship with parliament.	2. On completion of this unit the student should be able to 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.

Unit 3 Assessment Tasks	**Unit 4 Assessment Tasks**
The student's performance on each outcome will be assessed using one or more of the following: • A case study • Structured questions • A test • An essay • A report in written format • A report in multimedia format • A folio of exercises	The student's performance on each outcome will be assessed using one or more of the following: • A case study • Structure questions • A test • An essay • A report in written format • A report in multimedia format • A folio of exercises

Satisfactory Completion
School assessed coursework and an end-of-year examination

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Legal Studies students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination.
Percentage contributions to the study score in Legal Studies are as follows:

- Unit 3 School-assessed Coursework: 25 percent
- Unit 4 School-assessed Coursework: 25 percent
- End-of-year examination: 50 percent.

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 meaning within literary texts. Students reflect on their interpretations and on those of others.

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 that reader brings to the texts. Accordingly, the study encompasses texts that vary in form and range and from past to contemporary social and cultural contexts. Students learn to understand that texts are constructions, to consider the complexity of language and to recognise the influence of contexts and form. The study of literature encourages independent and critical thinking in students' analytical and creative responses to texts, which will assist students greatly in the workforce and in future academic study.

Outcomes

Outcomes define what students will know and be able to do as a result of undertaking the study.

Outcomes include a summary statement and the day knowledge and skills that underpin them. Only the summary statements have reproduced below and must be read in conjunction with the key knowledge and skills published in the study design.

Entry

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

LITERATURE UNITS 1 & 2

Unit 1

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.

Unit 2

In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Drawing on a range of literary texts, student consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted. Students analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

Unit 1 Outcomes	Unit 2 Outcomes
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. 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.	1. On completion of this unit the student should be able to analyse and respond critically and creatively to the ways a text from a past era and/or a different culture reflect or comment on the ideas and concerns of individuals and groups in that context. 2. On completion of this unit the student should be able to compare texts considering the dialogic nature of texts and how they influence each other.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
The student's performance on each outcome will be assessed using one or more of the following: • An essay (comparative, interpretive, analytical or discursive) • A debate • A reading journal • A close analysis of selected passages • An original piece of writing responding to a text(s) studied • An oral or written review • A multimedia presentation • Participation in an online discussion • Performance and commentary	The student's performance on each outcome will be assessed using one or more of the following: • An essay (comparative, interpretive, analytical or discursive) • A debate • Journal entries • A close analysis of selected passages • An original piece of writing responding to a text(s) studied • An oral or written review • A multimedia presentation • Participation in an online discussion • Performance and commentary

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

LITERATURE UNITS 3 & 4

Unit 3

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

Unit 4

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. Student 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.

Unit 3 Outcomes	Unit 4 Outcomes
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. 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.	1. On completion of this unit the student should be able to produce an interpretation of a text using different literary perspectives to inform their view. 2. On completion of this unit the student should be able to analyse features of texts and develop and justify interpretations of texts.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
The student's performance on each outcome will be assessed using the following: • An analysis of how the form of a text influences meaning • A creative response to a text, with a reflective commentary establishing connections with the original text.	The student's performance on each outcome will be assessed using the following: • A written interpretation of a text using two different perspectives to inform their response. • **Task 1:** A written interpretation of a text, supported by close textual analysis • **Task 2:** A written interpretation of a different text from Task 1, supported by close textual analysis.

Satisfactory Completion
School assessed coursework and an end-of-year examination

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In Literature the students' level of achievement will be determined by school-assessed coursework and an end of year examination. Percentage contributions to the study score in Literature are as follows:

- Unit 3 school-assessed coursework: 25 percent
- Unit 4 school-assessed coursework: 25 percent
- End of year examination: 50 percent

MATHEMATICS

Rationale

God created man in His image and likeness and put him in charge of the earth to manage it (Gen 1: 27-28; Psalm 8: 6-8). This responsibility has been the genesis of mankind's orientation to mathematical knowledge, its discovery and application. Evidences of mathematical relationships are to be found everywhere: in number, form, design and symmetry, and in the constancy, which God has created, and which we describe in terms of laws governing existence and the harmonious working of all things. Thus Mathematics is the study of functions and patterns in number, logic, space, and structure. Note that every decision, design and construction we make has an element of mathematics in it. We therefore cannot escape mathematics in life. Students are therefore encouraged to study Mathematics at the highest level they are capable of for as long as they can.

Aims

This study enables students to:

1. Develop mathematical concepts, knowledge and skills
2. Apply mathematics to analyse, investigate and model a variety of contexts and solve practical and theoretical problems in situations that range from well-defined and familiar to open-ended and unfamiliar
3. Use technology effectively as a tool for working mathematically

Structure

The study of VCE Mathematics is made up of the following units:

- Foundation Mathematics Units 1 and 2
- General Mathematics Units 1 and 2
- Mathematical Methods Units 1 and 2
- Specialist Mathematics Units 1 and 2
- Further Mathematics Units 3 and 4
- Mathematical Methods Units 3 and 4
- Specialist Methods Units 3 and 4

Entry

There are no prerequisites for entry to Foundation Mathematics or General Mathematics Units 1 and 2. Students undertaking Mathematical Methods Units 1 and 2 or Specialist Mathematics Units 1 and 2 are assumed to have a sound background in Number, Algebra, Function, Geometry, Probability and Statistics. Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 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.

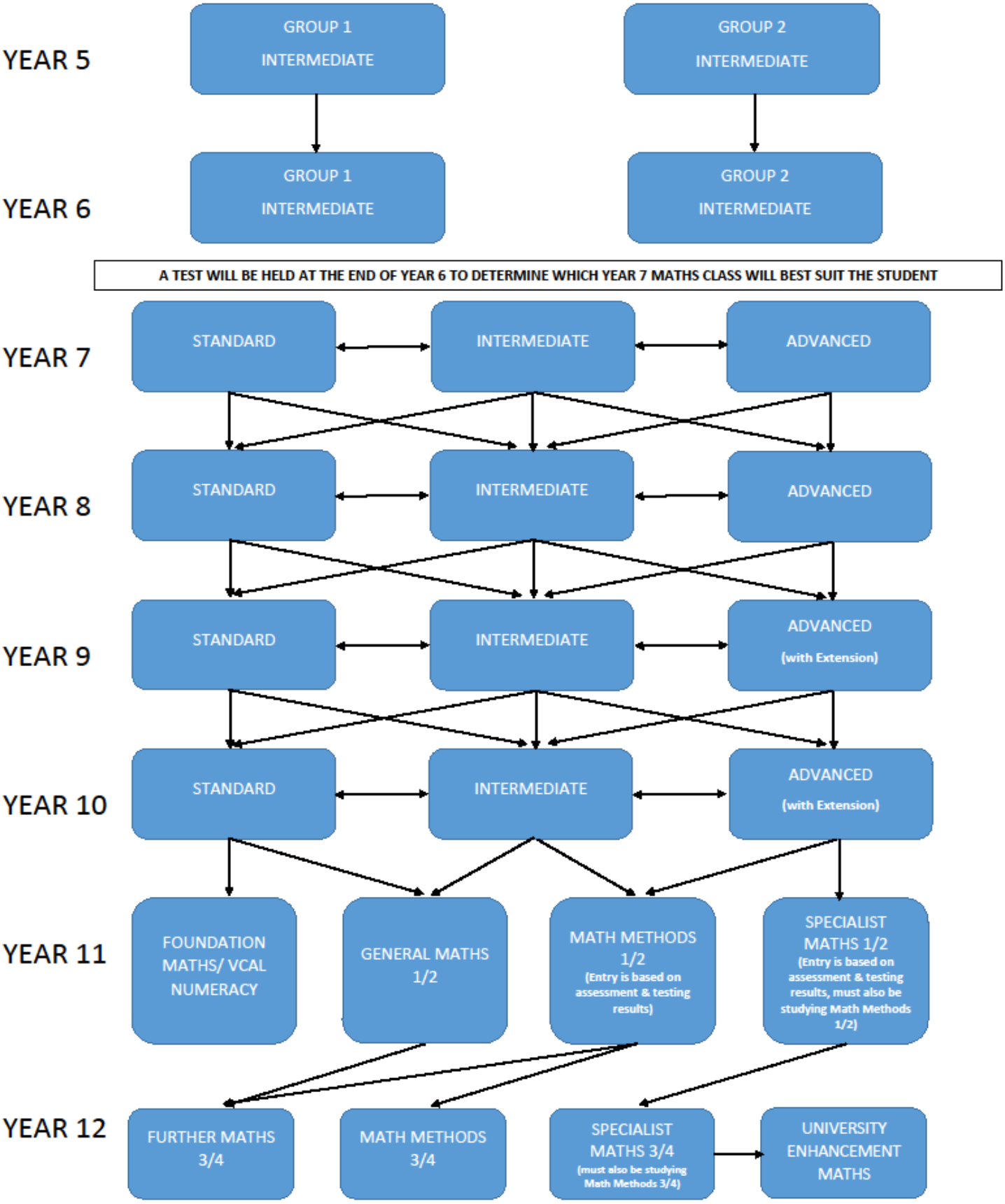
Enrolment in Specialist Mathematics Units 3 and 4 assumes a current enrolment in, or previous completion of, Mathematical Methods Units 3 and 4. There are no restrictions on the number of units students may obtain credit towards satisfactory completion of the VCE.

Units 3 and 4 of a study are designed to be taken as a sequence. Students must undertake Unit 3 of a study before entering Unit 4 of that study.

Students are allowed to take Units 3 & 4 of all three branches of Mathematics, namely Further Mathematics, Mathematical Methods and Specialist Mathematics but only the best two marks will count towards their best 4 subjects for their ATAR with 10% of the third mathematics subject being included.

MATHEMATICS PATHWAYS

Entrance to **ALL** maths classes including VCE maths, will be based on assessment and testing results.



Please Note: To study University Enhancement Maths in Year 12, you must have achieved A+ for all assessments in ALL subjects.

Subject Units:	Grade Boundaries:
Foundation Mathematics Units 1 & 2:	None.
General Mathematics Units 1 & 2:	None.
Mathematical Methods Units 1 & 2:	Achieving 75% in Year 10 Advanced Maths.
Specialist Mathematics Units 1 & 2:	Achieving 75% in Year 10 Advanced Maths and must be concurrently studying Mathematical Methods Units 1 & 2.
Further Mathematics Units 3 & 4:	None.
Mathematical Methods Units 3 & 4:	Achieving 75% in Mathematical Methods 1 & 2.
Specialist Mathematics Units 3 & 4:	Achieving 75% in Mathematical Methods 1 & 2 or Mathematical Methods 3 & 4 and 75% in Specialist Mathematical 1 & 2.

Common paths of study in VCE Mathematics at LCC from Units 1 & 2 to Units 3 & 4

From Units 1 & 2 (Prerequisites)	Into Units 3 & 4
1. Foundation Maths 1 and 2	1. No Mathematical Study
2. General Maths 1 and 2	2. No Mathematical Study
3. General Maths 1 and 2	3. Further 3 and 4
4. Methods 1 and 2	4. Further 3 and 4
5. Methods 1 and 2	5. Methods 3 and 4
6. Methods and Specialist 1 and 2	6. Specialist Maths 3 and 4 (must be studying or have already studied Methods 3 and 4)

FOUNDATION MATHEMATICS UNITS 1 & 2

Foundation Mathematics Units 1 and 2 are completely prescribed and provide for the continuing mathematical development of students entering VCE. In general, these students would not intend to undertake Unit 3 and 3 studies in VCE Mathematics in the following. However, students who do well in these units and undertake some supplementary study of selected topics could proceed to Further Mathematics Units 3 & 4.

In Foundation Mathematics there is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study. The areas of study for Unit 1 and 2 of Foundation Mathematics are 'Space, shape and design', 'Patterns and number', 'Data' and 'Measurement'. All four areas of study are to be completed over the two units. The content should be developed using contexts present in students' other studies, work and personal or other familiar situations. In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational and real arithmetic, sets, lists and tables, diagrams and geometric constructions, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, is to be incorporated throughout each unit as applicable.

Unit 1 & 2

Area of Study 1 – Space, Shape and Design
In this area of study students cover the geometric properties of lines and curves, and shapes and objects, and their graphical and diagrammatic representation with attention to scale and drawing conventions used in domestic, societal, industrial and commercial plans, map and diagrams.

Area of Study 2 – Patterns and Number
In this area of study students cover estimation, the use and application of different forms of numbers and calculations, and the representation of patterns and generalisations in number including formulas and other algebraic expressions in everyday contexts.

Area of Study 3 – Data
In this area of study students cover estimation, the use and application of different forms of numbers and calculations, and the representation of patterns and generalisations in number including formulas and other algebraic expressions in everyday contexts.

Area of Study 4 – Measurement
In this area of study students cover the use and application of the metric system and related measurement in a variety of domestic, social, industrial and commercial contexts, including consideration of accuracy.

Unit 1 & 2 Outcomes

1. On completion of this unit the student should be able to use and apply a range of mathematical concepts, skills and procedures from the areas of study to solve problems based on a range of everyday and real live contexts.

2. On completion of this unit the student should be able to use and apply mathematical procedures to solve practical problems in both familiar and new but accessible contexts, and communicate their results.

3. On completion of this unit the student should be able to select and use technology to solve problems in practical contexts.

Unit 1 & Unit 2 Assessment Tasks

1. **Outcome 1:** to be based on the student's performance on a selection of the following assessment tasks:
   - Investigations and projects
   - Assignments
   - Tests
   - Summary or review notes of mathematics encountered by students in their own work/study

2. **Outcome 2:** to be based on the student's performance on a selection of the following assessment tasks:
   - Investigations and projects
   - Assignments
   - Tests
   - Summary or review notes

3. **Outcome 3:** to be based on the student's performance on aspects of tasks completed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology in contexts related to the content of the areas of study.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

GENERAL MATHEMATICS UNITS 1 & 2

This study in General Mathematics is designed to suit a broad range of students. It caters mainly for those intending on studying Further Mathematics. It is also achievable for students not intending to do any mathematical studies in Year 12 as well as those who take this study along with Mathematical Methods 1 and 2 to strengthen their base for Specialist Mathematics.

Unit 1 – This Unit Covers Area of Study 1, Area of Study 3 and Area of Study 3

Area of Study 1 – Algebra and Structure
In this area of study students cover representation and manipulation of linear relations and equations, including simultaneous linear equations, and their applications in range of contexts.

- Linear relations and equations

Area of Study 2 – Arithmetic and Number
In this area of study students cover mental, by-hand and technology assisted computation with rational numbers, practical arithmetic and financial arithmetic, including estimation, order of magnitude and accuracy.

- Computation and practical arithmetic
- Financial arithmetic

Area of Study 3 – Discrete Mathematics
In this area of study students cover matrices, graphs and networks, and number patterns and recursion, and their use to model practical situations and solve a range of related problems.

- Matrices
- Number patterns and recursion

Unit 2 - This Unit Covers Area of Study 4 and Area of Study 6

Area of Study 4 – Geometry, Measurement and Trigonometry
In this area of study students cover shape, measurement and trigonometry and their application to formulating and solving two- and three-dimensional problems involving length, angle, area and surface area, volume and capacity, and similarity and the application of linear scale factors to measurement.

- Shape and measurement
- Applications of trigonometry

Area of Study 6 – Statistics
In this area of study students cover representing, analysing and comparing data distributions and investigating relationships between two numerical variables, including an introduction to correlation.

- Investigating and comparing data distribution
- Investigating relationships between two numerical variables

Unit 1 & 2 Outcomes
1. On completion of this unit the student should be able to define and explain key concepts as specified in the selected content from the areas of study, and apply a range of related mathematical routines and procedures. 2. On completion of each unit the student should be able to select and apply mathematical facts, concepts, models and techniques from the topics covered in the unit to investigate and analyse extended application problems in a range of contexts. 3. On completion of each unit the student should be able to select and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Unit 1 & 2 Assessment Tasks
1. **Outcome 1:** to be based on the student's performance on a selection of the following assessment tasks: • Assignments • Tests • Summary or review notes. 2. **Outcome 2:** to be based on the student's performance on a selection of the following assessment tasks: • Modelling tasks • Problem-solving tasks • Mathematical investigations 3. **Outcome 3:** to be based on the student's performance on aspects of tasks completed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

FURTHER MATHEMATICS UNITS 3 & 4

This study is intended to be widely accessible to students to provide general preparation for employment or further study, in particular, where data analysis is important. The assumed knowledge and skills for Further Mathematics Units 3 and 4 are 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 assumed knowledge and skills to undertake Further Mathematics.

Unit 3 – This Unit Covers Area of Study 1

Area of Study 1 – Core

- **Data Analysis**
  - Investigating data distributions
  - Investigating associations between two variables
  - Investigating and modeling linear associations
  - Investigating and modeling time series data
- **Recursion and Financial Modelling**
  - Depreciation of assets
  - Compound interest investments and loans
  - Reducing balance loans (compound interest loans with period repayments)
  - Annuities and perpetuities (compound interest investments with periodic payments made from the investment)

Unit 4 – This Unit Covers Area of Study 2

Area of Study 2 – Applications (2 Modules)

- **Matrices**
  - Matrices and their applications
  - Transition matrices
- **Geometry and Measurement**
  - Measurement and trigonometry
  - Spherical geometry

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to define and explain key concepts and apply related mathematical techniques and models as specified in Area of Study 1 in routine contexts. 2. On completion of this unit the student should be able to select and apply the mathematical concepts, models and techniques as specified in Area of Study 1 in a range of contexts of increasing complexity. 3. On completion of this unit the student should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.	1. On completion of this unit the student should be able to define and explain key concepts as specified in the content from the two selected modules, and apply related mathematical techniques and models in routine contexts. 2. On completion of this unit the student should be able to select and apply the mathematical concepts, models and techniques from the two selected modules in a range of contexts of increasing complexity. 3. On completion of this unit the student should be able to select and appropriately use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Outcome 1: Application task Modelling or problem-solving task 1 **2. Outcome 2:** Application task Modelling or problem-solving 1 **3. Outcome 3:** Application task Modelling or problem-solving task 1	**1. Outcome 1:** Modelling or problem-solving task 2 Modelling or problem-solving task 3 **2. Outcome 2:** Modelling or problem-solving task 2 Modelling or problem-solving task 3 **3. Outcome 3:** Modelling or problem-solving task 2 Modelling or problem-solving task 3

Successful Completion
School assessed coursework and two end-of-year examinations

Levels of Achievement
The VCAA will supervise the assessment of all students undertaking Units 3 and 4. The student's levels of achievement will be assessed through school assessed coursework and examination as follows:

- Unit 3 school assessed coursework: 20 per cent
- Unit 4 school assessed coursework: 14 per cent
- End of year examination 1: 33 per cent
- End of year examination 2: 33 per cent

MATHEMATICAL METHODS UNITS 1 & 2

This study is designed for those students with a general interest in mathematics as well as providing a sound base for those students intending to undertake studies in the science and engineering fields. The concepts of functions and graphs and calculus form the major part of the material covered. This course also provides a good introduction to Mathematical Methods and Specialist Mathematics which are taken at Units 3 and 4 level. The areas of study are 'Functions and Graphs, Algebra, Calculus plus Probability and Statistics'.

Students should be averaging a minimum of 75% in Year 10 Advanced Mathematics to enroll in Mathematical Methods Units 1 and 2.

Unit 1

Area of Study 1 – Functions and Graphs
This area of study covers the graphical representation of polynomial and power functions of a single real variable and their key features. The behaviour of functions and their graphs is explored in a variety of modeling contexts and theoretical investigations. These include vertical and horizontal line tests, power functions, polynomials and inverse functions.

Area of Study 2 – Algebra
This area supports students' work in the Functions and Graphs, Calculus and Probability and Statistics areas of study. The algebra of polynomial functions of low degree and transformation of the plane is considered to generalize and analyze properties of functions and their graphs. Solution of polynomial equations, and systems of simultaneous linear equations.

Area of Study 3 – Calculus
This area of study introduces an intuitive understanding of constant, average and instantaneous rate of change through familiar situations, and through a graphical and numerical approach to the measurement of rates of change, related to the tangent of a function average and instantaneous rates of change to be discussed.

Area of Study 4 – Probability and Statistics
Students cover the concepts of event, frequency, probability, sample space; complementary, mutually exclusive, conditional and independent events involving one, two, or three events, and rules for computation of probabilities for compound events. Lists, Grids, Venn Diagrams, Karnaugh Maps, Tables and Tree diagrams. Conditional probability. Independent and mutually exclusive events.

Unit 2

Area of Study 1 – Functions and Graphs
This area of study covers the graphical representation of functions of a single real and the key features such as axial intercepts, domain, co-domain and range, asymptotic behaviour, of such graphs. This study also focuses on simple trigonometric and exponential functions. Introduction of radians, identities and graphs of circular functions. Logarithmic functions as inverse of exponential functions.

Area of Study 2 – Algebra
Inverse functions and transformations to solve equations, laws of indices and logarithms. Newton's method of roots.

Area of Study 3 – Calculus
In this area, students will cover first principles of differentiation, differentiation and anti-differentiation of polynomial and power functions by rule, and related applications including the analysis of graphs, application in problems on maxima and minima. Definite integrals.

Area of Study 4 – Probability
This area of study covers introductory counting principles and techniques (combinatorics) and their applications to probability and the law of total probability in the case of two events.

Unit 1 & 2 Outcomes
1. On completion of each unit the student should be able to 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. On completion of each unit the student should be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics in at least three areas of study. 3. On completion of each unit the student should be able to use technology to produce results and carry out analysis in situations requiring problem-solving, modeling or investigative techniques or approaches in at least three areas of study.

Unit 1 Assessment Tasks	**Unit 2 Assessment Tasks**
Outcome 1: • Assignments • Tests • Summary or review notes **Outcome 2:** • Modelling tasks • Problem-solving tasks • Mathematical investigations **Outcome 3:** Based on student's performance on aspects of task competed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology.	**Outcome 1:** • Assignments • Tests • Summary or review notes **Outcome 2:** • Modelling tasks • Problem-solving tasks • Mathematical investigations **Outcome 3:** Based on student's performance on aspects of task competed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

MATHEMATICAL METHODS UNITS 3 & 4

The areas of study of Math Methods 3 & 4 consist of 'Functions and Graphs, Calculus, Algebra, plus Probability and Statistics'. This study is designed for those students with a keen interest in mathematics, and provides a sound base for studies in mathematics at tertiary level. Students should be averaging a minimum of 75% in Mathematical Methods Units 1 and 2 to enroll in Mathematical Methods Units 3 and 4.

Units 3 & 4

Area of Study 1 – Functions and Graphs (Coordinate Geometry)
Students will cover transformations of the plane and the behaviour of some relations and functions (of a single variable) including key features of their graphical representations plus their application in practical situations. Power functions, experiential and logarithmic functions, circular functions, and polynomials including inverses and transformations. Families of graphs including sum, difference and product of functions.

Area of Study 2 – Algebra
This area covers the algebra of functions, identification of appropriate solution processes for solving equations and system of simultaneous equations. Students will also use inverse operations, graphical and numerical approaches to solve equations to desire accuracy. Functional relations, restricting domains for inverses, solution of literal equations.

Area of Study 3 – Calculus
This area covers graphical treatment of limits, continuity and differentiability of one variable functions; differentiation, anti-differentiation and integration of one variable functions. The material will be linked to applications in practical situations. Chain rule, product and quotient rules. Maxima and minima problems. A real under a curve and between two curves using integration and problems.

Area of Study 4 – Probability
Students will cover discrete and continuous random variables, their representation using tables and probability functions; the calculation of measures of center and spread; statistical inference for sample proportions. This study will also focus on understanding the notion of a random variable, related parameters, properties and application and interpretation in context for a given probability distribution. Bernouilli trials and binomial distribution: mean, variance and standard deviation. Probability density functions. Standard normal distribution and standardizing of variables, statistical inference of sample distributions.

Unit 3 & 4 Outcomes
1. On completion of each unit the student should be able to 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. On completion of each unit the student should be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics in at least three areas of study. 3. On completion of each unit the student should be able to use technology to produce results and carry out analysis in situations requiring problem-solving, modeling or investigative techniques or approaches in at least three areas of study.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
A function and calculus-based mathematical investigation of a practical and theoretical context involving content from two or more areas of study, with the following three components of increasing complexity: • Introduction of the context through specific cases or examples • Consideration of general features of the context • Variation or further specification of assumption or conditions involved in the context to focus on a particular feature or aspect related to the context.	**Outcome 1:** • Modelling or problem-solving task 1 • Modelling or problem-solving task 2 **Outcome 2:** • Modelling or problem-solving task 1 • Modelling or problem-solving task 2 **Outcome 3:** • Modelling or problem-solving task 1 • Modelling or problem-solving task 2

Satisfactory Completion
School assessed coursework and two end-of-year examinations

Level of Achievement
The VCAA will supervise the assessment of all students undertaking Units 3 and 4. The student's levels of achievement will be assessed through school assessed coursework and examination as follows

- Unit 3 School Assessed coursework: 17 per cent
- Unit 4 School Assessed coursework: 17 per cent
- End of year examination 1 (No technology): 22 per cent
- End of year examination 2 (Technology enabled): 44 per cent

SPECIALIST MATHEMATICS UNITS 1 & 2

Specialist Mathematics Units 1 and 2 comprise a combination of prescribed and selected non-calculus based topics and provide courses of study for students interested in advanced study of mathematics, with a focus on mathematical structure and reasoning. They incorporate topics that, in conjunction with Mathematical Methods Units 1 and 2, provide preparation for Specialist Mathematics Units 3 and 4 and cover assumed knowledge and skills for those units.

Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4.

The areas of study for Units 1 and 2 of Specialist Mathematics are 'Algebra and Structure', 'Arithmetic and Number', 'Discrete Mathematics', 'Geometry, Measurement and Trigonometry', 'Graphs of Linear and Non-Linear Relations' and 'Statistics'.

For Units 1 and 2, to suit the range of students entering the study, and cover the four prescribed topics, content will be selected from the six areas of study using the following rules:

- For each unit, content covers four or more topics in their entirety, selected from at least three different areas of study
- Each unit must include two of the prescribed topics: Number Systems and Recursion, Vectors in the Plane, Geometry in the Plane and Proof and Graphs of Non-Linear Relations
- Other topics can be selected from those included in the areas of study for Specialist Mathematics Units 1 and 2 and/or General Mathematics Units 1 and 2.
- Course intended as preparation for study at the Units 3 and 4 level should include selection of content from areas of study that provide a suitable background for these studies
- Content covered from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2.

In undertaking these units, students are expected to be able to apply techniques, routines and processes involving rational, real and complex arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulations, equations and graphs with and without the use of technology. They should have facility with relevant mental and by-hand approaches to estimation and computation. The use of numerical, graphical, geometric, symbolic and statistical functionality of technology for teaching and learning mathematics, for working mathematically, and in related assessment, will be incorporated throughout each unit as applicable.

Area of Study 1

- Algebra and Structure
    - Logic and Algebra, including Boolean Algebra
- Transformations, Trigonometry
    - Linear Transformations of the Plane with a stress on Matrices
    - Identities of circular functions and proofs

Area of Study 2

- Arithmetic and Number
    - Principles of counting using sets and Venn diagram and combinatorics, Pascal's triangle.

Area of Study 3

- Discrete Mathematics
    - Graph Theory including Euler's formula, Eulerian circuits and Eulerian trails.

Area of Study 4 (prescribed)

- Geometry, Measurement, Trigonometry and Congruence
    - Geometry in the Plane and Proof, Circle Geometry, Vectors and Unit Vectors, Scalar Product and Dot Product of Vectors, Geometric Proofs.

Area of Study 5 – Introductory (prescribed)

- Graphs of Linear and Non-Linear Relations
    - Kinematics (Rectilinear Motion)
    - Non-Linear Relations and Graphs, Velocity, Time Relationships by step functions.

Area of Study 6

- Statistics
    - Simulation with random experiments. Small and large samples.
    - Sampling Distributions. Sampling and populations and the difference. Mean and standard deviation of both.

Unit 1 & 2 Outcomes
1. On completion of each unit the student should be able to 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. On completion of each unit the student should be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics in at least three areas of study. 3. On completion of each unit the student should be able to use technology to produce results and carry out analysis in situations requiring problem-solving, modeling or investigative techniques or approaches in at least three areas of study.

Unit 1 Assessment Tasks	**Unit 2 Assessment Tasks**
Outcome 1: • Assignments • Tests • Summary or review notes **Outcome 2:** • Modelling tasks • Problem-solving tasks • Mathematical investigations **Outcome 3:** Based on student's performance on aspects of task competed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology.	**Outcome 1:** • Assignments • Tests • Summary or review notes **Outcome 2:** • Modelling tasks • Problem-solving tasks • Mathematical investigations **Outcome 3:** Based on student's performance on aspects of task competed in demonstrating achievement of Outcomes 1 and 2 that incorporate opportunity for the effective and appropriate use of technology.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

SPECIALIST MATHEMATICS UNITS 3 & 4

Specialist Mathematics Unit 3 and 4 consists of the areas of study 'Functions and Graphs, Algebra, Calculus, Vectors, Mechanics, plus Probability and Statistics.
This study is designed for those students with a strong interest in mathematics and those intending to pursue mathematics at tertiary level. The course has a definite focus towards the mathematics required for engineering and science engineering and as such students should be averaging a **minimum** of 75% in Mathematical Methods Units 1 and 2 to enroll in Specialist Maths 3 & 4.

Units 3 & 4

Area of Study 1 – Functions and Graphs
This area of study covers inverse circular functions, reciprocal functions, rational functions, absolute value functions; their graphical representations and analyses of their key features such as intercepts, asymptotic behavior, nature and location of stationary points, points of inflection, periodicity and symmetry. Graphs of reciprocal circular functions and use of identities, compound and double angle formula. Inverse functions and restricted domains, quotient functions.

Area of Study 2 – Algebra
This area covers the expression of simple rational functions as the sum of partial fractions; the arithmetic and algebra of complex numbers, including polar form; points and curves in the complex plane; introduction to factorization of polynomial functions over the complex plane and an informal treatment of the fundamental theorem of algebra. De Moivre's Theorem and use in expansion conversion from Cartesian to Polar form and vice versa. Factorisation in the complex plane and solution of equations.

Area of Study 3 – Calculus
Students will cover advanced calculus techniques for analytic and numeric differentiation and integration of a range of functions; combinations of functions; application of calculus techniques to practical situations, including curve sketching, evaluation of arc length, area and volume; differential equations and kinematics. Implicit differentiation, use of second derivatives, Euler's method, application to Kinematics.

Area of Study 4 – Vectors
Students will cover the arithmetic and algebra of vectors, conditions for linear dependence and independence of a set of vectors; proof of geometric results using vector; vector representation of curves in the plane and vector kinematics in one, two and three dimensions. Perpendicular and parallel vectors. Vector calculus related to mechanics with Kinematics.

Area of Study 5 – Mechanics
In this area, students will cover an introduction to Newtonian mechanics, for both constant and variable acceleration. Equations of motion and laws of motion, inertia, momentum of friction and equilibrium.

Area of Study 6 – Probability and Statistics
In this area, students will cover statistical inference related to the definition and distribution of sample means, simulations and confidence interval; linear combinations of random variables; simple means; confidence intervals for means. Combination of random variables. Confidence intervals for use in simulation. Approx confidence interval for a standard normal distribution.

Unit 3 & 4 Outcomes
1. On completion of each unit the student should be able to 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. On completion of each unit the student should be able to apply mathematical processes in non-routine contexts, and analyse and discuss these applications of mathematics in at least three areas of study. 3. On completion of each unit the student should be able to use technology to produce results and carry out analysis in situations requiring problem-solving, modeling or investigative techniques or approaches in at least three areas of study.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
A mathematical investigation of a practical or theoretical context involving content from two or more areas of study, with the following three components of increasing complexity: • Introduction of the context through specific cases or examples. • Consideration of general features of the context • Variation or further specification or assumption or conditions involved in the context to focus on a particular feature or aspect related to the context	**Outcome 1:** • Modelling or problem-solving task 1 • Modelling or problem-solving task 2 **Outcome 2:** • Modelling or problem-solving task 1 • Modelling or problem-solving task 2 **Outcome 3:** • Modelling or problem-solving task 1 • Modelling or problem-solving task 2

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Level of Achievement
The VCAA will supervise the assessment of all students undertaking Units 3 and 4. The student's levels of achievement will be assessed through school assessed coursework and examination as follows

- Unit 3 School Assessed coursework: 17 percent
- Unit 4 School Assessed coursework: 17 percent
- Unit 3 and 4 Written Examination 1 (No technology): 22 percent
- Unit 3 and 4 Written Examination 2 (Technology enabled): 44 percent

MUSIC PERFORMANCE

Rationale

Humans have an innate need to connect with one another on spiritual, emotional and physical levels. Music is a conduit through which this communication can take place.

Music is an integral part of all cultures and societies, both contemporary and historical. The study of music develops students' understanding of artistic processes and contributes to the development of the aesthetic, cognitive, psychomotor and affective domains.

VCE Music Performance offers students opportunities to engage in the practice of performing, creating and studying music that is representative of diverse genres, styles and cultures. Students can specialise in one or more approaches to the study of music, depending on their VCE program overall and the post-VCE pathways they may be interested in following.

Students develop knowledge of stylistic, aesthetic and expressive qualities and characteristics of music and develop their ability to communicate their understanding through music making: performing, composing, arranging and/or improvising; and musicianship: aural perception, analysis and music language.

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

Entry

There are no prerequisites for entry to Units 1, 2 and 3 for Music Performance. Student must undertake Unit 3 prior to undertaking Unit 4. Music Performance Units 1-4 are designed to a standard equivalent to the final two years of secondary education.

MUSIC PERFORMANCE UNITS 1 & 2

Unit 1

This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and practise technical work to address these challenges. They also develop skills in performing previously unseen music. Students study aural, theory and analysis concepts to develop their musicianship skills and apply this knowledge when preparing and presenting performances.

Unit 2

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

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to prepare and perform a program and solo works.	1. On completion of this unit the student should be able to prepare and perform a program of group and solo works.
2. On completion of this unit the student should be able to demonstrate and discuss techniques relevant to the performance of selected works.	2. On completion of this unit the student should be able to demonstrate and discuss techniques relevant to performance of selected works.
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.	3. On completion of this unit the student should be able to re-create, extend and notate music language components and short phases, and describe ways elements of music may be interpreted.
	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.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks

• Performance/s of at least three works including at least one group work and one solo work with accompaniment, as appropriate; the duration of the performance/s will vary depending on the works selected.
• A demonstration of material chosen to address challenges in performance of works prepared for Outcome 1, for an example an assessment task that includes a test or other performance context
• An explanation of how selected material supports the student's development as an instrumentalist and their preparation of works performed for Outcome 1; the explanation may be presented in one or more of the following formats:
  ○ Oral
  ○ Multimedia
  ○ Written
• Aural, written and practical tasks such as:
  ○ A folio of exercises
  ○ Structured questions
  ○ A workbook of class activities
	• Performances of at least three works, including at least one group work and one solo work with accompaniment as appropriate; the duration of the performances will vary depending on the works selected.
	• A demonstration of material chosen to address challenges in performance of works prepared for Outcome 1, for example an assessment task that includes a test or other performance context
	• An explanation of how selected material supports the student's development as an instrumentalist and their preparation of works performed for Outcome 1; the explanation may be presented in one or more of the following formats:
	  ○ Oral
	  ○ Multimedia
	  ○ Written
	• Aural, written and practical tasks such as:
	  ○ A folio of exercises
	  ○ Structured questions
	  ○ A workbook of class activities
	• A composition or an improvisation and accompanying documentation that describes use of music language in the exercise/s; the documentation may be presented in one or both of the following:
	  ○ Multimedia
	  ○ Written

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

MUSIC PERFORMANCE UNITS 3 & 4

Rationale

Music is an integral part of all cultures and societies, both contemporary and historical. The study of music develops students' understanding of artistic processes and contributes to the development of the aesthetic, cognitive, psychomotor and affective domains.

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 specialise in one or more approaches to the study of music, depending on their VCE program overall and the post-VCE pathways they may be interested in following.

Students develop knowledge of stylistic, aesthetic and expressive qualities and characteristics of music and develop their ability to communicate their understanding through music making: performing, composing, arranging and/or improvising; and musicianship: aural perception, analysis and music language.

Unit 3

This unit prepares students to present convincing performances of group and solo works. In this unit student select a program of group and solo works representing a range of styles and diversity of character for performance. They develop instrumental techniques that enable them to interpret the works and expressively shape their performances. They also develop an understanding of performance conventions they can use to enhance their performances. Students develop skills in an unprepared performance, aural perception and comprehension, transcription, music theory and analysis. The focus for analysis in Area of Study 3 is works and performances by Australian musicians.

Unit 4

In this unit students refine their ability to present convincing performances of group and solo works. Students select group and solo works that complement works selected in Unit 3. They further develop and refine instrumental and performance techniques that enable them to expressively shape their performance and communicate their understanding of the music style of each work. Students continue to develop skills in aural perception and comprehension, transcription, theory, analysis and unprepared performance. Students continue to study ways in which Australian performers interpret works that have been created since 1910 by Australian composers/songwriters.

Unit 3 Outcomes	Unit 4 Outcomes
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.	1. On completion of this unit the student should be able to prepare and perform 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.
2. On completion of this unit the student should be able to demonstrate and discuss techniques relevant to performance of selected works.	2. On completion of this unit the student should be able to demonstrate and discuss techniques relevant to refining the performance of selected works.

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	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.

Unit 3 Assessment Tasks	**Unit 4 Assessment Tasks**

• 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.
• 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:
  o Oral
  o Multimedia
• A test that includes the following components:
  o Aural and theory
  o Written, and
  o Practical components
	• 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
	• 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:
	  o Oral
	  o multimedia

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Level of Achievement
The VCAA will supervise the assessment of all students undertaking Units 3 and 4. The student's levels of achievement will be assessed through school assessed coursework and examination as follows

- Units 3 & 4 School Assessed coursework: 30 percent
- External End-of-Year Performance Examination: 50 percent
- External End-of-Year Aural and Written Examination: 20 percent

PHYSICAL EDUCATION

Rationale

Humans are created beings made by God for activity and relationship. Therefore, as humans we have unique value and purpose. God knows us intimately and as we acknowledge who we are in Him we can learn the best way to interact with others and function physically. We are stewards of the bodies God has given us.

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

The study enables the integration of theoretical knowledge with practical application through participation in physical activities. There are opportunities for students to apply theoretical concepts and reflect critically on factors that affect all levels of performance and participation.
This VCE study is suitable for students with a wide range of aspirations, including those who wish to pursue further formal study at tertiary level or in vocational education and training settings. The study prepares students for such fields as the health sciences, exercise science and education, as well as providing valuable knowledge and skills for participating in their own sporting and physical activity pursuits to develop as critical practitioners and lifelong learners.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education.

PHYSICAL EDUCATION UNITS 1 & 2

Unit 1 – Bodies in Motion
In this unit students explore how the body systems work together to produce movement and analyse this motion using biomechanical principles. Through practical activities students explore the relationships between the body systems and physical activity. They are introduced to the aerobic and anaerobic pathways utilised to provide the muscles with the energy required for movement and the basic characteristics of each pathway.

Students apply biomechanical principles to improve and refine movement. They use practical activities to demonstrate biomechanical principles and how the correct application of biomechanics can lead to improved performance in sport and physical activity.

In Area of Study 3, there are two detailed studies: Technological advancements from a biomechanical perspective and Injury prevention and rehabilitation, which will expand and build on the knowledge and skills introduced in Areas of Study 1 and 2. Students select one of these detailed studies to explore in greater depth.

Unit 2 – Sports Coaching and Physically Active Lifestyles
This unit explores a range of coaching practices and their contribution to effective coaching and improved performance of an athlete. The way in which a coach influences an athlete can have a significant effect on performance. The approach a coach uses, the methods applied and the skills used will have an impact on the degree of improvement experienced by an athlete. By studying various approaches and applying this knowledge to a practical session, students gain a practical insight into coaching.

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

In Area of Study 3, there are two detailed studies: Decision making in sport and Promoting active living, which will expand and build on the knowledge and skills introduced in Areas of Study 1 and 2. Students select one of these detailed studies to explore in greater depth.

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit students should be able to collect and analyse information from, and participate in, a variety of practical activities to explain how the musculoskeletal system functions and its limiting conditions, and evaluate the ethical and performance implications of the use of practices and substances that enhance human movement.	1. On completion of this unit the student should be able to collect and analyse data related to individual and population levels of participation in physical activity and sedentary behaviour to create, undertake and evaluate an activity plan that meets the physical activity and sedentary behaviour guidelines for an individual or a specific group.

2. On completion of this unit students should be able to collect and analyse information from, and participate in, a variety of practical activities to explain how the cardiovascular and respiratory systems function and the limiting conditions of each system, and discuss the ethical and performance implications of the use of practices and substances to enhance the performance of these two systems.	2. On completion of this unit the student should be able to apply a social-ecological framework to research, analyse and evaluate a contemporary issues associated with participation in physical activity and/or sport in a local, national or global setting.

Unit 1 Assessment Tasks	**Unit 2 Assessment Tasks**
• A written report analysing participation in at least four physical activities that demonstrate how the musculoskeletal and cardiorespiratory systems work together to produce movement • A practical laboratory report linking key knowledge and key skills to a practical activity or practical activities • A case study analysis • A critically reflective folio/diary of participation in practical activities • A visual presentation such as a graphic organiser, concept/mind map, annotated poster, presentation file • A multimedia presentation, including two or more data types and involving some form of interaction or simulation • A physical simulation or model • An oral presentation such as podcast, debate • A written report • Structured questions	• A written plan and a reflective folio demonstrating participation in a program designed to either increase physical activity levels and/or reduce sedentary behaviour based on the physical activity and sedentary behaviour guidelines for an individual or a selected group. • A visual presentation such as graphic organiser, concept/mind map, annotated poster, presentation file • A multimedia presentation, including two or more data types and involving some form of interaction or simulation • An oral presentation • A written report

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

PHYSICAL EDUCATION UNITS 3 & 4

Unit 3

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisitions principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport.

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

Unit 4

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program.

Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods. Students critique the effectiveness of the implementation of training principles and methods to meet the needs of the individual, and evaluate the chronic adaptations to training from a theoretical perspective.

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to collect and analyse information from, and participate in, a variety of physical activities to develop and refine movement skills from a coaching perspective, through the application of biomechanical and skill acquisition principles.	1. On completion of this unit the student should be able to analyse data from an activity analysis and fitness tests to determine and assess the fitness components and energy system requirements of the activity.
2. On completion of this unit the student should be able to use data collected in practical activities to analyse how the major body and energy systems work together to enable movements to occur, and explain the factors causing fatigue and suitable recovery strategies.	2. On completion of this unity the student should be able to participate in a variety of training methods, and design and evaluate training programs to enhance specific fitness components.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
Outcome 1: Structured questions that draw on primary data which analyses a movement skill using biomechanical and skill acquisition principles. **Outcome 2:** A laboratory report based on primary data collected during participation in a practical activity, which analyses the relative contribution of energy systems and acute response to exercise. A response in one or more of the following forms, which focus on energy system interplay, fatigue and/or recovery • A practical laboratory report • A case study analysis • A data analysis • A critically reflective folio/diary of participation in practical activities • A visual presentation • A multimedia presentation • Structured questions	**Outcome 1:** A written report analysing data from an activity analysis to determine the relevant fitness components and energy system requirements in a selected activity, and including justification of the selection of appropriate tests to assess fitness. **Outcome 2:** • A reflective folio of participation in a minimum of five different training sessions focusing on the components of the session, the training method completed and the implementation of training principles to the fitness components being trained • A written report that will draw on the personal experiences recorded in the folio to design a six-week training program for a given case study. • A response in one or more of the following formats, which links chronic adaptations of the cardiovascular, respiratory and muscular systems to training methods and improved performance: o A case study analysis o A data analysis o Structured questions

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Level of Achievement
The VCAA will supervise the assessment of all students undertaking Units 3 and 4. The student's levels of achievement will be assessed through school assessed coursework and examination as follows

- Unit 3 School Assessed Coursework: 25 percent
- Unit 4 School Assessed Coursework: 25 percent
- External End-of-Year Examination: 50 percent

PHYSICS

Rationale

Physics is a natural science based on observations, experiments, measurements and mathematical analysis, finding quantitative explanations for phenomena occurring throughout the Universe. While much scientific understanding in physics has stood the test of time, many areas continue to evolve. In undertaking this study, students develop their understanding of systematic experimentation and modelling in the development of theories and laws. They undertake practical activities and apply physics principles to explain natural and constructed phenomena.

In VCE Physics students develop a range of inquiry skills, analytical skills, and communication skills. Students use scientific skills and understanding to analyse contemporary physics issues and to communicate informed views.

VCE Physics provides for continuing study pathways and leads to a range of careers. Physicists undertake research and development in specialist areas including acoustics, astrophysics, atmospheric physics, computational physics, education, engineering, instrumentation, lasers and photonics, medical physics, nuclear science, optics, pyrotechnics and radiography and in cross-disciplinary areas such as bushfire research, climate science, forensic science, geology, materials science, neuroscience, and sports science.

Scope of Study

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

VCE Physics provides students with opportunities to explore the natural and constructed world. The study explores areas including mechanics, thermodynamics, electricity, fields, atomic physics, quantum physics, and waves. Options also include astrophysics, bioelectricity, electronics, flight, medical physics, biomechanics, nuclear energy, nuclear physics, optics, sound and sports science.
Students examine classical and contemporary models to understand how knowledge in physics has evolved in response to new evidence and discoveries. Students learn to appreciate the interconnectedness of areas within physics, and across other sciences.
An important feature of VCE science is self-designed inquiry. Students develop key science skills and investigate the link between theory and practice. Methodologies can include laboratory experimentation, local and remote data logging, simulations, animations and literature reviews. Students learn to work collaboratively, pose questions, formulate hypotheses and analyse and interpret data. Knowledge of the safety consideration is integral to any physics investigation.
Students also develop capacities that enable them to critically assess the strengths and limitations of science and gain a greater awareness of the context of scientific endeavours.

Entry

There are no prerequisite studies for Units 1 and 2.
To successfully understand Physics you will need very good Mathematics skills. It is therefore expected that you will study Mathematical Methods to compliment your study of this subject.
Students would also be expected to have maintained a high achievement standard in Mathematics at Year 9 and 10 before attempting the VCE Physics course.

Grade Boundaries:

Physics Units 3 & 4: Achieving 70% in Physics Units 1 & 2

PHYSICS UNITS 1 & 2

Unit 1 – What Ideas Explain the Physical World?

Ideas in physics are dynamic. As physicists explore concepts, theories evolve. Often this requires the detection, description and explanation of things that cannot be seen. In this unit students explore how physics explains phenomena, at various scales, which are not always visible to the unaided human eye. They examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. Students consider the origins and formation of matter.

Students use thermodynamic principles to explain phenomena related to changes in thermal energy. They apply thermal laws when investigating energy transfers within and between systems, and assess the impact of human use of energy on the environment. Students examine the motion of electrons and explain how it can be manipulated and utilised. They explore current scientifically accepted theories that explain how matter and energy have changes since the origins of the Universe.

Students undertake quantitative investigations involving at least one independent, continuous variable.

Area of Study 1 – How can Thermal Effects be Explained?
Area of Study 2 – How do Electric Circuits Work?
Area of Study 3 – What is Matter and How is it Formed?

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 make direct observations of physics phenomena and examine the ways in which phenomena that may not be directly observable can be explored through indirect observations.

Students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary. Students choose to study an option from one of:

- Astrobiology,
- Astrophysics
- Bioelectricity
- Biomechanics
- Electronics
- Flight
- Medical physics
- Nuclear energy
- Optics
- Sound
- Sports science

A student-designed practical investigation then relates to content drawn from Area of Study 1 or 2.

Area of Study 1 – How Can Motion be Described and Explained
Area of Study 2 – Option (chosen from the above list)
Area of Study 3 – Student Designed Practical Investigation

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to apply thermodynamic principles to analyse, interpret and explain changes in thermal energy in selected contexts, and describe the environment impact of human activities with reference to thermal effects and climate science concepts. 2. On completion of this unit the student should be able to investigate and apply a basic DC circuit model to simple battery-operated devices and household electrical systems, apply mathematical models to analyse circuits, describe the safe and effective use of electricity by individuals and the community. 3. On completion of this unit the student should be able to explain the origins of atoms, the nature of subatomic particles and how energy can be produced by atoms.	1. On completion of this unit the student should be able to investigate, analyse and mathematically model the motion of particles and bodies. 2. Will depend on option chosen 3. On completion of this unit the student should be able to design and undertake an investigation of a physics question related to the scientific inquiry processes of data collection and analysis, and draw conclusions based on evidence from collected data.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
Outcome 1 and 2: • An annotated folio of practical activities • Data analysis • Design, building, testing and evaluation of a device • A proposed solution to a scientific or technological problem • A report of a selected physics phenomenon • A modelling activity • A media response • A summary report of selected practical investigations • 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.	**Outcome 1 and 2:** • An annotated folio of practical activities • Data analysis • Design, building, testing and evaluation of a device • A proposed solution to a scientific or technological problem • A report of a selected physics phenomenon • A modelling activity • A media response • A summary report of selected practical investigations • 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.

Outcome 3: A report of a practical investigation (student-designed or adapted) using an appropriate format, for example a scientific poster, practical report, oral communication or digital presentation.	**Outcome 3:** A report of a practical investigation (student-designed or adapted) using an appropriate format, for example a scientific poster, practical report, oral communication or digital presentation.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

PHYSICS UNIT 3 & 4

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. Students consider the field model as a construct that has enables an understanding of why objects move when not in contact with other objects. Applications of concepts related to fields include electricity transmission and particle accelerators. Students explore the interactions, effects and applications of gravitational, electric and magnetic fields. They use Newton's laws to investigate motion in one and two dimensions, and are introduced to Einstein's theories to explain the motion of very fast objects. They consider how developing technologies can challenge and require a review of existing explanations of the physical world.

Area of Study 1: How do things move without contact?
Area of Study 2: How are fields used to move electrical energy?
Area of Study 3: How fast can things go?

Unit 4
A complex interplay exists between theory and experiment in generating models to explain natural phenomena including light. Wave theory has classically been used to explain phenomena related to light; however, continues exploration of light and matter has revealed the particle-like properties of light, and on very small scales, light and matter have been observed as having similar properties.
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. Students learn to think beyond the concepts experienced in everyday life to study the physical world from a new perspective. Students design and undertake investigations involving at least two continuous independent variables.
A student-designed practical investigation related to waves, fields or motion is assessed with Unit 4, Outcome 3. The findings of which are presented in a scientific poster format.

Unit 3 Outcomes	Unit 4 Outcomes
1. 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.	1. On completion of this unit the student should be able to apply wave concepts to analyse, interpret and explain the behaviour of light.
2. On completion of this unit the student should be able to analyse and evaluate an electricity generation and distribution system.	2. 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.

3. 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.	3. 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.

Unit 3 Assessment Tasks	**Unit 4 Assessment Tasks**
Outcome 1: • Annotations of at least two practical activities from a practical logbook. • A report of a student investigation • A report of a physics phenomenon • Data analysis • Media analysis/response • Design, building, testing and evaluation of a device • An explanation of the operation of a device • A proposed solution to a scientific or technological problem • A response to structured questions • A reflective learning journal or blog related to selected activities or in response to an issue • A test (short answer and extended responses) **Outcome 2:** • Annotations on at least two practical activities from a practical logbook • A report of a student investigation • A report of a physics phenomenon • Data analysis • Media analysis/response • Design, building, testing and evaluation of a device • An explanation of the operation of a device • A proposed solution to a scientific or technological problem • A response to structured questions • A reflective learning journal or blog related to selected activities or in response to an issue • A test (short answer and extended responses)	**Outcome 1:** • Annotations of at least two practical activities from a practical logbook. • A report of a student investigation • A report of a physics phenomenon • Data analysis • Media analysis/response • Design, building, testing and evaluation of a device • An explanation of the operation of a device • A proposed solution to a scientific or technological problem • A response to structured questions • A reflective learning journal or blog related to selected activities or in response to an issue • A test (short answer and extended responses) **Outcome 2:** • Annotations on at least two practical activities from a practical logbook • A report of a student investigation • A report of a physics phenomenon • Data analysis • Media analysis/response • Design, building, testing and evaluation of a device • An explanation of the operation of a device • A proposed solution to a scientific or technological problem • A response to structured questions • A reflective learning journal or blog related to selected activities or in response to an issue • A test (short answer and extended responses)

Outcome 3: • Annotations of at least two practical activities from a practical logbook • A report of a student investigation • A report of a physics phenomenon • Data analysis • Media analysis/response • Design, building, testing and evaluation of a device • An explanation of the operation of a device • A proposed solution to a scientific or technological problem • A response to structured questions • A reflective learning journal or blog related to selected activities or in response to an issue • A test (short answer and extended responses)	**Outcome 3:** • Structure scientific poster according to VCAA template (not exceeding 1000 words)

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Physics students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. Percentage contributions to the study score in Physics are as follows:

- Unit 3 School-assessed Coursework: 16 percent
- Unit 4 School-assessed Coursework: 24 percent
- End-of-year examination: 60 percent

PSYCHOLOGY

Thematic Statement

Biblical truth states that human beings are created in the 'image of God' (Genesis 1: 26-27). To obtain an understanding of humans we need to obtain an understanding of God, who He is and how He works. Our entire being, spirit, soul and body, is a reflection of the character of God. When we respond to and/or imitate God's character we experience the peace and balance that God designed us to so that He is 'glorified.' The Christian perspective of psychology will therefore be applied throughout this unit.

Whole classical psychology seeks to analyse the mind independent of spiritual considerations, contemporary research is now acknowledging the validity of study of such phenomena. There are many examples of successful and acclaimed Christian psychologists.

Rationale

Psychology is the systematic study of thoughts, feelings and behaviour. As a science, psychology aims to describe, explain and predict behaviour; in doing so it relies on empirical procedures rather than intuition. The application of research methods in psychology allows students to develop useful skills in analytical and critical thinking and in making inferences.

It helps them to understand their own behaviour and the behaviour of others and it supports a variety of career paths in both business and the profession.

Entry

There are no prerequisites for entry in Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. However, students who enter the study at unit 3 may need to undertake preparatory work.

PSYCHOLOGY UNITS 1 & 2

Unit 1 – How are Behaviour and Mental Processes Shaped?
In this unit students investigate the structure and functioning of the human brain and the role it plays in the overall functioning of the human nervous system. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. They consider the complex nature of psychological development, including situations where psychological development may not occur as expected. Students examine the contribution that classical and contemporary studies have made to an understanding of the human brain and its functions, and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours.

Unit 2 – How do External Factors Influence Behaviour and Mental Processes
In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitudes, perception of themselves and relationships with others. Students explore a variety of factors and contexts that can influence the behaviour of an individual and groups. They examine the contribution that classical and contemporary research has made to the understanding of human perception and why individuals and groups behave in specific ways.

Research methods are integrated within the different approaches to psychology and students learn to make evaluations of the appropriateness of each model. Consideration of ethical principles in the conduct of psychological research and practice is included.

Unit 1 Outcomes	Unit 2 Outcomes
1. Students 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.	1. Students 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.
2. Students 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.	2. Students 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.
3. Students should be able to investigate and communicate a substantiated response to a question related to brain function and/or development, including reference to at least two contemporary psychological studies and/or research techniques.	3. Students 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.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
• 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 in response to an issue • 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.	• A report of a practical activity involving the collection of primary data • A research investigation involving the collection of secondary data • 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 • 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.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

PSYCHOLOGY UNITS 3 AND 4

Unit 3 – How Does Experience Affect Behaviour and Mental Processes?
In this unit students examine both macro-level and micro-level functioning of the nervous system to explain how the human nervous system enables a person to interact with the world around them. They explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved. Students examine the contribution that classical and contemporary research has made to the understanding of the structure and function of the nervous system, and to the understanding of biological, psychological and social factors that influence learning and memory.

Research methods are integrated within the different approaches to psychology and students learn to make evaluations of the appropriateness of each model. Consideration of ethical principles in the conduct of psychological research and practice is included.

Unit 4 – How is Wellbeing Developed and Maintained?
In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder. They use specific phobia to illustrate how the development and management of a mental disorder can be considered as an interaction between biological, psychological and social factors. Students examine the contribution that classical and contemporary research has made to the understanding of consciousness, including sleep, and the development of an individual's mental functioning and wellbeing.

Research methods continue to be integrated within the different methodological approaches to psychology. The application and understanding of ethical principles in the conduct of psychological research and practice is extended.

Unit 3 Outcomes	Unit 4 Outcomes
1. 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.	1. 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.
2. 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.	2. 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.

	3. Design and undertake a practical investigation related to mental processes and psychological functioning, and present methodologies, findings and conclusions in a scientific poster.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
• Visual Presentation • Annotations of practical activities from a practical logbook • Maintaining a logbook	• A reflective journal • Test • Scientific poster • Maintaining a logbook

Satisfactory Completion
Demonstrated achievement of the set of outcomes specified in the unit.

Levels of Achievement
The Victorian Curriculum and Assessment Authority will supervise the assessment of all students undertaking Units 3 and 4. In the study of Psychology students' level of achievement will be determined by School-assessed Coursework and an end-of-year examination. Percentage contributions to the study score in Psychology are as follows:

- Unit 3 School-assessed Coursework: 16 percent
- Unit 4 School-assessed Coursework: 24 percent
- End-of-year examination: 60 percent.

RELIGION AND SOCIETY

Rationale

The beliefs, values and ideas of religious traditions can play an important part in shaping and maintaining culture. Religious beliefs about the nature of existence and the purpose of human life provide a frame of reference for understanding the world and for guiding daily personal and communal action.

Structure

The study is made up of four units:

Unit 1: Religion in Society
Unit 2: Ethics and Morality
Unit 3: The Search for Meaning
Unit 4: Challenge and Response

Each unit contains between two and four Areas of Study.

Entry

There are no prerequisites for entry to Units 1, 2 and 3. Students must undertake Unit 3 prior to undertaking Unit 4. Units 1 to 4 are designed to a standard equivalent to the final two years of secondary education.

RELIGION AND SOCIETY UNITS 1 & 2

Unit 1: Religion in Society

In this unit students explore the origins of religion, identifying the nature and purpose of religion past and present. They investigate the contribution of religion to the development of human society and then focus on the role of religious traditions in shaping personal and group identity. Students examine how religious traditions are affected and changed by individuals and groups. The unit provides the opportunity for students to understand the often complex relationships that exist between individuals, groups, religious traditions and the society in which they live.

Throughout this unit at least two religious traditions should be studied. Different religious traditions may be selected for each area of study. Religious traditions to be studied are to be chosen from more than one of the following groups:

- Religions of ancient civilisations (for example, Mesopotamian, Babylonian, Egyptian, Canaanite, Roman, Greek)
- Primal religions (for example, Australian Aboriginal religions, religions of the Pacific Islands)
- Asian religions (for example, Buddhism, Hinduism, Chinese religions)
- Abrahamic religions (for example, Judaism, Christianity and Islam)

Unit 2: Ethics and Morality

Choosing which values to live by in principle and in practice is fundamental to being human. Ethics is a discipline that investigates the various methods for making ethical decisions; it involves reflection on what is 'right' and 'wrong', and 'good' and 'bad' and mean when applied to human decisions and actions. Ethics is concerned with the justification for moral choices – identifying the arguments and analysing the reasoning behind them. Ethical questions are raised at the personal, family, local, wider community, national and global level.

Unlike morality, ethics is not just a matter of individual awareness and personal decision making. Family, community and traditional connections tie people together and provide an ethical background to guide what individuals do, supporting some choices and disapproving of others. This background is enmeshed with the dominant religious and philosophical traditions of the times. Today, religious and philosophical traditions compete with powerful alternative sources of moral values represented in the media and popular culture. Nevertheless, society still relies on cultural heritages that contain a variety of ethical perspectives as well as numerous values centred on human dignity and basic justice. These various values remain fundamental to legal and social systems, and constitute the everyday categories of ethical discourse in the modern world. They are taken by the individual and groups that hold them to be the starting pint and common ground for ethical discussion in pluralist society.

In this unit student survey various approaches to ethical decision-making and then explore at least two religious traditions in detail. They explore contemporary ethical issues in the light of their investigations into ethical decision-making and ethical perspectives, and moral viewpoints in religious traditions.

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to discuss the nature and purpose of religion and explain the aspects of religion.	1. On completion of this unit the student should be able to explain the variety of influences on ethical decision-making and moral judgment in societies where multiple worldviews coexist.

2. On completion of this unit the student should be able to discuss the changing roles and influence of religion in society.	2. On completion of this unit the student should be able to explain how ethical perspectives and moral judgements are formed within at least two religious traditions, in societies in which multiple worldviews coexist.
3. On completion of this unit the student should be able to discuss the presence of religion in Australia, past and present.	3. On completion of this unit the student should be able to explain two or more debates on ethical issues in societies in which multiple worldviews coexist.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
• Reports • Debates Identification exercises • Analytical exercises • An essay • Written exercises • Annotated charts	• Reports • Debates • Role-plays • Identifiation exercises • Analystical exercises • An essay • Written exercises • Annotated charts

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

RELIGION AND SOCIETY UNITS 3 & 4

Unit 3
In this unit, students study the purposes of religion generally and then consider the religious beliefs developed by one or more than one religious tradition or denomination in response to the big questions of life. Students study how particular beliefs within a religious tradition/s or denomination/s may be expressed through the other aspects of religion, and explore how this is intended to foster meaning for adherents. Student then consider the interaction between significant life experience and religion.

Unit 4
This unit focuses on the dynamic interaction over time of religious traditions and the societies of which they are a part. Religious traditions are living institutions that participate and contribute in many ways, both positively and negatively, to wider societies – stimulating and supporting society; as levers for change themselves and embracing or resisting forces for change within society. In this unit, students explore challenge for religion generally over time and then undertake a study of challenge and change for one or more than one religious tradition or denomination.

Unit 3 Outcomes	Unit 4 Outcomes
1. On completion of this unit the student should be able to discuss and analyse the nature and purpose of religion and religious beliefs.	1. On completion of this unit the student should be able to discuss, analyse and compare stances and supporting responses taken by religions as they are challenged.
2. On completion of this unit the student should be able to examine how beliefs and their expression in other aspects of religion are intended to respond to the search for meaning.	2. On completion of this unit the student should be able to discuss the interactions within a religious tradition or denomination and between a religious tradition or denomination and wider society in relation to a significant challenge, and examine the effects of these interactions.
3. On completion of this unit the student should be able to discuss and analyse the interplay between religious beliefs and their expression through related aspects and significant life experience.	

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
• A report • An essay • A case study • Analytical exercises • Structured questions • Extended questions	• A report • An essay • A case study • Analytical exercises • Structured questions • Extended questions

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Level of Achievement
The VCAA will supervise the assessment of all students undertaking Units 3 and 4. The student's levels of achievement will be assessed through school assessed coursework and examination as follows

- Unit 3 School Assessed Coursework: 25 percent
- Unit 4 School Assessed Coursework: 25 percent
- External End-of-Year Examination: 50 percent

THEATRE STUDIES

Thematic Statement

As Christians engaged in the dramatic arts we must connect with God's purpose on our lives as His chosen stewards and image bearers of the Christian faith. Through Theatre Studies students develop skills that aid them in building confidence, public speaking, creativity and technical skill, while strengthening their God given gifts to communicate and engage with the community around them. Students explore current issues and develop an understanding of Christian values including courage, integrity, humility and creativity, at the same time as exploring the importance of their lives for God.

Rationale

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

This knowledge is applied through use of stagecraft to collaboratively interpret play scripts in performance. Through contribution to the production of plays and performance of a monologue, students also develop knowledge and understanding of theatrical styles. This knowledge and understanding is further developed by analysis and evaluation of their own productions and productions by professional theatre practitioners.

Theatre Studies provides students with pathways to further studies in fields such as theatre production and theatre design, script writing and studies in theatre history.

Entry

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

THEATRE STUDIES UNITS 1 & 2

Unit 1

Area of Study 1 – Pre-modern Theatre
This area of study focuses on an exploration of play scripts from the pre-modern era of theatre that is works prior to the 1880s. Students study play scripts from at least three distinct theatrical periods from this era. Through practical workshops students learn about contexts, cultural origins, theatrical styles, use of stagecraft and performance possibilities for each of the selected play scripts.

Area of Study 2 – Interpreting Play Scripts
This area of study focuses on the presentation of play scripts from the pre-modern era of theatre. Students learn how acting and other stagecraft can be informed by different theatrical styles and contexts. Through rehearsals and performance students learn about developing character, the effect of the audience on performance, and the use of acting skills to enhance text interpretation.

Area of Study 3 – Analysing a Play in Performance
This area of study focuses on an analysis of a professional performance of a play script from the pre-modern era. Students explore the nature of theatrical analysis including theatrical styles, audience perspective, acting skills, use of other stagecraft and the ways in which the contexts of a play script have been interpreted through performance.

Unit 2

Area of Study 1 – Modern Theatre
This area of study focuses on an exploration of play scripts from the modern era of theatre, that is, works written between 1880s and the present. Students study at least three distinct theatrical movements from this era including play script/s associated with each movement. Students learn about the contexts, origins, theatrical styles, production processes, use of stagecraft and performance possibilities of each play script. Through practical workshops involving the application of stagecraft, students gain knowledge of how each movement has shaped and contributed to the world of modern theatre.

Area of Study 2 – Interpretation through Stagecraft
In this area of study students apply stagecraft to realise play scripts from at least three distinct theatrical movements from the modern era. They also learn how stagecraft is informed by and contributes to the development of different theatrical styles, and consider ways the application of stagecraft is itself shaped by the contexts of the play scripts. Through working collaboratively, students gain an understanding of how stagecraft is applied in a production process to interpret play scripts.

Area of Study 3 – Analysing a Play in Performance
This area of study focuses on an analysis and evaluation of a professional performance of a play script from the modern era. Students explore the nature of theatrical analysis and production evaluation including the application of stagecraft and its effect on an audience

Unit 1 Outcomes	Unit 2 Outcomes
1. On completion of this unit the student should be able to identify and describe the distinguishing features of play scripts from the pre-modern era. 2. On completion of this unit the student should be able to apply acting and other stagecraft to interpret play scripts from the pre-modern era. 3. On completion of this unit the student should be able to analyse a performance of a play script from the pre-modern era in performance.	1. On completion of this unit the student should be able to identify and describe the distinguishing features of play scripts from the modern era of theatre. 2. On completion of this unit the student should be able to apply stagecraft to interpret play scripts from the modern era. 3. On completion of this unit the student should be able to analyse and evaluate stagecraft in a performance of a play script from the modern era.

Unit 1 Assessments Tasks	Unit 1 Assessments Tasks
1. A folio with annotated visual reports and interpretation of play script/s 2. Performance of play scripts from the pre-modern era. 3. Oral presentations. 4. Analysis of a performance of a play script from the pre-modern era. 5. Semester Examination.	1. A folio with annotated visual reports and interpretation of play script/s 2. Practical application of stagecraft to interpret play scripts from the pre-modern era. 3. Written analysis and evaluation of stagecraft in a performance of a play script from the modern era. 4. Semester Examination.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

THEATRE STUDIES UNITS 3 & 4

Unit 3

Area of Study 1 – Production Process
This area of study focuses on the development of skills which contribute to the interpretation of a play script. Students work collaboratively to contribute to the development of a production. The students undertake practical exercises and tasks as a member of the production team in the development of a play script through the four stages of production including production planning, production development, production season, and production evaluation.

Area of Study 2 – Stagecraft Influence
This area of study focuses on documentation and analysis of the influence of stagecraft on the production of a play script by the students in area of study 1. Students study the background, contexts, language and theatrical possibilities of a play script as a way of informing the development of an appropriate interpretation for the production. They document and analyse the influence of their two chosen stagecraft elements influenced and contributed to the production during the four stages of production.

Area of Study 3 – Production Analysis
This area of study focuses on the analysis and evaluation of an interpretation of a play script in a production from the prescribed *Theatre Studies Unit 3 Playlist*. Students analyse and evaluate the relationship between the written play script and its interpretation on stage. This includes the decisions that have been made when interpreting the play script, for example decisions pertaining to design, direction and acting. In doing so students study ways the interpretation on stage draws on and/or changes the historical, cultural and social contexts in the play script.

Unit 4

Area of Study 1 – Monologue Interpretation
This area of study focuses on the interpretation of a monologue from a play script selected from the monologue list. Students select a monologue from the list and study the text of the monologue, the prescribed scene in which it is embedded and the play script from which the scene is derived. Students interpret the monologue through the application of acting, and other stagecraft and theatrical style/s.

Area of Study 2 – Scene Interpretation
Students outline an interpretation of the scene focusing on the ways in which the scene could be approached as a theatrical performance.

Area of Study 3 – Performance Analysis
This area of study focuses on the analysis and evaluation of the acting in a production selected from the prescribed *Theatre Studies Unit 4 Playlist*. Students attend a production selected from the prescribed playlist. They analyse and evaluate how actor/s interpret the play script in the performance. In doing so students study the character/s in the play and how the actor/s interpreted them on stage

Unit 3 Outcomes	Unit 4 Outcomes
1. Apply stagecraft to interpret a play script for performance to an audience and demonstrate understanding of the stages of the production process (folio).	1. Perform an interpretation of a monologue from a play script.
2. Analyse the use of stagecraft in the development of a play script for production, incorporating the specifications appropriate for each stage of the production process	2. Develop a theatrical brief that presents an interpretation of a scene.
3. Analyse and evaluate ways in which a written play script selected from the prescribed playlist is interpreted in its production to an audience	3. Analyse and evaluate acting in a production from the prescribed playlist.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Apply acting and set design in all stages of the production process and demonstrate understanding through interactions with other members of the production team and decisions made in relation to application of acting and set design to interpret a selected play script in performance to an audience.	1. A theatrical brief presented as a written report that outlines ways in which a prescribed scene selected from the *Theatre Studies Performance Examination* (monologue list) could be approached as a theatrical performance.
2. Develop and present a production folio that analyses application of costume and stage management during all stage of the production process.	2. A written report that analyses and evaluates acting in a production selected from the *Theatre Studies Unit 4 Playlist*.
3. Responses to structured questions about decisions that have been made when interpreting a play script selected from the *Unit 3 Theatre Studies Playlist*.	3. Performance Examination (monologue).
	4. Written Examination.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
School assessed coursework, performance exam and an end-of-year examination.

- Unit 3 school-assessed coursework: 30 per cent
- Unit 4 school-assessed coursework: 15 per cent
- End-of-year performance examination: 25 per cent
- End-of-year written examination: 30 per cent

VISUAL COMMUNICATION AND DESIGN

Through Arts such as Visual Communication and Design, people can understand, express and analyse truth, beauty and faith. Humans have an innate need to connect with one another on spiritual, emotional, intellectual and physical levels. The Arts are a conduit through which this communication can take place.

UNITS 1 & 2

Unit 1
Students will develop an understanding of instrumental drawing methods and freehand drawing including drawing from direct observation. They study of a range of drawing methods, including relevant Australian Standards conventions. Students develop practical skills in the application of appropriate drawing methods, design elements and principles, and information and communications technology. The unit also introduces the role of the design process in visual communication production.

Area of Study 1 – Instrumental Drawing
This area of study focuses on instrumental drawing to show objects and their relationship to each other in space – two dimensionally and three dimensionally. Manual and/or electronic drawing methods are used to draw objects using paraline projections, including isometric, oblique, planometric and third-angle orthogonal projections. Australian Standards conventions are used appropriately in the communication of visual information and in the completion of finished designs.

Area of Study 2 – Freehand Drawing and Rendering
This area of study focuses on freehand drawing from direct observation, including one-point and two-point perspective and rendering. A range of media is used in drawing to represent objects, depicting surface features and to describe form, space, light, shade, shadow and texture. A variety of rendering techniques may be applied to enhance the form of represented objects and to communicate realistic scale and proportion of objects in relation to one another.

Area of Study 3 – 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, the use of information and communications technology and, where appropriate, other methods of electronic image generation such as photography and photocopying. Design elements, including colour, shape, line, tone, texture, form, letterform and point, and principles, including balance, contrast, cropping, hierarchy, figure–ground, scale, proportion and pattern, are used to produce visual communications that satisfy a stated purpose. Experimentation and exploration occur throughout the development of ideas in the testing and reviewing of the relationship between applied elements and principles and the requirements specified in the stated purpose.

Area of Study 4 – Design process
This area of study focuses on components of the design process and how it is applied in the production of visual communications. The design process initially involves identification of a visual communication need establishing the purpose of the visual communication. Information is then researched and ideas generated in order to establish how the visual communication need could be best satisfied through the production of visual communications. Materials, methods, media, design elements and principles are trialed and tested throughout the design process prior to the completion of final presentations.

Unit 2: Communication in Context
Students learn to develop and refine practical skills by generating images and developing them through freehand drawing, instrumental drawing and the use of information and communications technology. Students will develop an awareness of how the design process facilitates exploration and experimentation and how information and ideas are communicated.

Area of Study 1 – Representing and Communicating Form
This area of study focuses on developing skills in communicating visual information and in developing images through freehand and instrumental drawing. The representation of form, scale and relationships should be achieved through the appropriate selection of drawing methods including two-dimensional and three-dimensional representations. Australian Standards conventions should be applied to indicate correct dimensioning, cross-sectioning and for the representation of circles in two-dimensional drawing. In drawing three-dimensional objects, the appropriate representation of circular features should be shown. The conversion of two-dimensional drawings to three-dimensional representations and vice versa should be clearly depicted.

Area of Study 2 – Developing Imagery
This area of study focuses on the application of freehand drawing and rendering and the methods of application that effectively represent form. Both one-point and two-point perspective drawing is used in the development of imagery, which depicts the surface details of an object, including materials and texture. Similarly, the effects of light and shadow on the features of an object are illustrated and a range of media, design elements and principles are applied. In the depiction of selected images, design principles such as scale and hierarchy are applied to illustrate the relationships that exist between objects on a picture plane.

Area of Study 3 – Developing Visual Communication Solutions
This area of study focuses on applying the design process in the development of visual communication solutions to set tasks. The tasks may vary in their purpose, context, target audience, materials to be trialed, media and design elements and principles to be explored. Freehand and instrumental drawing together with information and communications technology and, where appropriate, other methods of electronic image generation such as photography and photocopying are used to express varied concepts and to develop solutions. Following the analysis of material and research related to the set task, the proposal of solutions and refinement of ideas occur during the application of the design process.

Area of Study 4 – Visual communication in Context
This area of study focuses on how cultural and historical factors influence the communication of information and ideas in both contemporary and historical visual communications. The influence of materials, methods, media, design elements, design principles and final presentations on the visual communication within these contexts is also considered. The influences of historical styles and movements on contemporary visual communications are also analysed. In the discussion of examples of both contemporary and historical visual communications, the influence of social factors such as changes in fashion, social values and current issues would be analysed. Visual communication terminology is used throughout the analysis of examples of visual communications.

Unit 1 Outcomes	Unit 2 Outcomes
1. Students learn how to produce orthogonal and paraline drawings according to standards and conventions.	1. Students learn to draw cross sections, circular forms, and represent scale through orthogonal and paraline drawings.
2. Students create form through observational drawing and render it to show light and surface qualities of a variety of objects using a range of media.	2. Students learn to use perspective drawing to represent scale relationships between objects, and to show form, and shadow.
3. Students explore the use of the design elements and principles, through drawing and computers and apply them to the development of their ideas.	3. Students learn to us the design process to produce visual communication solutions.
4. Students learn about the stages of the design process and how they are used to create design solutions.	4. Students compare and contrast the features of different historical design styles.

Unit 1 Assessment Tasks	Unit 2 Assessment Tasks
1. Folio of instrumental drawings due Week 4 term one.	1. Folio of instrumental drawings due week 6 term four.
2. Folio of freehand drawing and rendering due week 9 term one.	2. Folio of developmental work Due week two term three.
3. Folio of developmental work and final presentation due Week 7 term two.	3. Outcome 3 folio and visual communication solutions due week 5 term three.
4. Written presentation due week 3 term two.	4. Written presentation Due week 9 term three.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
Individual school decision on levels of achievement.

VISUAL COMMUNICATION AND DESIGN UNITS 3 & 4

Unit 3 – Visual Communication
Students will develop an understanding of visual communication production through the application of the design process. They consider existing visual communication and analyse and evaluate examples. Students will also investigate the production of visual communications in a professional setting and examine the nature of professional practice.

Area of Study 1 – Visual Communication Design
This area of study focuses on the application of the design process to satisfy a stated visual communication need. In response to this defined need, research provides material for analysis and manual drawing is used to generate concepts and ideas relevant to the original visual communication need. Design elements, principles, media and materials are applied in the development of design alternatives. Freehand and instrumental drawing, featuring Australian Standards conventions where required, are also applied in the generation and development of ideas related to the original need.

Instrumental drawing, using manual or electronic methods, including third-angle orthogonal, paraline and perspective drawing, are used to demonstrate form and, where appropriate, function relevant to the communication need. Throughout the application of the design process, ongoing evaluation occurs, demonstrating the selection and refinement of concepts appropriate to the visual communication need. The development and refinement of ideas using a range of image generation methods including information and communications technology, culminates in a final presentation.

Area of Study 2 – Visual Communication Analysis
This area of study focuses on the analysis and evaluation of examples of visual communication. It includes the audiences and purposes of visual communication and the ways in which information is communicated to a desired audience. The use of the materials, methods, media, design elements, design principles and final presentations in visual communication is described and the application of design elements and principles evaluated.

Area of Study 3 – Professional Practice in Visual Communication
This area of study focuses on the relationship between the clients, professional designers and, where appropriate, specialist professional personnel in a professional setting. In the design and production stages of the design process, client initiated design briefs are used by professional designers and, where appropriate, specialist professional personnel to prepare solutions to fulfill the requirements of the brief. In preparing these solutions decisions are made about materials, methods, media, design elements and principles that are the most appropriate and related to the requirements of the design brief. In this area of study, the term ‘brief’ can be understood as one or more briefs.

Unit 4: Designing to a Brief
The main purpose of this unit is to enable students to apply their knowledge of the components of the design process in the preparation of one design brief. Students apply their practical skills to the development and production of two distinct final visual communication presentations through application of the design process and based on the requirements of the brief.

Area of Study 1 – The Brief
This area of study focuses on the preparation of a brief that proposes and defines the communication need of a client. The brief identifies the need of the client (including two possible distinct final presentations on two presentation formats), identifies the audience/s, purposes and contexts, and specifies any related constraints and expectations.

Area of Study 2 – Developmental Work

This area of study focuses on the application of the design process to produce developmental work consistent with the requirements of the brief. The design process initially involves researching and analysing information related to the brief. Initial concepts based on this analysis are then developed and refined. This part of the design process involves experimentation with materials, methods (including freehand drawing), media, design elements, design principles and presentation formats in order to develop imaginative solutions for the proposed two distinct final visual communication presentations. The selection of the preferred options for final presentations involves the production of mock-ups. Throughout the design process the developmental work (including mock-ups) is evaluated to ensure client need/s, intended purpose/s and audience/s are being satisfied. Final creative and technical decisions are made about the developmental work in order to satisfy the requirements of the brief.

Area of Study 3 – Final Presentations

This area of study focuses on the final phase of the design process. Two distinct final visual communication presentations are produced on two presentation formats. These are in addition to the work completed as part of the developmental work for Outcome 2. Each final presentation should be based on the content of the brief, and the approach taken and solutions developed during the design process in the application of materials, methods, media, design elements and principles. The final presentations should reflect technical competence in the methods developed and refined during the design process and be consistent with Australian Standards conventions, where appropriate.

Unit 3 Outcomes	Unit 4 Outcomes
1. Students produce a Folio of work including technical and observational drawings and use of the design process as well as a final solution.	1. Students write a design brief that clearly defines the communication need.
2. Students complete a design analysis identifying audience characteristics, use of elements and principles to effectively communicate.	2. Students produce a folio of developmental work that utilises design process and a variety of materials, processes and elements and principles etc.
3. Students discuss and evaluate how professional designers operate in the real world.	3. Students create 2 final presentations that meet the need explained the design brief.

Unit 3 Assessment Tasks	Unit 4 Assessment Tasks
1. Folio and final presentation Due week 7 term two (this project runs for the whole semester). 2. Written Analysis to be completed week 9 term one in class. 3. Written short answer task completed term 2 week 3 during class time.	1. Folio of development work and two distinct final presentations due at the end of term three.

Satisfactory Completion
Demonstrated achievement of the set outcomes specified for the unit.

Levels of Achievement
School assessed coursework and an end-of-year examination.

- Unit 3 school-assessed coursework: 33 percent
- Unit 4 school-assessed coursework: 33 percent
- End-of-year written examination: 34 percent

VET IN THE VCE

VET

All VET in the VCE programs have full VCE study status and contribute as units towards the satisfactory completion of the VCE. The qualifications are composed of units of competence. There is a wide variety of VET studies ranging from Arts, Media and Automotive to Community Services, Engineering, Retail and Animal Studies. Please speak to the VCE Coordinator (Academic) who will direct you to the relevant personnel for further information. Up to 8 of the units of study may be VET units obtained over two programs.

VCE VET VETAMORPHUS

UNITS 1 TO 4

VCE VET programs lead to nationally recognised qualifications and offer students the opportunity to gain both the VCE and a nationally recognised Vocational Education and Training (VET) certificate. They are fully recognised within the Units 1 to 4 structure of the Victorian Certificate of Education (VCE) and have equal status with other VCE units

Vetamorphus is **Certificate 3 in Christian Ministry and Theology**. It provides a rich and multi-faceted opportunity for students to explore their faith. The course complements what many students are already doing in service at their local church and in mission work (including our year 11 Missions Trip to Fiji).

There are 6 core areas of Vetamorphus:

Peer Group (a small group which runs during class time):
A student led small group where students inspire each other to grow, whilst being supported and encouraged by their Peer Group Supervisor. This supervisor facilitates a growing environment where students are equipped with knowledge and given the opportunity to apply that knowledge to their life.
Time commitment: 28 weeks x 1.5 hrs per week = 42 hrs

Ministry Practice
Developing the discipline of service and becoming a servant; discovering and growing gifts, whilst being apprenticed to a more experienced leader. Ministry Practice can consist of serving in a team on a regular basis throughout the program (kids club, youth group, school program, community project or any other regular ministry), and or a Live-in-mission: (leading on a camp, mission trip etc.).
Time commitment: 56 hrs

Private Bible Study
Students engage in a reading plan that covers two thirds of the New Testament and requires them to reflect on and journal their readings. Private study also includes the preparation and application of Learning Exercises, Ministry Exercises, Seminars and "Creatives", which are worked through and discussed in the peer group time.
Time commitment: Reading & Journaling:
30 mins per day x 3 times a week x 28 weeks per year = 42 hrs

3 seminar papers x 10 hrs = 30 hrs
16 learning and ministry exercises x 1 hrs = 16 hrs

Mentoring
Students participate in a mentoring relationship with a mature Christian on a regular basis. Students will explore their personal journey with Christ and draw on the wisdom and experience of someone they look up to and respect.
Time commitment: 10 meetings x 1 hr per meeting = 10 hrs

Retreats
The goal of our retreats is to equip and inspire. We take 3 weekends over the program and give students opportunity to connect with peers from across the state. On these weekends students will receive intensive training as well as opportunity to reflect and have fun with others.
Time Commitment: 3 retreats = 30 hrs

Christian Community
During the program students commit to journeying with a community of faith, discovering what it means to be the Church instead of just going to church. Students reflect on this regular experience individually and as a peer group.
Time Commitment: 14 gatherings x 1 hr = 14 hrs

TOTAL COURSE TIME COMMITMENT = 240 HRS

VICTORIAN CERTIFICATE OF APPLIED LEARNING (VCAL)

The Victorian Certificate of Applied Learning (VCAL) is a 'hands-on' option for students in Years 11 and 12.

Like the VCE, the VCAL is a recognised senior secondary qualification. Unlike the VCE, which is widely used by students as a pathway to university, the VCAL focuses on 'hands-on learning'. Students who 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 Year 12.

The VCAL's flexibility enables students to design a study program that suits their interests and learning needs. Students select accredited curriculum components from VCE studies, Vocational Education and Training (VET) qualifications, Further Education (FE) and VCAL units. There are four compulsory strands in VCAL:

- Literacy and Numeracy Skills
  Your VCAL learning program must include literacy and numeracy subjects, such as VCE English and Maths or other accredited studies such as literacy and numeracy modules from the Certificate in General Education for Adults.
- Work Related Skills
  In order to develop 'employability skills', VCAL gives you the choice of undertaking:
    - Structured Workplace Learning
    - A School-based or Part-time Apprenticeship/Traineeship, or
    - Part-time work.

You can also study units and modules that will help prepare you for work, for example occupational health and safety or job interview skills.

- Industry Specific Skills
  Your VCAL learning program must include Vocational Education and Training (VET) units of competency. However, you are not required to focus on or complete any single VET qualification. For example, you can choose to undertake various units of competency from a range of VET qualifications to meet the VCAL requirements, and gain experience in a range of vocational areas. The range of VET options is extensive with recognised training packages available from industries including automotive, engineering, building and construction, hospitality and retail, agriculture, horticulture, warehousing and hair and beauty.
- Personal Development Skills.
  As part of your VCAL learning program, you must participate in community-based projects, voluntary work and/or structured activities that will help develop your self-confidence, teamwork skills and other skills important for life and work.

Students who start their VCAL and then decide they would like to complete their VCE, are able to transfer between certificates. Any VCE studies successfully completed as part of the VCAL program will count towards the VCE.

A certificate and Statement of Results will be issued to students who successfully complete their VCAL.

For further information please contact the Director of Teaching and Learning or the Deputy Principal. The delivery of the VCAL Certificate is subject to having a minimum number of students (10).

VCE (Year 11) Subject Selection Plan 2018

Complete the grid below to indicate the subjects and the corresponding units selected for 2018
Please refer to page 140 for instructions on how to enter your subjects online through Web Preferences.
Student's Name (Please print): ……

The usual program for students to take is:

- 6 VCE units per semester in Year 11 (Unit 1 and 2), or
- 6 VCE units per semester in Year 11 (including one 3 and 4 sequence if eligible) and
- 5 VCE units per semester in Year 12

The compulsory studies have been listed for you.

Current Career Aspirations:

1._____ 2._____

3._____ 4._____

Year 11		**Year 12**	
Semester 1	**Semester 2**	**Semester 1**	**Semester 2**
English 1	English 2	English 3	English 4

Proposed Tertiary Courses Tertiary Prerequisites

-
-
-
-

Are you eligible to study a Unit 3 and 4 sequence in Year 11? If so, list your preference here.

1_____ 2_____

** *Please submit a copy of your Semester 1 report*

Do you wish to study a VET course or external LOTE in 2017? If so, list your choice here

_____

Student's Signature---------- **Date**----------

Parent's Signature:…… **Date:**……

APEX (VCAL) Subject Selection Plan 2018

Complete the grid below to indicate the subjects and the corresponding units selected for 2018.
Please refer to page 140 for instructions on how to enter your subjects online through Web Preferences.
Student's Name (Please print): ……

The usual program for students to take is:

- Literacy
- Numeracy
- Personal Development
- Work Studies
- VET Course

The compulsory studies have been listed for you.

Current Career Aspirations:

1._____ 2._____

3._____ 4._____

Year 11		**Year 12**	
Semester 1	**Semester 2**	**Semester 1**	**Semester 2**
Literacy	Literacy	Literacy	Literacy
Numeracy	Numeracy	Numeracy	Numeracy
Personal Development	Personal Development	Personal Development	Personal Development
Work Studies	Work Studies	Work Studies	Work Studies
VET Course (whole year)		**VET Course (whole year)**	

An optional VCE subject could be a study possibility within the APEX program.

If you are interested in studying a VCE subject with your APEX course, please indicate which subject you would like to study here.

1_____ 2_____

Proposed Tertiary/TAFE courses

-
-
-
-

Student's Signature---------- **Date**----------

Parent's Signature:……… **Date:……**.……

Instructions for Subject Selection Online

- You will make your selections for your subjects online. Please follow these instructions:
- Before you begin make sure you have access to a printer from the computer on which you are making your selection as you will need to print out your receipt.
- **The closing date for subject selections is July 28.** Please do not leave it to the last minute as you cannot make selections after this date. **Printed receipts to be handed to Mrs Jewell on or before July 31.**

a) You will receive an **email to your Lighthouse address on June 26** with your login details. **Portal opens on June 27. If you don't receive the email, please speak to Mrs Jung. If you have issues accessing your Lighthouse email account, please see the IT staff.**
- Log on to the weblink included in the email. Enter access code and password.

b) This takes you to the *Web Preferences Student Portal Welcome Page*

c) Follow the steps Note: For entry to Year 11 choose study stream either VCE or VCAL

Step 1. Add new preferences
Step 2. Select preferences
Step 3. Submit, check resubmit
Step 4. Print receipt

Please NOTE:

- **Read your Semester One report and check last year's ATAR and university courses before making your selections.**
- Notice red banner at top of page. You must select 6 entries for those going into Year 11. You must choose 5 for entry to Year 12
- The system already identifies prerequisites for you. (You will not see the subject if you have not done the prerequisite study).
- There is a note against Maths subjects indicating required grade levels for all Unit 3 and 4 Maths subjects and for Maths Methods 1 and 2. If you have not met the grade boundaries for entry into the Maths subjects then you will not be able to select it. **Please see your Maths teacher regarding your results.**
- You cannot select VET or external LOTE directly from the Portal. Indicate your interest in these studies on the receipt.