



# VCE

# *Navigator*

2022

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**KOROWA**  
ANGLICAN GIRLS' SCHOOL

# Welcome

## BECOMING LIFE READY

At Korowa our community plays an important role in supporting the School and our students. Many of our families choose Korowa because they value the connection that we foster, as a smaller school, between students, teachers and families.

Our parents are the foundation of our community; we work hard to encourage them to be connected and continue to look for ways in which we can support them and their children. We recently introduced a subsidised bus service from Oakleigh South and Bentleigh to support our families in those areas where access to Korowa via public transport is difficult.

### VCE – MISSION STATEMENT

VCE at Korowa sees our students with one eye on the present and one eye on their future. With a firm focus on developing a balance between academics and co-curricular activities, a successful VCE program is underpinned by health and wellbeing, undertaking subjects which align with an individuals strengths, passion and pathways, and pursuing opportunities which allow students to continue to grow and build their CV in preparation for life beyond Korowa.

Students are encouraged to take ownership of their own learning journey and to empower themselves in making decisions that best set them up for success both now and for the future. Sessions delivered through a dynamic Time Zero program support students to develop their skills in and continue to build on their individual capacities to work towards personal best.

Complemented by a team approach, VCE students are supported through their final years by their Head of School, Head of Year, VCE Co-ordinator, Director of Learning and Teaching, Careers Counsellor, School Counsellor, Educational Psychologist and Counsellor. VCE Mentors support students in a range of Crew based discussions and regular individual check ins.

VCE is an exciting time for our students as they work towards life beyond Korowa.

Ms Karlie Stocker  
Head of Senior Years

# BUILDING CHARACTER

Developing good people who actively engage in their community is a priority. Students can easily pursue their passions while balancing their academic studies with an array of co-curricular offerings pertaining to social service, music, drama, visual arts, sport, writing and leadership.

Our Prep–Year 12 House system is very much part of the Korowa life and all students in the Senior Years are expected to actively participate in the array of activities on offer. Current students and Korovians alike fondly recall memorable House chants during events where students forge strong relationships with fellow members while cheering them on. House also facilitates an opportunity to be enterprising while demonstrating leadership and teamwork as part of the School community.

VCE at Korowa provides our girls with a mix of formal and informal opportunities to develop, enhance and demonstrate their leadership capacity. These opportunities include serving both the School and wider community through formal and informal participation in Committees such as Social Service, Environment, Student Representative Council and the Palm Leaf (Korowa Magazine) Committee. All girls are encouraged to consider carefully serving our School in this way.

*Developing good people*

# Mission and Values

Korowa students want to be prepared for their future, to be ready to thrive in an increasingly complex and challenging world. They want authentic learning experiences that will be relevant in the real world. They are curious and relentless in the pursuit of knowledge and want to make connections between school and life.

At Korowa, our Mission and Values provide the framework to delivering students a holistic education where they are supported to explore their passions, try new things and achieve their best.

## MISSION

Our purpose is to develop self-aware, confident and capable young women who understand their responsibility and capacity to influence the world in a positive way.

## VALUES

At Korowa, we believe in the power of Kindness and the values of courage, respect, integrity and service. Be brave, respectful, honest, generous and above all be Kind.

## STRATEGY

Korowa's strategy provides the structure to support teaching and learning and the delivery of an outstanding education program.

Key elements:

- The Place to connect
- The Opportunity to excel
- The Challenge to learn

## GUIDING PRINCIPLES

Underpinning all that we do are five overall guiding principles:

- A culture that encourages character and values that equip students to meet future opportunities and challenges.
- Academic excellence within a meaningful journey of rich, diverse, future-focused and holistic learning experiences.
- Staff are supported to develop their expertise and this commitment adds significantly to our students' capacity to enjoy learning and embark on their chosen pathways.
- A whole School community strengthened by enduring relationships of trust and a shared vision.
- Facilities that enhance the quality of our education and draw us together in celebration of our achievement.

# We are Konnected!

At Korowa, we view technology as a vital tool to support collaboration and creativity. Online tools and programs facilitate transformational teaching and learning. Our staff and students have access to cloud-based programs such as Microsoft Mail, OneDrive, Microsoft Teams and professional tools such as the Adobe Creative Suite.

## ONE TO ONE LAPTOP PROGRAM

Korowa students and teachers have their own laptop with the most up to date tools and creative software.

Laptops provide the tools to channel student creativity and collaboration which in turn can be translated into prototypes in the STEAM Lab or film through the Media Studio.

## KONNECT – LEARNING MANAGEMENT SYSTEM

A platform which supports every individual class with an online page to House resources, communications, online assessment and reporting.

## LEARNING ONLINE

A digital toolbox allows students to create, design, collaborate and problem solve.

Tools include: Microsoft 365, OneNote, Stream, Adobe Creative Suite, Minecraft, CAD.

## MICROSOFT TEAMS

2020 has shown us the importance of being adaptable and the value of being able to connect and collaborate anytime, anywhere. This powerful communication tool has allowed us to continue to teach and learn as well as stay connected remotely. Teams will continue to be a character of our classroom in both face to face and online learning into the future.

## STEAM LAB

The STEAM Lab at Korowa facilitates hands on creative problem solving through tinkering with robotics and design thinking to develop and engineer prototypes. The STEAM Lab has a range of resources available including robotics, technology such as 3D printers, Virtual Reality systems, laser cutter, electronic equipment and other materials to assist students in bringing their creations to life.

The co-curricular Quest program provides an opportunity for students to work with external experts from industry and the tertiary sector.

## MEDIA STUDIO

Set up with a suite of lights, cameras and other related tools, students can engage in developing and producing film in a media studio that replicates an industry standard experience.

# Wellbeing Ecosystem

At Korowa we believe in the power of kindness, and the capacity of our girls to develop into young women of good character who understand and act upon the need to be brave, honest, respectful and generous to others.

Essential to student's success in the VCE is a really closely connected and supportive team who work with students daily. The team of VCE teaching staff, Careers Counsellor, VCE Mentors, International Student Coordinator, School Counsellor and Educational Psychologist, Chaplain, Head of Learning Support, Heads of Year and Head of Senior School work closely with each student to provide them with the support they require to be successful.

Wellbeing is delivered in a holistic way daily to support the students through tailored Time Zero sessions, classroom learning and personal development information sessions. Students regularly meet with the Careers Counsellor to review post-school pathways and options.

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## TIME ZERO

In Years 11 and 12 Personal Development, girls are given the opportunity to engage with a range of concepts and key issues that impact the lives of contemporary young women.

They are challenged to consider ways in which they can begin to take more control of, and responsibility for, all elements of their young adult lives.

In Personal Development, girls have access to a range of experts and educators from within and beyond the Korowa community who assist our girls in developing habits for life including self- management, self-efficacy and proactive and protective behaviours.

In addition, Time Zero offer students the opportunity to access targeted academic assistance that is responsive to girls' individual needs. These habits will prepare them well for the challenges of the final years of Senior School, as well as life beyond Korowa.

Whilst there is no formal assessment in the Personal Development or Time Zero courses, active participation and engagement is expected and is considered critical to holistic development of our VCE girls, and as such, all girls are expected to attend all parts of the Program.

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# Korowa's MENTAL HEALTH STRATEGY

Korowa's Mental Health Strategy was developed to support our student, staff and families. We recognise that investing in our community's mental wellbeing is paramount for ensuring that our students continue to thrive academically, emotionally, and socially in today's world. The Korowa Mental Health Plan, as illustrated, has been designed to enable the prevention and early intervention of wellbeing and mental health issues in students. This strategy has been integrated through all areas of teaching with a particular focus on the Circle, Community and Crew classes.

The strategy explores mental health under three sub-categories: Self-care, Connectedness and Health Practices underpinned by our School values, social emotional learning and character.

Self-Care is about caring for oneself and using a range of strategies alleviate stress and improve wellbeing such as contemplation, creativity and self-compassion.

Connectedness is about feeling you belong to something, that you are included, accepted and appreciated. We look at this through the climate of kindness, collaboration, ceremonies and connection.

Health Practices is the final element of the Mental Health Strategy which examines positive health practices, being physically active, eating well and looking after yourself.

Looking after oneself and supporting each other to maintain a healthy mind and body has never been more important.



Kashdan, T.B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30, 865-878.

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30, 79-90.

Signature programs are unique to Korowa and equip our young students with the skills and experiences of real life learning and application that extend them both within and beyond the classroom. Korowa endeavours to create connections within the community and industry to provide authentic experiences for our students.

# Signature Programs

## KINGLAKE EXPERIENCE

The purpose of the Kinglake Experience is to encourage Year 10 students to learn new skills and master old ones, to make decisions, to take responsibility, to practise positive relationships during teamwork, and to have fun. This ensures that every Year 10 student leaves with a greater sense of self confidence and leadership skills to apply as she prepares for her senior years. As part of this program in 2021, all Year 10 students travelled to Kinglake to engage in a range of outdoor challenges and cultural experiences.

## FUTURE READY

In Year 11, students have a 1:1 careers discussion where clarity is gained around their strengths and weaknesses in subjects. Building on the students self-awareness around suitability for subjects and potential careers pathways, an individual research plan is developed teaching the student how to navigate course and university information. Gaining a clear understanding of what the future pathway options may be and how appealing the content is, becomes a priority for good decision making. Informed choices allow the students to take control of their career planning.

All Year 12 girls attend an individual careers counselling appointment in Term 1 to make sure any planning required for entry to local, interstate or overseas applications are clarified. In Term 3, students meet again with the Careers Counsellor to do their VTAC applications and develop alternative career pathway plans. This is to ensure when they leave Korowa they are fully equipped with the knowledge and pathways that will provide the structure for their next journey.

Further to this, Year 12 girls who apply for tertiary places are able to access careers counselling during the change of preference period to ensure that they have access to up-to-date information and resources.



# THE VICTORIAN CERTIFICATE OF EDUCATION (VCE)

The VCE rules 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 1 and 2 and either English Units 3 and 4 or Literature Units 3 and 4;
- Three (3) sequences of Units 3 and 4 in 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.

## KOROWA VCE PROGRAM

The VCE program at Korowa 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. Individual needs will also be taken into account when finalizing a student's academic program.

The VCE Curriculum Guide is intended to help students plan their academic subjects so as to maximise future opportunities whilst providing an enjoyable and challenging Year 11 and 12 experience. As a Year 10 student, this guide is used to learn about the VCE and map out a program of study for the final two years at Korowa. As a Year 11 student, this guide is used to re-assess an academic program, in order to select the most appropriate Year 12 subjects, working towards completion of the VCE.

## THE PROCESS

All prospective Year 11 and 12 students will make initial choices from the subjects on offer.

At Korowa, we typically offer this number of VCE studies:

- Unit 1 & 2: 29 studies
- Unit 3 & 4: 30 studies

Student choices from the studies on offer will form the basis as to what subjects run the following year. A blocking grid is created to enable subjects and the required number of classes to run. This grid represents which studies will be blocked on the timetable at the same time.

Whilst we do our best to meet students' preferences, this may not always be possible due to:

- Class size;
- Block arrangements; or
- Unit 3 & 4 VCAA rules which state that class sizes of less than five require a partnership arrangement with another school.

Students should consider back-up studies should the need arise. This is practised from Year 9 and 10 when students are asked to make elective choices.

## PLANNING YOUR STUDIES AT VCE

A VCE program should contain studies you enjoy and will do well in. It may also contain prerequisite subjects; that is, subjects you may need in order to satisfy tertiary entrance requirements in particular courses. Please refer to page 11 for further information about tertiary entrance.

## THE VCE (BACCALAUREATE)

The VCE (Baccalaureate) has been designed to provide further information about the kind of senior secondary program of study a student has undertaken within the very flexible structure of the VCE. It provides an additional form of recognition for those students who choose to undertake the demands of studying both a higher level mathematics and a language in their VCE program of study.

The VCE (Baccalaureate) is contained within the VCE and is not another senior secondary credential.

## ELIGIBILITY

To be eligible to receive the VCE (Baccalaureate) a student must satisfactorily complete the VCE and receive a study score for each prescribed study component.

The VCE program of study must include:

- A Unit 3 and 4 sequence in English or Literature or English Language with a study score of 30 or above; or a Unit 3 and 4 sequence in EAL with a study score of 33 or above
- A Unit 3 and 4 sequence in either Mathematical Methods or Specialist Mathematics
- A Unit 3 and 4 sequence in a VCE Language
- At least two other Unit 3 and 4 sequences

## STUDIES ON OFFER TO YEAR 11 AND 12 STUDENTS AT KOROWA IN 2022

UNITS 1 AND 2	UNITS 3 AND 4
Accounting	Accounting
Art Unit 1 / Studio Art Unit 2	Art
Biology	Biology
Business Management	Business Management*
Chemistry	Chemistry
Drama Unit 2 / Theatre Studies Unit 2	Drama
English / English EAL	English / English EAL
Food Studies	Food Studies*
Australian and Global Politics	Global Politics*
Health and Human Development	Health and Human Development*
History: 20th Century	History: Revolutions*
Languages: Chinese (1st Language); Chinese (2nd Language); French; German; Japanese	Languages: Chinese (1st Language)*; Chinese (2nd Language); French; German; Japanese
Legal Studies	Legal Studies*
Literature	Literature

## STUDIES ON OFFER TO YEAR 11 AND 12 STUDENTS AT KOROWA IN 2022

UNITS 1 AND 2	UNITS 3 AND 4
Mathematics: <ul style="list-style-type: none"> <li>• General Mathematics (Further)</li> <li>• Mathematical Methods</li> <li>• Specialist Mathematics</li> </ul>	Mathematics: <ul style="list-style-type: none"> <li>• Further Mathematics</li> <li>• Mathematical Methods</li> <li>• Specialist Mathematics</li> </ul>
Media Studies	Media Studies
Music Performance	Music Performance
Physical Education	Physical Education*
Physics	Physics
Psychology	Psychology*
	Studio Arts
Visual Communication and Design	Visual Communication and Design

### VET STUDIES

Korowa also offers VET (Vocational Education and Training) programs in conjunction with the Inner Melbourne VET Cluster. Please speak with the Careers Counsellor for enrolment information. Additional charges apply for these courses.

### UNIT 3 AND 4 STUDIES IN YEAR 11

Please refer to the information on the next page regarding acceptance into Unit 3 and 4 subjects in Year 11. Subjects marked with an asterisk (\*) may be considered by students for acceleration in Year 11. Year 12 students may also consider these for their Year 12 program.

## UNIT 3 AND 4 STUDIES IN YEAR 11

When considering subjects for Year 11, some Year 10 students may consider applying to study one Unit 3 and 4 subject. Students whose academic performance in Year 10 indicates that they have developed a high level of skills and understanding may be considered.

### UNIT 1 AND 2 STUDIES IN YEAR 10 LEADING ONTO UNIT 3 AND 4 STUDIES IN YEAR 11

In the first instance, a Year 10 Semester 1 report will be considered, along with subject selection interviews, and consultation with the Head of Department.

The Semester 2 report will also be considered to support decisions previously made.

SUBJECT	CRITERIA
Biology	<ul style="list-style-type: none"> <li>Average of 70% on all CATs;</li> <li>Students who do not meet this requirement will need to sit a supplementary task and meet with the Head of Department for approval</li> </ul>
Business Management	Minimum of 70% across all areas of assessment in Units 1 & 2
Chinese 2nd Language Units 3 & 4	Chinese 2nd Language Units 1 & 2: minimum of 70% across all areas of assessment
Food Studies	Approval of Head of Department
Mathematical Methods	Maths Methods Units 1 & 2: minimum of 80% across tests and examinations in Semester 1
Music Performance	Approval of Head of Department
Studio Arts	Approval of Head of Department

*Performance must be maintained in the Semester 2 report.*

## VET IN THE VCE (VOCATIONAL EDUCATION AND TRAINING IN SCHOOLS)

All VET programs have full VCE study status, and contribute as units towards the satisfactory completion of the VCE. On successful completion, students are awarded their VCE as well as the VET certificate. Korowa works in partnership with the Inner Melbourne VET cluster.

VET enrolments are subsidised but incur some additional charges. VET in the VCE provides additional breadth to the VCE and gives students a nationally recognised training credential endorsed by industry.

The qualifications are composed of Units of Competence, which are expressed in terms of elements and their associated performance criteria; each must be demonstrated. To be awarded the Certificate, students must achieve all the elements in each Unit of Competence in accordance with the prescribed assessment requirements.

### VCE STUDENTS COMPLETING VET COURSES WILL INCUR AN ADDITIONAL FEE.

The fee varies depending on the course, the provider and the funding given to the School. The fee will be charged on Term 1 and Term 3 school fees. An estimate of the fees will be available when students choose their VCE program with final details distributed at the end of Term 4.

## UNIVERSITY ENHANCEMENT / HIGHER EDUCATION STUDIES

The VCE program at Korowa 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. Individual needs will also be taken into account when finalizing a student's academic program.

## ATAR CONTRIBUTIONS

Where the average mark over all Higher Education units:

- Is at least 90, the ATAR increment will be 5.0
- Is at least 80 but less than 90, the ATAR increment will be 4.5
- Is at least 70 but less than 80, the ATAR increment will be 4.0
- Is at least 60 but less than 70, the ATAR increment will be 3.6
- Is at least 50 but less than 60, the ATAR Increment will be 3.0

# Other VCE Options

## MAKING MODIFICATIONS TO A VCE PROGRAM

It is important that you plan your VCE program carefully according to the recommendations in the Curriculum Guide. Once the semester has begun, Unit changes can occur until the closing date. Changes can be made at the end of Semester 1 for Unit 1 and 2 studies.

Changes in the VCE student program are not possible at the end of Semester 1 for Units 3 and 4, as these units are studied as a sequence and are scored as such for the purposes of the VCE and tertiary selection.

## SATISFACTORY COMPLETION OF VCE UNITS

Each VCE unit includes a set of two to four outcomes. These outcomes must be achieved for satisfactory completion of the unit. In accordance with VCAA requirements, the subject teacher determines satisfactory completion. Parents are notified in writing if a VCE student is in danger of not achieving an outcome or has not completed an assessment task by the due date. A student may not be granted satisfactory completion if:

- There is doubt about whether the work is the student's own;
- The work is not of the required standard;
- The student has not met a School deadline for the assessment task, including where an extension of time has been granted; or
- There has been a substantive breach of rules including School attendance rules.

### ASSESSMENT AND REPORTING: UNITS 1 AND 2

VCE Units 1 and 2 will be assessed in two ways:

Completion of each Learning Outcome in a unit will be assessed as Satisfactory (S) or Not Satisfactory (N). For a unit as a whole to be satisfactorily completed, all the Learning Outcomes must receive an S.

Percentage results indicating the level of achievement/performance reached in aspects of each study are also used. These are internal scores and are not reported to the VCAA.

### ASSESSMENT AND REPORTING: UNITS 3 AND 4

The VCAA is responsible for the final assessment of all students undertaking Units 3 and 4. There are three assessment components in each Unit 3 and 4 study: either one school assessment and two examinations or two school assessments and one examination.

Each assessment is reported by VCAA as grades A+ to E, UG (ungraded). Examination grades and school assessment grades are reported separately.

### REPORTING FOR UNITS 1 AND 2

Parent teacher interviews are scheduled during Semester 1 and 2, and continuous online reporting is used to provide feedback to students and parents after each common assessment task during each semester.

### REPORTING FOR UNITS 3 AND 4

Continuous online reporting is used to provide feedback to students and parents after each common assessment task. A parent-student-teacher interview is scheduled during Semester 1 and 2.

Parents and students are urged to attend parent-student-teacher interviews where there is an opportunity to discuss progress with each of the subject teachers.

# Assessment and Reporting

### STUDY SCORES: UNITS 3 AND 4

Students' overall achievements for each study at Unit 3 and 4 are calculated and reported as a study score (relative position) on a scale of 0 to 50 by the VCAA. In order to qualify for a study score, a student must have S/S for Units 3 and 4 in that study.

On completion of the VCE, VCAA sends to Year 12 students:

- A cumulative statement of results listing all VCE units undertaken over any year level. Study Scores (relative position) will be listed for Unit 3 and 4 studies;
- A summary statement of grades giving the grades obtained in assessment components for Units 3 and 4;
- Credit obtained for a Vocational Certificate;
- University studies with the titles of the studies and university listed if successfully completed;
- The Victorian Certificate of Education; and
- The General Achievement Test (GAT) statement.

The language of the VCE may sound confusing at first. This glossary of commonly used VCE words will help you until the language becomes more familiar.

### **Australian Tertiary Admissions Rank (ATAR)**

The ATAR is 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 own, and she works under a teacher's supervision and confers with her teacher at various stages of completion of the work. She acknowledges all sources and types of help she receives. The teacher may ask the student to demonstrate her understanding of the work. The Victorian Curriculum and Assessment Authority stipulates authentication procedures, and Korowa sets policy and procedure accordingly.

### **Examinations**

All Unit 3 and 4 VCE Studies offered by Korowa include one or two examinations. Examinations are set and marked by the Victorian Curriculum and Assessment Authority. There are two periods of examinations during the year, in June (for the General Achievement Test) and October/November.

### **General Achievement Test (GAT)**

All students undertaking one or more Unit 3 and 4 subjects are required to sit the General Achievement Test (GAT). This examination 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 check the accuracy of external marking of individual students' examinations.

Students should do their very best on the GAT. They may like to familiarise themselves with the instructions and types of questions that may appear on the GAT. 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 subject. Each study includes at least one examination, most have School-assessed coursework and some have School-assessed tasks.

### **Level of Performance**

Units 3 and 4 levels of performance for School-assessed coursework are provided to Korowa students as % results.

These levels of assessment can only be used as a guideline as the Victorian Curriculum and Assessment Authority has responsibility for adjustment of levels of performance in accordance with examinations and (in the case of some studies) GAT scores.

### **Prerequisite Studies**

These are the studies nominated by Universities and TAFE's as studies which must be satisfactorily completed by all applicants seeking admission to their course. Entry requirements change. Refer only to the relevant Tertiary Entrance Guide and the Careers Counsellor.

### **'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 study. Students satisfactorily complete a unit if they satisfactorily demonstrate achievement of all outcomes as per the Victorian Curriculum and Assessment Authority-issued study design and if they meet School-stipulated attendance requirements. Schools vary in their chosen assessment activities (particularly for Units 1 and 2) because the Victorian Curriculum and Assessment Authority's study designs provide for assessment flexibility but comparability.

### **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 Units 3 and 4 English (or equivalent). Units 3 and 4 for all studies are taught as a sequence or as a year-long course. Students must obtain 'S' for Units 3 and 4 of a study for that study to be given a study score.

### **Statistical Moderation**

Moderation is a process of 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 that the coursework assessments given by different schools are comparable throughout the State. Further information is available from the Victorian Curriculum and Assessment Authority's (VCAA) website at [www.vcaa.vic.edu.au](http://www.vcaa.vic.edu.au).

### **Technical and Further Education (TAFE)**

TAFE institutes offer post-secondary courses which are vocationally-oriented. For most TAFE courses, students apply through VTAC, while for some certificate courses students apply directly to the particular TAFE Institute.

### **Unit**

Each of the VCE studies is divided into four units. One unit lasts one semester or half a year. One unit involves approximately 100 hours of study (including work done in and out of the classroom).

### **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 Curriculum and Assessment Authority (VCAA)**

The Victorian Curriculum and Assessment Authority oversees the implementation of the Victorian Certificate of Education including forwarding VCE results to the Victorian Tertiary Admissions Centre (VTAC). The VCAA website is [www.vcaa.vic.edu.au](http://www.vcaa.vic.edu.au).

### **Victorian Tertiary Admissions Centre (VTAC)**

This organisation 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 appropriate applications and accompanying information to the relevant tertiary institutions; making offers to prospective students on behalf of tertiary institutions; and publishing information which students will use in planning VCE programs and later applying for courses. VTAC is not a selection authority, and it does not determine selection criteria used by tertiary institutions.

# 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 acts as the central processing body for Victorian 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 study score (relative position); and/or
- Completion of special requirements such as attendance at an interview or submission of a folio of work

This information is available on the VTAC website at [www.vtac.edu.au](http://www.vtac.edu.au). On the website there is also a publications page at [www.vtac.edu.au/publications/](http://www.vtac.edu.au/publications/) where students and their parents can download useful materials such as the relevant VICTER (Victorian Tertiary Entrance Requirements) guide, which summarises entrance requirements for Tertiary Institutions that participate in the VTAC selection system.

Students should also consider downloading CHOICE: VCE Studies and the ATAR from this site. CHOICE: VCE Studies and the ATAR is a companion booklet to VICTER, it provides a snapshot of the tertiary system for students, it explains the terms they need to be familiar with and debunks some of the myths commonly associated with choosing subjects by using real life examples. Year 11 students may wish to download a copy of ABC of Scaling, as it helps students understand how the ATAR is calculated.

Students are encouraged to use the Course Search function on the VTAC website to assist in planning their VTAC preferences.

The ATAR is calculated using the formula:

- The Victorian Curriculum and Assessment Authority provides VTAC with each student's study scores (relative position) which indicates each student's position in the cohort of students taking the particular study;
- VTAC adjust these study scores to reflect differences in the cohort of students taking each study compared to other studies and differences in the difficulties of the VCE studies. This process is called scaling.

The scaled study scores are used to calculate the ATAR:

- The primary four studies (approved sequences in the English group and the next best three scaled scores) plus
- 10% of the score of the fifth and sixth scaled score are used

The following should be noted for Language and Mathematics in relation to the calculation of the ATAR:

- Languages study scores are adjusted up by adding five to the initial ATAR Subject Score mean. This means that all students of a LOTE receive an adjustment, but it is not a uniform adjustment.
- Mathematics: if a student has completed each of Further Mathematics, Mathematical Methods and Specialist Mathematics, only two of these results can contribute to the primary four, with the third Mathematics result being included as a fifth or sixth ATAR increment.

Students may obtain study scores in approved VET in the VCE Unit 3 and 4 programs. VTAC will include the VCE VET Unit 3 and 4 subject with a study score in either the primary four for the ATAR or if it is not one of the primary four studies, 10% of the score will be included as the fifth or sixth study score.

VCE VET Unit 3 and 4 sequences with no scored assessment available may be counted as fifth and sixth studies. The increment will be 10% of the average of the primary four VTAC scaled study scores.





VCE

*Unit Descriptions*

for Studies on offer  
to Korowa Students

(listed in alphabetical order)

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## UNIT 1: ESTABLISHING AND OPERATING A SERVICE BUSINESS

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

### AREAS OF STUDY

- Going into business
- Recording financial data and reporting accounting information

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks including: a folio of exercises; test/s; assignments; case study/ies (all manual or ICT based); classroom presentation; reports (written, oral and multimedia). Students must use ICT in at least two of the selected assessment tasks.

## UNIT 2: ACCOUNTING FOR A TRADING BUSINESS

This unit extends the accounting process from a service business and focuses on accounting for a sole proprietor of a single activity trading business. Students use a single entry recording system for cash and credit transactions and the accrual method for determining profit. They analyse and evaluate the performance of the business using financial and non-financial information. Using these evaluations, students suggest strategies to the owner on how to improve the performance of the business.

Students develop their understanding of the importance of ICT in the accounting process by using a commercial accounting software package to establish a set of accounts, record financial transactions and generate accounting reports.

### AREAS OF STUDY

- Recording financial data and reporting accounting information
- ICT in accounting
- Evaluation of business performance

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks including: exercises using a commercial accounting software package; folio of exercises; tests; assignments; case studies (all manual or ICT based); classroom presentation; reports (written, oral and multimedia). Students must use ICT in at least two of the selected assessment tasks.

### ENTRY: UNITS 3 AND 4

*It is highly recommended that students complete Units 1 and 2 before attempting Unit 3.*

## UNIT 3: RECORDING AND REPORTING FOR A TRADING BUSINESS

This unit focuses on financial accounting for a single activity trading business as operated by a sole trader and emphasises the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting. The perpetual method of stock recording with the First In, First Out (FIFO) method is also used.

### AREAS OF STUDY

- Recording financial data
- Balance day adjustments and reporting and interpreting accounting information

## UNIT 4: CONTROL AND ANALYSIS OF BUSINESS PERFORMANCE

This unit provides an extension of the recording and reporting processes from Unit 3 and the use of financial and non-financial information in assisting management in the decision-making process. The unit is based on the double entry accounting system and the accrual method of reporting for a single activity trading business using the perpetual inventory recording system.

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

### AREAS OF STUDY

- Extension of recording and reporting
- Financial planning and decision making

### ASSESSMENT: UNITS 3 AND 4

The level of achievement for Units 3 and 4 will be determined by school-assessed coursework and an end of year exam.

- Unit 3 coursework – 25%
- Unit 4 coursework – 25%
- End of year exam – 50%

This subject encompasses the study of both Art and Studio Arts in Unit 1 and 2. Students who choose this subject will have the opportunity to experience both studies throughout the year. This will allow them to make an informed choice between the studies of Art and Studio Arts in Unit 3 and 4 where they are taught as separate subjects.

### UNIT 1: ARTWORKS, EXPERIENCE AND MEANING

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 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. 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.

#### AREAS OF STUDY

- Artworks and meaning
- Art making and meaning

#### ASSESSMENT

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Unit 1 are a matter for school decision. For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

Tasks for assessment may be selected from the following: an extended written response, short-answer responses supported by visual references, an annotated visual report, a presentation using digital technologies, an oral presentation, or a range of visual responses to a selection of set tasks and documented evidence of the art process.

### UNIT 2: STUDIO EXPLORATION AND CONCEPTS

In this unit students focus on establishing and using a studio practice to produce artworks. The studio practice includes the formulation and use of an individual approach to documenting sources of inspiration, and experimentation with selected materials and techniques relevant to specific art forms.

Students explore and develop ideas and subject matter, create aesthetic qualities and record the development of the work in a visual diary as part of the studio process. Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks.

Students also develop skills in the visual analysis of artworks. Artworks made by artists from different times and cultures are analysed to understand developments in studio practice. Using a range of art periods, movements or styles, students develop a broader knowledge about the history of art.

#### AREAS OF STUDY

- Exploration of studio practice and development of artworks
- Ideas and styles in artworks

#### ASSESSMENT

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Unit 1 are a matter for school decision. For this unit students are required to demonstrate two outcomes. As a set these outcomes encompass the areas of study in the unit.

# ART/STUDIO ARTS

### UNIT 3: ARTWORKS, IDEAS AND VALUES

In this unit students study selected artists who have produced works before 1990 and since 1990. Students use the Analytical Frameworks (for analysing and interpreting the meaning of artworks). 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 their reflection of the structural, personal, cultural and contemporary aspects of their own developing artworks.

In this unit, contemporary art refers to art that 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, globalisation and environmental issues.

#### AREAS OF STUDY

- Interpreting art
- Investigation and interpretation through art making

**UNIT 4: ARTWORKS, IDEAS AND VIEWPOINTS**

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.

From research conducted 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 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.

**AREAS OF STUDY**

- Discussing art
- Realisation and resolution

**ASSESSMENT: UNITS 3 AND 4**

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework: 20%
- School assessed task (subject to external review): 50%
- A 90 minute written examination in November: 30%

\* Note that students' Art-related studies are enhanced by exposure to Artists-in-Residence and Gallery Ranfurly, involvement in exhibitions and competitions and the opportunity to take after-school Life Drawing classes.

# AUSTRALIAN AND GLOBAL POLITICS / GLOBAL POLITICS

## UNIT 1: IDEAS, ACTORS AND POWER

In this unit students are introduced to the key ideas relating to the exercise of political power. They explore how these ideas shape political systems, in particular, the characteristics of liberalism. They consider the nature of power in Australian democracy and in a non-democratic political system. They also explore the nature and influence of key political actors in Australia: political parties, interest groups and the media. All these forms of participation in Australian democracy influence the political agenda.

### AREAS OF STUDY

- Power and ideas
- Political actors and power

## UNIT 2: GLOBAL CONNECTIONS

This unit introduces students to the global community and the global actors that are part of this community. In Area of Study 1, students explore the myriad ways lives are affected by increased interconnectedness – the global links of the world – through the process of globalisation. In Area of Study 2, students consider the extent to which global actors cooperate and share visions and goals as part of the global community. They investigate the ability of the global community to manage areas of global cooperation and to respond to issues of global conflict and instability.

### AREAS OF STUDY

- Global links
- Global cooperation and conflict

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks which may include: an oral presentation such as a podcast or video; a wiki or blog; a social media campaign; an interactive presentation; a research report; a case study; an essay; test and short-answer questions; extended-response questions and examinations.

## UNIT 3: GLOBAL ACTORS

In this unit students investigate the key global actors in twenty-first century global politics. They use contemporary evidence to analyse the key global actors and their aims, roles and power. They develop an understanding of the key actors through an in-depth examination of the concepts of national interests and power as they relate to the state, and the way in which one Asia-Pacific state uses power within the region to achieve its objectives.

### AREAS OF STUDY

- Global actors
- Power in the Asia-Pacific region

## UNIT 4: GLOBAL CHALLENGES

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

### AREAS OF STUDY

- Ethical issues and debates
- Global crises

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes which may come from a multimedia presentation, a case study, an essay, a report, a test, structured questions, short-answer questions or an extended response. Students' level of achievement is determined by:

- School-assessed coursework in Units 3 and 4: 25% + 25%
- A two-hour written examination in November: 50%

### UNIT 1: HOW DO ORGANISMS REGULATE THEIR FUNCTIONS?

Students examine the cell as the structural and functional unit of life, from the single celled to the multicellular organism, including the requirements for sustaining cellular processes. Students focus on cell growth, replacement and death and the role of stem cells in differentiation, specialisation and renewal of cells. They explore how systems function through cell specialisation in vascular plants and animals, and consider the role homeostatic mechanisms play in maintaining an animal's internal environment.

#### AREAS OF STUDY

- How do cells function?
- How do plant and animal systems function?
- How do scientific investigations develop understanding of how organisms regulate their functions?

### UNIT 2: HOW DOES INHERITANCE IMPACT ON DIVERSITY?

Students explore reproduction and the transmission of biological information from generation to generation and the impact this has on species diversity. They explain the inheritance of characteristics, analyse patterns of inheritance, interpret pedigree charts and predict outcomes of genetic crosses. Students analyse the advantages and disadvantages of asexual and sexual reproductive strategies, including the use of reproductive cloning technologies. They study structural, physiological and behavioural adaptations that enhance an organism's survival, and consider the contributions of Aboriginal and Torres Strait Islander knowledge and perspectives in understanding Australian ecosystems.

#### AREAS OF STUDY

- How is inheritance explained?
- How do inherited adaptations impact on diversity?
- How do humans use science to explore and communicate contemporary bioethical issues?

### UNIT 3: HOW DO CELLS MAINTAIN LIFE?

Students investigate the workings of the cell from several perspectives. They explore the relationship between nucleic acids and proteins as key molecules in cellular processes. Students explore the structure, regulation and rate of biochemical pathways, with reference to photosynthesis and cellular respiration. They examine the biological consequences of manipulating the DNA molecule and applying biotechnologies. Students apply their knowledge of cellular processes through investigation of a selected case study, data analysis and/or a bioethical issue.

#### AREAS OF STUDY

- What is the role of nucleic acids and proteins in maintaining life?
- How are biochemical pathways regulated?

### UNIT 4: HOW DOES LIFE CHANGE AND RESPOND TO CHALLENGES?

Students consider the continual change and challenges to which life on Earth has been, and continues to be, subjected to. They study the human immune system and the interactions between its components to provide immunity to a specific pathogen. Students consider how evolutionary biology is based on the accumulation of evidence over time. They investigate the impact of various change events on a population's gene pool and the biological consequences of changes in allele frequencies. Students examine the evidence for relatedness between species and change in life forms over time using evidence from paleontology, structural morphology, molecular homology and comparative genomics.

#### AREAS OF STUDY

- How do organisms respond to pathogens?
- How are species related over time?
- How is scientific inquiry used to investigate cellular processes and/or biological change?

#### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of VCAA specified outcomes. Students' levels of achievement are determined by:

- Unit 3 School assessed coursework: 20%
- Unit 4 School assessed coursework and Outcome 3: 30%
- One 2 ½ hour examination in November: 50%

**UNIT 1: PLANNING A BUSINESS**

Businesses of all sizes are major contributors to the economic and social wellbeing of a nation. Therefore, how businesses are formed and the fostering of conditions under which new business ideas can emerge are vital for a nation's wellbeing. Taking a business idea and planning how to make it a reality are the cornerstones of economic and social development.

In this unit students explore the factors affecting business ideas and the internal and external environments within which businesses operate, and the effect of these on planning a business.

**AREAS OF STUDY**

- The business idea
- External environment
- Internal environment

**UNIT 2: ESTABLISHING A BUSINESS**

This unit focuses on the establishment phase of a business's 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 years.

**AREAS OF STUDY**

- Legal requirements and financial considerations
- Marketing a business
- Staffing a business

**ASSESSMENT**

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. For this unit students are required to demonstrate three outcomes. As a set these outcomes encompass the areas of study in the unit. Suitable tasks for assessment may be a case study analysis; a business research report; development of a business plan; an interview and a report on contact with business; a school-based, short-term business activity; a business simulation exercise; an essay; a business survey and analysis; a media analysis.

**ENTRY: UNITS 3 AND 4**

*There are no formal prerequisites for entry at the Unit 3 & 4 level.*

**UNIT 3: MANAGING A BUSINESS**

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 relationship 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.

**AREAS OF STUDY**

- Business foundations
- Managing employees
- Operations management

**UNIT 4: TRANSFORMING A BUSINESS**

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, students evaluate business practice against theory.

**AREAS OF STUDY**

- Reviewing performance – the need for change
- Implementing change

**ASSESSMENT: UNITS 3 AND 4**

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit.

This decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for each unit.

Student's level of achievement is determined by:

- Unit 3 coursework contributes 25%
- Unit 4 coursework contributes 25%
- End-of-year examination contributes 50%

## UNIT 1: HOW CAN THE DIVERSITY OF MATERIALS BE EXPLAINED?

The development and use of materials for specific purposes is an important human endeavour. In this unit students investigate the chemical properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore and explain the relationships between properties, structure and bonding forces within and between particles that vary in size from the visible, through nanoparticles, to molecules and atoms. Students examine the modification of metals, assess the factors that affect the formation of ionic crystals and investigate a range of non-metallic substances from molecules to polymers and relate their structures to specific applications. Students are introduced to quantitative concepts in chemistry including the mole concept. They apply their knowledge to determine the relative masses of elements and the composition of substances.

Throughout the unit students use chemistry terminology including symbols, formulas, chemical nomenclature and equations to represent and explain observations and data from experiments, and to discuss chemical phenomena.

### AREAS OF STUDY

- How can knowledge of elements explain the properties of matter?
- How can the versatility of non-metals be explained?
- Research investigation

## UNIT 2: WHAT MAKES WATER SUCH A UNIQUE CHEMICAL?

Living things on earth have evolved to use water and the gases of the atmosphere in the chemical reactions that sustain them. Water is used by both plants and animals to carry out their energy-producing reactions, dissolve their nutrients and transport their wastes. The atmosphere supplies life-giving gases, provides heat that sustains life and gives protection from harmful radiation. Students will investigate how chemistry is used to respond to the effects of human activities on our environment. Quantitative chemical calculations play an essential role in the monitoring of wastes and students will be introduced to the types of calculations used every day by analytical chemists.

Students will be introduced to new, cleaner and more efficient processes that have been designed using green chemistry principles. Students will continue to use the language of chemistry, its symbols and chemical formulas and equations to explain observations and data collected from experiments.

### AREAS OF STUDY

- How do substances interact with water?
- How are substances in water measured and analysed?
- Practical investigation

### ASSESSMENT: UNITS 1 AND 2

The award of satisfactory completion for a unit is based on a decision that the student has demonstrated achievement of the set outcomes specified. Assessment tasks may come from the following: annotations of a practical work folio of activities or investigations; reports on practical activities or investigation; modelling activities; media responses; reflective learning journals; data analysis, tests and written reports.

### Entry: Units 3 and 4

*Students must achieve a minimum of 60% in each of tests and exams in Unit 1 & 2 Chemistry in order to proceed to Units 3 & 4.*

## UNIT 3: HOW CAN CHEMICAL PROCESSES BE DESIGNED TO OPTIMISE EFFICIENCY?

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

Students compare and evaluate different chemical energy resources. They investigate the combustion of fuels, including the energy transformation involved, the use of stoichiometry and energy calculations. Students consider the design and purpose of different types of cells and batteries and how to apply the electrochemical series to these contexts.

Students analyse manufacturing processes with reference to factors that influence their reaction rates and extent. They investigate and apply equilibrium principals and laws to different reaction systems and explain how that will improve the efficiency and yield of chemical processes.

### AREAS OF STUDY

- What are the options for energy production?
- How can the yield of a chemical product be optimised?

# CHEMISTRY

## UNIT 4: HOW ARE ORGANIC COMPOUNDS CATEGORISED, ANALYSED AND USED?

Students investigate the structural features, bonding, reactions and uses of major families of organic compounds focussing on those found in food. They process data from instrumental analysis of organic compounds to provide both quantitative and qualitative information. Students consider the nature of the reactions involved to predict the products of reaction pathways and to design pathways to produce particular compounds from given starting materials.

Students investigate key food molecules through an exploration of their chemical structures and reactions. In this context the role of enzymes and coenzymes in facilitating chemical reactions is explored. Students use a variety of tools to determine the energy released in the combustion of foods.

### AREAS OF STUDY

- How can the diversity of carbon compounds be explained and categorised?
- What is the chemistry of food?
- Practical Investigation

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework for Unit 3: 16%
- School-assessed coursework for Unit 4: 24%
- One 2½ hour examination in November: 60%



## DRAMA UNIT 2: AUSTRALIAN IDENTITY

In this unit students study aspects of Australian identity evident in contemporary drama practice. This may also involve exploring the work of selected drama practitioners and associated performance styles. This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance. Students create, present and analyse a performance based on a person, an event, an issue, a place, an artwork, a text and/or an icon from a contemporary or historical Australian context. In creating the performance, students use stimulus material that allows them to explore an aspect or aspects of Australian identity. They examine selected performance styles and explore the associated conventions. Students further develop their knowledge of the conventions of transformation of character, time and place, the application of symbol, and how these conventions may be manipulated to create meaning in performance and the use of dramatic elements and production areas. Students analyse their own performance work as well as undertaking an analysis of a performance of an Australian work, where possible, by professional actors.

An Australian work might:

- Be written, adapted or devised by Australian writers or theatre-makers; or
- Reflect aspects of Australian identity, for example the voice of Australia's first peoples, the Celtic perspective, the twentieth or twenty-first century migrant experience, the refugee experience, urban and rural perspectives.

Across this unit, students study performance styles from a range of historical and/or social and/or cultural contexts. In this unit, the terms character, performance, story and style may be understood as one or more characters, performances, stories or styles.

### AREAS OF STUDY

- Using Australia as inspiration
- Presenting a devised performance
- Analysing a devised performance
- Analysing an Australian drama performance

### ASSESSMENT

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. For this unit students are required to demonstrate four outcomes. As a set these outcomes encompass the areas of study in the unit.

## THEATRE STUDIES UNIT 2: MODERN THEATRE STYLES AND CONVENTIONS

This unit focuses on the application of acting, direction and design in relation to theatre styles from the modern era, that is, the 1920s to the present. Students creatively and imaginatively work in production roles with scripts from the modern era of theatre, focusing on at least three distinct theatre styles. They study innovations in theatre production in the modern era and apply this knowledge to their own works. Students develop knowledge and skills about theatre production processes including dramaturgy, planning, development and performance to an audience and apply this to their work. They study safe and ethical working practices in theatre production and develop skills of performance analysis, which they apply to the analysis of a play in performance. Theatre styles from the modern era of theatre include Epic theatre, Constructivist theatre, Theatre of the Absurd, Political theatre, Feminist theatre, Expressionism, Eclectic theatre, Experimental theatre, Musical theatre, Physical theatre, Verbatim theatre, Theatre-in-education, and Immersive/ Interactive theatre.

### AREAS OF STUDY

- Exploring modern theatre styles and conventions
- Interpreting scripts
- Analysing and evaluating a play in performance

### ASSESSMENT

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. For this unit students are required to demonstrate three outcomes. As a set these outcomes encompass the areas of study in the unit. Assessment may be in the form of: interpretation of scripts from the modern era through the application of acting, direction and/or design: costume, make-up, props, set, lighting, sound; oral/visual/multimedia reports and/or presentations; structured questions; or a research report.

At least one assessment task will be practice-based, at least one task will be written and at least one task will include an oral component.

## DRAMA UNIT 3: DEvised ENSEMBLE PERFORMANCE

In this unit students explore the work of drama practitioners and draw on contemporary practice as they devise ensemble performance work. Students explore performance styles and associated conventions from a diverse range of contemporary and/or traditional contexts. They work collaboratively to devise, develop and present an ensemble performance. Students create work that reflects a specific performance style or one that draws on multiple performance styles and is therefore eclectic in nature.

They use play-making techniques to extract dramatic potential from stimulus material, then apply and manipulate conventions, dramatic elements, expressive skills, performance skills and production areas. Throughout development of the work they experiment with transformation of character, time and place, and application of symbol. Students devise and shape their work to communicate meaning or to have a specific impact on their audience. In addition, students document and evaluate stages involved in the creation, development and presentation of the ensemble performance.

Students analyse and evaluate a professional drama performance selected from the prescribed VCE Drama Unit 3 Playlist published annually on the VCAA website. In this unit the terms character, performance, story and style can be understood as one or more characters, performances, stories or styles.

### AREAS OF STUDY

- Devising and presenting ensemble performance
- Analysing a devised performance
- Analysing and evaluating a professional drama performance

### ASSESSMENT

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. For this unit students are required to demonstrate four outcomes.

- School-assessed coursework for Unit 3: 30%
- End-of-year written examination: 25%
- Performance examination: 35%

## DRAMA UNIT 4: DEvised SOLO PERFORMANCE

This unit focuses on the development and the presentation of devised solo performances. Students explore contemporary practice and works that are eclectic in nature; that is, they draw on a range of performance styles and associated conventions from a diverse range of contemporary and traditional contexts. Students develop skills in extracting dramatic potential from stimulus material and use play-making techniques to develop and present a short solo performance. They experiment with application of symbol and transformation of character, time and place. They apply conventions, dramatic elements, expressive skills, performance skills and performance styles to shape and give meaning to their work. Students further develop and refine these skills as they create a performance in response to a prescribed structure. They consider the use of production areas to enhance their performance and the application of symbol and transformations. Students document and evaluate the stages involved in the creation, development and presentation of their solo performance. Students are encouraged to attend performances that incorporate a range of performance styles to support their work in this unit.

### AREAS OF STUDY

- Demonstrating techniques of solo performance
- Devising a solo performance
- Analysing and evaluating a devised solo performance

### ASSESSMENT

- School-assessed coursework for Unit 4: 10%
- End-of-year written examination: 25%
- Performance examination: 35%

The study of English contributes to the development of literate individuals capable of critical and creative thinking, aesthetic appreciation and creativity. This study also develops students' ability to create and analyse texts, moving from interpretation to reflection and critical analysis.

Through engagement with texts from the contemporary world and from the past, and using texts from Australia and from other cultures, students studying English become confident, articulate and critically aware communicators and further develop a sense of themselves, their world and their place within it. English helps equip students for participation in a democratic society and the global community.

This study will build on the learning established through the Victorian Curriculum F - 10 in the key discipline concepts of language, literature and literacy, and the language modes of listening, speaking, reading, viewing and writing.

#### UNITS 1 AND 2 AREAS OF STUDY

- Reading and creating texts
- Analysing and presenting argument
- Reading and comparing texts

#### ASSESSMENT

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

#### UNITS 3 AND 4 ENTRY

*Students will undertake Unit 1 and 2 English or Unit 1 and 2 Literature prior to entry to the Unit 3 and 4 English sequence.*

English Units 3 and 4 is a natural progression from Unit 1 and 2. Students will identify, discuss and analyse how the features of literary, film and media texts create meaning and influence interpretation, as well as prepare sustained analytical, creative and comparative interpretations of these texts. They will also use their understanding of argument, audience, purpose and language to develop an oral presentation of their point of view.

#### AREAS OF STUDY

- Reading and creating texts
- Analysing and presenting argument
- Reading and comparing texts

#### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes.

The students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- A three-hour written examination in October: 50%

Students whose native language is a language other than English are eligible for assessment according to criteria developed for EAL students, providing they satisfy both the following conditions:

The student has been resident in Australia for no more than seven calendar years immediately prior to 1 January of the year in which the study is undertaken at Unit 3 and 4, and; English has been the student's major language of instruction for a total period of no more than seven years prior to the year in which the study is being undertaken at Unit 3 and 4.

For students of English as an Additional Language the study structure is the same as for students of English, but different assessment criteria and conditions apply.

The study of English as an Additional Language encourages the development of literate individuals capable of critical and imaginative thinking, aesthetic appreciation and creativity. The focus of this course is on reading and responding to a range of texts, in order to comprehend, appreciate and analyse the ways in which they are constructed and interpreted. Students will develop competence and confidence in creating written, oral and multimodal texts.

Year 11 and 12 EAL students receive EAL support as timetabled sessions. This support time provides students with an opportunity to seek assistance with language matters across all of their subjects.

## UNITS 1 AND 2

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 to the unit. This decision will be based on the teacher's assessment of the student's overall performance on assessment tasks designated for the unit.

### AREAS OF STUDY

- Reading and creating texts
- Analysing and presenting argument
- Reading and comparing texts

## UNITS 3 AND 4

### AREAS OF STUDY

- Reading and creating texts
- Analysing and presenting arguments
- Listening to texts
- Reading and comparing texts

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA specified outcomes. The student's level of achievement is determined by:

- School-assessed coursework in Units 3 and 4: 25% + 25%
- A three-hour written examination in October/November: 50%

Australia has a varied and abundant food supply, and food and cooking have become prominent in digital media and publishing. Students investigate the origins and roles of food through time and across the world. 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.

The students 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 by the use of ingredients available today that were used in earlier cultures.

Students use practical skills and knowledge to produce foods and consider a range of evaluation measures to compare their foods to commercial 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. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, food manufacturing and hospitality and nutrition. There are no prerequisites for entry into Units 1 & 2.

#### AREAS OF STUDY IN UNIT 1: FOOD ORIGINS

- Food around the world
- Food in Australia

#### AREAS OF STUDY IN UNIT 2: FOOD MAKERS

- Food industries
- Food in the home

#### ASSESSMENT

Students' level of achievement is determined by satisfactory completion for a unit is based on the teacher's decision that the student has demonstrated achievement of the set of outcomes specified for the unit. Satisfactory completion of a unit is determined by evidence gained through the assessment of a range of learning activities and tasks.

Progress into Units 3 and 4 of this subject as a Year 11 student is not automatic. A student will need to meet minimum eligibility levels at the Units 1 and 2 level.

#### UNITS 3 AND 4

Australia has a varied and abundant food supply, and food and cooking have become prominent in digital media and publishing. Globally, many people do not have access to a secure and varied food supply and many Australians, amid a variety of influences, consume food and beverage products that may harm their health.

VCE Food Studies is designed to build the capacities of students to make informed food choices and extend their food knowledge and skills and build individual pathways to health and wellbeing through the application of practical food skills. Students develop their understanding of food while acquiring skills that enable them to take greater ownership of their food decisions and eating patterns.

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 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. Practical work is integral to Food Studies and includes cooking, demonstrations, creating and responding to design briefs, dietary analysis, food sampling and taste-testing, sensory analysis, product analysis and scientific experiments. This study complements and supports further training and employment opportunities in the fields of home economics, food technology, nutrition, dietetics, food manufacturing and hospitality. It also complements studies in Nursing and Childcare.

#### AREAS OF STUDY IN UNIT 3

- The science of food
- Food choice, health and wellbeing

#### AREAS OF STUDY IN UNIT 4

- The science of food
- Food choice, health and wellbeing

#### ASSESSMENT

The award of satisfactory completion of units is based on the teachers' decision that students have demonstrated achievement of a set of VCAA specified outcomes. Students' level of achievement is determined by:

- Unit 3 School-assessed Coursework: 30%
- Unit 4 School-assessed Coursework: 30%
- End of year examination in November: 40%

## UNIT 1: UNDERSTANDING HEALTH AND WELLBEING

This unit focuses on health and wellbeing as a concept with varied and evolving perspectives and definitions. Health and wellbeing has different meanings for different people and is subject to a wide range of contexts and interpretations. Students investigate various definitions of health and consider wellbeing as an implicit element of health.

In this unit students identify personal perspectives and priorities relating to health and wellbeing and enquire into factors that influence health attitudes including among Indigenous Australians. Students look at dimensions of health and wellbeing, the complex influences on health and wellbeing and the indicators used to measure and evaluate health status.

With a focus on youth, students consider their own health and build literacy through interpreting and using data via investigating the role of food and researching one youth health focus area.

### AREAS OF STUDY

- Health perspectives and influences
- Health and nutrition
- Youth health and wellbeing

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks: a short written report, oral presentation, a visual presentation, structured questions, including data analysis.

## UNIT 2: MANAGING HEALTH AND DEVELOPMENT

This unit investigates transitions in health and wellbeing, and development, from lifespan and societal perspectives. Students look at changes and expectations as part of the progression from youth to adulthood whilst applying health literacy skills. They examine adulthood as a time of increasing independence and responsibility, involving the establishment of relationships, possible parenthood and management of health-related milestones and changes.

Students enquire into the Australian healthcare system and extend their capacity to access and analyse health information. They investigate the challenges and opportunities presented by digital media and health technologies, and consider issues surrounding the use of health data and access to quality health care.

### AREAS OF STUDY

- Developmental transitions
- Health care in Australia

### ASSESSMENT: UNITS 1 AND 2

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks: a short written report, oral presentation, a visual presentation, structured questions, including data analysis.

## UNIT 3: AUSTRALIA'S HEALTH IN A GLOBALISED WORLD

This unit looks at health, wellbeing and illness as being multidimensional and dynamic and subject to different interpretations and contexts. Students begin to take a broader approach to inquiry as they explore health and wellbeing as a global concept. Students consider the benefits of optimal health and wellbeing and its importance as a resource.

They look at the fundamental conditions required for health improvement and use this knowledge as background to their analysis and evaluation of variations in the health status of Australians. Students consider health promotion and improvements in population health over time. They look at various public health approaches, research health improvements and evaluate successful programs.

The emphasis is on the Australian health system and the progression of change in public health as seen within a global context.

### AREAS OF STUDY

- Understanding health and wellbeing
- Promoting health and wellbeing

## UNIT 4: HEALTH AND HUMAN DEVELOPMENT IN A GLOBAL CONTEXT

This unit examines health and wellbeing, and human development in a global context. Student use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including physical, social and economic conditions in which people live. Students examine burden of disease over time and study the key concepts of sustainability and human development. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Students look at global action to improve health and wellbeing and human development, focusing on the United Nations, Sustainable Development Goals and the work of the World Health Organisation. Students also investigate the role of non-government organisations and Australia's overseas aid program. They evaluate the effectiveness of health initiatives and programs in a global context and reflect on their capacity to take action.

### AREAS OF STUDY

- Health and wellbeing in a global context
- Health and the Sustainable Development Goals

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' level of achievement is determined by:

- School assessed coursework for Units 3 and 4: 25% + 25%
- A two hour written examination in November: 50%

## UNIT 1: IDEOLOGY AND CONFLICT

In this unit students investigate the emergence of three great superpowers of the 20th Century: China, The USA and the USSR. A superpower is characterised by its extensive ability to exert influence or project power on a global scale, but how are they made, who makes them and what impact do they have on ordinary people both socially and culturally? This first unit in Modern History provides students with an opportunity to explore some of the most significant events, ideas, individuals and movements (both political and pop-cultural) that shaped the social, political, economic and technological conditions and developments that have shaped our world.

### AREAS OF STUDY

Ideology and conflict

- In Outcome One students explain how significant events, ideologies and individuals contributed to political and economic changes in the first half of the 20th century, and analyse their ongoing significance

Social and Cultural Change

- In Outcome Two students analyse patterns of social and cultural change in everyday life in the first half of the twentieth century

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks which may include:

- a historical inquiry
- an essay
- evaluation of historical sources
- short-answer questions
- extended responses
- a multimedia presentation

## UNIT 2: THE CHANGING WORLD ORDER

In this unit students investigate the clash of the superpowers which manifested in The Cold War creating enormous challenges and changes to social, political and economic structures and systems of power in the second half of the twentieth century and the first decade of the twenty-first century. The United Nations was intended to resolve issues of conflict; however, what emerged was Cold War paranoia and nuclear proliferation which led to trauma and further clashes across the globe. From this trauma, the second half of the twentieth century saw the rise of youth movements and social movements that challenged the status quo including the civil rights movement, feminism and environmental movements. However, terrorism remained a major threat, influencing politics, social dynamics and the migration of people across the world.

### AREAS OF STUDY

- Causes, course and consequences of the Cold War
- Challenge and change – political and youth social movements and global terrorism

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks which may include:

- a historical inquiry
- an essay
- evaluation of historical sources
- short-answer questions
- extended responses

**ENTRY: UNITS 3 AND 4**

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution. Revolutions represent great ruptures in time and are a major turning point which brings about the collapse and destruction of an existing political order resulting in a pervasive change to society. Revolutions are caused by the interplay of ideas, events, individuals and popular movements. Their consequences have a profound effect on the political and social structures of the post-revolutionary society. Revolution is a dramatically accelerated process whereby the new order attempts to create political and social change and transformation based on a new ideology. Progress in a post-revolutionary society is not guaranteed or inevitable. Post-revolutionary regimes are often threatened internally by civil war and externally by foreign threats. These challenges can result in a compromise of revolutionary ideals and extreme measures of violence, oppression and terror.

# HISTORY: REVOLUTIONS

**UNIT 3: REVOLUTIONS**

This unit will either focus on the causes and consequences of The American or The French Revolution and will examine revolutionary ideas, leaders, movements and events and the creation of the new society. The decision to pursue America or France will be made in consultation with students at the end of 2021.

**AREAS OF STUDY**

Causes of Revolution

- Either the French or The American Revolution.

Consequences of Revolution

- Either the French or American Revolution.

**UNIT 4: REVOLUTIONS**

This unit focuses on the Chinese Revolution and examines revolutionary ideas, movements, leaders and events and the creation of a new society.

**AREAS OF STUDY**

Causes of Revolution

- The Chinese Revolution from 1912 to 1949 (The Chinese Republic to the Communist victory in the Civil War on the 1 October 1949).

Consequences of Revolution

- The Chinese Revolution from 1949 to 1976 (Communist victory to 1976).

**ASSESSMENT: UNITS 3 AND 4**

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes:

- a historical inquiry
- evaluation of historical sources
- extended responses
- an essay

Students' levels of achievement are determined by:

- Unit 3 School assessed coursework: 25%
- Unit 4 School assessed coursework: 25%
- One hour examination in November: 50%



# LANGUAGES: CHINESE (FIRST LANGUAGE)

## UNIT 1

Students are required to demonstrate achievement of three outcomes: to exchange meaning in a spoken interaction in Chinese; to interpret information from two texts presented in Chinese, and to respond in writing in Chinese and in English; to present information, concepts and ideas in writing in Chinese for a specific audience and purpose.

### THEMES

- Self and others;
- Tradition and change in the Chinese-speaking communities; and,
- Global issues

### ASSESSMENT

Students produce a 500 – 600 character response to an issue of interest or concern, listen to spoken texts and compare information or ideas obtained in a given format and produce a 500 – 600 character personal response to a fictional text.

## UNIT 2

Students are required to demonstrate achievement of three outcomes: participate in a spoken exchange focusing on the resolution of an issue; read and extract and compare information and ideas from written texts; and produce an imaginative piece in written form.

### THEMES

- Self and others;
- Tradition and change in the Chinese-speaking communities; and,
- Global issues

### ASSESSMENT

Students conduct a four to five minutes role play on an issue related to texts studied, read written texts and compare information or ideas obtained in a given format and produce a 500 – 600 character imaginative piece in written form.

### ENTRY: UNITS 3 AND 4

*Chinese First Language is designed for students who will typically have spent some time as a resident and/or have had significant experience of studying Chinese in a country in which Chinese is a major language of communication. Entry is governed by eligibility criteria, which are monitored and published by VCAA.*

## UNIT 3

Students are required to demonstrate achievement of three outcomes: express ideas through production of original texts; analyse and use information from spoken texts and exchange information, opinions and experiences.

### THEMES

- Self and others;
- Tradition and change in the Chinese-speaking communities; and,
- Global issues

### ASSESSMENT

Students produce a 500 – 600 character imaginative written piece and a response to specific questions or instructions from a spoken text, analysing and using information requested. They also take part in a four to five minute evaluative oral presentation focusing on points for and against an aspect related to texts studied.

## UNIT 4

Students are required to demonstrate achievement of two outcomes: to analyse and use information from written texts; and to respond critically to spoken and written texts which reflect aspects of the language and culture.

### THEMES

- Self and others;
- Tradition and change in the Chinese-speaking communities; and,
- Global issues

Students produce: a response to specific questions or instructions from written texts, analysing and using information requested; a 500 – 600 character persuasive or evaluative written response such as a report, essay, article or review; and a four to five minute interview on an issue related to texts studied.

### ASSESSMENT: UNITS 3 AND 4

- The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of the set of VCAA-specified outcomes.
- Students' levels of achievement are determined by:
- School-assessed coursework in Unit 3 and 4: 25% + 25%
- An oral examination: 10%
- A two-hour written examination (plus 15 minutes reading time) in November: 40%

This study (Units 1– 4) is designed to enable students to use Chinese to communicate with others; understand and appreciate the cultural contexts in which Chinese is used; understand their own culture(s) through the study of others cultures; understand the language as a system; make connections between Chinese and English, and/or other languages; and apply Chinese to work, further study, training or leisure.

# LANGUAGES: CHINESE (SECOND LANGUAGE)

## UNIT 1

Students are required to demonstrate achievement of three outcomes: to exchange meaning in a spoken interaction in Chinese; to interpret information from two texts presented in Chinese, and to respond in writing in Chinese and in English; to present information, concepts and ideas in writing in Chinese for a specific audience and purpose.

### THEMES

- The individual;
- The Chinese-speaking communities; and,
- The world around us.

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: conversation or an interview; obtaining information from spoken and written texts, and creating a written presentation through the support of media.

The study of Chinese is underpinned by the concepts of communicating and understanding languages and cultures. There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning Chinese while the interpersonal, interpretive and presentational contexts define the ways in which students use Chinese. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

## UNIT 2

Students are required to demonstrate achievement of three outcomes respond in writing in Chinese to spoken, written or visual texts presented in Chinese analyse and use information from written, spoken or visual texts to produce an extended written response in Chinese; explain information, ideas and concepts orally in Chinese to a specific audience about an aspect of culture within communities where Chinese is spoken.

### THEMES

- The individual;
- The Chinese-speaking communities; and,
- The world around us.

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: writing a personal answer to an email formal letter, fax or email or participating in a role play or interview; describe in writing an experience seen from different perspectives; and narrating a life story, event or incident that highlights an aspect of culture.

### ENTRY: UNITS 3 AND 4

Chinese First Language is designed for students who will typically have spent some time as a resident and/or have had significant experience of studying Chinese in a country in which Chinese is a major language of communication. Entry is governed by eligibility criteria, which are monitored and published by VCAA.

## UNIT 3

Students are required to demonstrate achievement of three outcomes: express ideas through production of original texts; analyse and use information from spoken texts and exchange information, opinions and experiences.

### THEMES

- Self and others;
- Tradition and change in the Chinese-speaking communities; and,
- Global issues.

### ASSESSMENT

Students produce a 500-600 character imaginative written piece and a response to specific questions or instructions from a spoken text, analysing and using information requested.

They also take part in a four to five minute evaluative oral presentation focusing on points for and against an aspect related to texts studied.

## UNIT 4

Students are required to demonstrate achievement of two outcomes: to analyse and use information from written texts; and to respond critically to spoken and written texts which reflect aspects of the language and culture.

### THEMES

- Self and others;
- Tradition and change in the Chinese-speaking communities; and,
- Global issues.

Students produce: a response to specific questions or instructions from written texts, analysing and using information requested; a 500-600 character persuasive or evaluative written response such as a report, essay, article or review; and a four to five minute interview on an issue related to texts studied.

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of the set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- An oral examination: 10%
- A two-hour written examination (plus 15 minutes reading time) in November: 40%

The study of VCE French is underpinned by the concepts of communicating and understanding languages and cultures. There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning French while the interpersonal, interpretive and presentational contexts define the ways in which students use French. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

### UNIT 1:

Students are required to demonstrate achievement of three outcomes: to exchange meaning in a spoken interaction in French; to interpret information from two texts presented in French, and to respond in writing in French and in English; to present information, concepts and ideas in writing in French for a specific audience and purpose.

#### AREAS OF STUDY

- The individual
- The French-speaking communities
- The world around us

#### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: conversation or an interview; obtaining information from spoken and written texts, and creating a written presentation through the support of media.

### UNIT 2

Students are required to demonstrate achievement of three outcomes: respond in writing in French to spoken, written or visual texts presented in French; analyse and use information from written, spoken or visual texts to produce an extended written response in French; explain information, ideas and concepts orally in French to a specific audience about an aspect of culture within communities where French is spoken.

#### AREAS OF STUDY

- The individual
- The French-speaking communities
- The world around us

#### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: writing a personal answer to an email formal letter, fax or email or participating in a role play or interview; describe in writing an experience seen from different perspectives; and narrating a life story, event or incident that highlights an aspect of culture.

#### ENTRY: UNITS 3 AND 4

*French is designed for students who will typically have studied French for at least 400 hours at completion of Year 12. It is possible, however, that some students with less formal experience will also be able to successfully meet the requirements.*

# LANGUAGES: FRENCH

### UNIT 3

Students are required to demonstrate achievement of three outcomes: to participate in a spoken exchange in French to resolve a personal issue; to interpret information from texts and write responses in French; to express ideas in a personal, informative or imaginative piece of writing in French.

#### AREAS OF STUDY

- The individual
- The French-speaking communities
- The world around us

#### ASSESSMENT

Students express ideas in a personal, informative or imaginative piece of writing; they interpret information from texts and write responses. They also participate in a spoken exchange to resolve a personal issue.

### UNIT 4

Students are required to demonstrate achievement of three outcomes: to share information, ideas and opinions in a spoken exchange in French; to analyse information from written, spoken and viewed texts for use in a written response in French; to present information, concepts and ideas in evaluative or persuasive writing on an issue in French.

#### AREAS OF STUDY

- The individual
- The French-speaking communities
- The world around us

#### ASSESSMENT

A three to four minute interview providing information and responding to questions about a cultural product or practice; an approximately 250-word written response for a specific audience and purpose, incorporating information from three or more texts, an approximately 300-word evaluative or persuasive piece of writing.

#### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of the set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- An oral examination: 12.5%
- A two-hour written examination (plus 15 minutes reading time) in November: 37.5%

The study of VCE German is underpinned by the concepts of communicating and understanding languages and cultures. There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning German while the interpersonal, interpretive and presentational contexts define the ways in which students use German. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

## UNIT 1

Students are required to demonstrate achievement of three outcomes: to exchange meaning in a spoken interaction in German; to interpret information from two texts presented in German, and to respond in writing in German and in English; to present information, concepts and ideas in writing in German for a specific audience and purpose.

### THEMES

- The individual
- The German-speaking communities
- The world around us

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: conversation or an interview; obtaining information from spoken and written texts, and creating a written presentation through the support of media.

## UNIT 2

Students are required to demonstrate achievement of three outcomes respond in writing in German to spoken, written or visual texts presented in German; analyse and use information from written, spoken or visual texts to produce an extended written response in German; explain information, ideas and concepts orally in German to a specific audience about an aspect of culture within communities where German is spoken.

### THEMES

- The individual
- The German-speaking communities
- The world around us

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: writing a personal answer to an email formal letter, fax or email or participating in a role play or interview; describe in writing an experience seen from different perspectives; and narrating a life story, event or incident that highlights an aspect of culture.

### Entry: Units 3 and 4

*German is designed for students who will typically have studied German for at least 400 hours at completion of Year 12. It is possible, however, that some students with less formal experience will also be able to successfully meet the requirements.*

# LANGUAGES: GERMAN

## UNIT 3

Students are required to demonstrate achievement of three outcomes: to participate in a spoken exchange in German; to resolve a personal issue; to interpret information from texts and write responses in German; to express ideas in a personal, informative or imaginative piece of writing in German Themes.

### THEMES

- The individual
- The German-speaking communities
- The world around us

### ASSESSMENT

Students produce a personal, informative or imaginative written piece; a response to specific questions, messages or instructions from a spoken text, extracting and using information requested.

They also take part in a three to four minute role play resolving an issue.

## UNIT 4

Students are required to demonstrate achievement of three outcomes: to share information, ideas and opinions in a spoken exchange in German; to analyse information from written, spoken and viewed texts for use in a written response in German; to present information, concepts and ideas in evaluative or persuasive writing on an issue in German.

### THEMES

- The individual
- The German-speaking communities
- The world around us

### ASSESSMENT

A three to four minute interview providing information and responding to questions about a cultural product or practice; an approximately 250-word written response for a specific audience and purpose, incorporating information from three or more texts, an approximately 300-word evaluative or persuasive piece of writing.

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of the set of VCAA specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- An oral examination: 12.5%
- A two-hour written examination (plus 15 minutes reading time) in November: 37.5%

# LANGUAGES: JAPANESE (SECOND LANGUAGE)

## UNIT 1

Students are required to demonstrate achievement of three outcomes: to exchange meaning in a spoken interaction in Japanese; to interpret information from two texts presented in Japanese, and to respond in writing in Japanese and in English; to present information, concepts and ideas in writing in Japanese for a specific audience and purpose.

### THEMES

- The individual
- The Japanese-speaking communities
- The world around us

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: conversation or an interview; obtaining information from spoken and written texts, and creating a written presentation through the support of media.

## UNIT 2

Students are required to demonstrate achievement of three outcomes: respond in writing in Japanese to spoken, written or visual texts presented in Japanese; analyse and use information from written, spoken or visual texts to produce an extended written response in Japanese; explain information, ideas and concepts orally in Japanese to a specific audience about an aspect of culture within communities where Japanese is spoken.

### THEMES

- The individual
- The Japanese-speaking communities
- The world around us

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: writing a personal answer to an email formal letter, fax or email or participating in a role play or interview; describe in writing an experience seen from different perspectives; and narrating a life story, event or incident that highlights an aspect of culture.

### ENTRY: UNITS 3 AND 4

*Japanese Second Language is designed for students who do not have a Japanese background; that is students who have learnt all the Japanese they know in an Australian school or similar environment. These students will have, typically, studied Japanese for at least 400 hours at completion of Year 12. It is possible, however, that some students with less formal experience will also be able to successfully meet the requirements. To enrol in this study, students must complete application forms giving details of their background in Japanese.*

## UNIT 3

Students are required to demonstrate achievement of three outcomes: to participate in a spoken exchange in Japanese to resolve a personal issue; to interpret information from texts and write responses in Japanese; to express ideas in a personal, informative or imaginative piece of writing in Japanese.

### THEMES

- The individual
- The Japanese-speaking communities
- The world around us

### ASSESSMENT

Students express ideas in a personal, informative or imaginative piece of writing; they interpret information from texts and write responses. They also participate in a spoken exchange to resolve a personal issue.

## UNIT 4

Students are required to demonstrate achievement of three outcomes: to share information, ideas and opinions in a spoken exchange in Japanese; to analyse information from written, spoken and viewed texts for use in a written response in Japanese; to present information, concepts and ideas in evaluative or persuasive writing on an issue in Japanese.

### THEMES

- The individual
- The Japanese-speaking communities
- The world around us

### ASSESSMENT

A three to four minute interview providing information and responding to questions about a cultural product or practice; an approximately 250-word written response for a specific audience and purpose, incorporating information from three or more texts, an approximately 300-word evaluative or persuasive piece of writing.

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of the set of VCAA specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- An oral examination: 12.5%
- A two-hour written examination (plus 15 minutes reading time) in November: 37.5%

The study of VCE Japanese is underpinned by the concepts of communicating and understanding languages and cultures.

There are five macro skills that inform all language use: listening, speaking, reading, writing and viewing. Connections, comparisons and communities provide the context for learning Japanese while the interpersonal, interpretive and presentational contexts define the ways in which students use Japanese. The integration of these contexts through the teaching and learning program enables students to develop their understanding and skills in the language.

**UNIT 1: GUILT AND LIABILITY**

In this unit students develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and/or hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused and the liability of a party in a civil dispute.

**AREAS OF STUDY**

- Legal Foundations
- The Presumption of Innocence
- Civil Liability

**UNIT 2: SANCTIONS, REMEDIES AND RIGHTS**

Students undertake a detailed investigation into two criminal cases and two civil cases from the past four years to form a judgment about the ability of sanctions and remedies to achieve the principles of justice. Students develop their understanding of the way rights are protected in Australia and in another country, and possible reforms to the protection of rights. They examine a significant case in relation to the protection of rights in Australia.

**AREAS OF STUDY**

- Sanctions
- Remedies
- Rights

**ASSESSMENT**

All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. For this unit students are required to demonstrate three outcomes. As a set these outcomes encompass the areas of study in the unit.

Suitable tasks for assessment in this unit may be selected from the following: a folio of exercises; structured questions; a report; or a question-and-answer session.

**UNIT 3: RIGHTS AND JUSTICE**

In this unit students examine the methods and institutions in the justice system and consider their appropriateness in determining criminal cases and resolving civil disputes.

Students explore matters such as the rights available to an accused and to victims in the criminal justice system. They also examine the extent to which the principles of justice are upheld in the justice system. Throughout this unit, students apply legal reasoning and information to actual and/or hypothetical scenarios.

**AREAS OF STUDY**

- The Victorian Criminal Justice System
- The Victorian Civil Justice System

**UNIT 4: THE PEOPLE AND THE LAW**

In this unit, students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments, and protects the Australian people through structures that act as a check on parliament in law-making.

Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate Parliament and the courts and consider the roles of the individual, the media and law reform bodies in influencing law reform. Throughout this unit, students apply legal reasoning and information to actual scenarios.

**AREAS OF STUDY**

- The People and the Constitution
- The People, Parliament and the Courts

**ASSESSMENT: UNITS 3 AND 4**

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- A two hour written examination in November: 50%

**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.

**AREAS OF STUDY**

- Reading practices
- Ideas and concerns in text

**UNIT 2**

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

They examine the ways texts explore different aspects of the human condition.

**AREAS OF STUDY**

- Form and Transformation
- Interpreting Texts

Students demonstrate achievement of the VCAA-set outcomes specified for each Unit via performance on a selection of assessment tasks. They are asked to construct personal and analytical responses to a range of texts.

**ASSESSMENT**

Students demonstrate achievement of the VCAA-set outcomes specified for each unit via performance on a selection of assessment tasks. They are asked to construct personal and analytical responses to a range of texts.

**ENTRY: UNITS 3 AND 4**

*There are no prerequisites for entry into Unit 3. Students must undertake Unit 3 prior to undertaking Unit 4.*

**UNIT 3**

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

**AREAS OF STUDY**

- Form and Transformation
- Creative responses to texts

**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. Students develop an informed and sustained interpretation supported by close textual analysis. For the purposes of this unit, literary criticism is characterised by extended, informed and substantiated views on texts and may include reviews, peer-reviewed articles and transcripts of speeches. Specifically, for Unit 4 Outcome 1, the literary criticism selected must reflect different perspectives, assumptions and ideas about the views and values of the text/s studied.

**AREAS OF STUDY**

- Approaches to Literature
- Context and Connections

**ASSESSMENT: UNITS 3 AND 4**

The award of satisfactory completion based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School assessed coursework in Unit 3 and 4: 25% + 25%
- A two-hour written examination in November: 50%

# MATHEMATICS

## OPTION 1

Specialist Mathematics 1 and 2  
Mathematical Methods 1 and 2

Specialist Mathematics 3 and 4  
Mathematical Methods 3 and 4

Mathematical Methods 3 and 4

Further Mathematics 3 and 4  
Mathematical Methods 3 and 4

Further Mathematics 3 and 4

## OPTION 2

Mathematical Methods 1 and 2

Mathematical Methods 3 and 4

Further Mathematics 3 and 4  
Mathematical Methods 3 and 4

Further Mathematics 3 and 4

## OPTION 3

General Maths 1 and 2

Further Mathematics 3 and 4

No Mathematics

## OPTION 4 (CASE BY CASE BASIS)

General Maths (Further) 1 and 2  
Mathematical Methods 1 and 2

Further Mathematics 3 and 4  
Mathematical Methods 3 and 4

Mathematical Methods 3 and 4

Further Mathematics 3 and 4

**NOTE:** “Students who wish to study mathematically-based subjects at tertiary level are strongly advised to study both Mathematical Methods and Specialist Mathematics at Units 1 and 2 level. Although it is possible to obtain preparation for Mathematical Methods 3 and 4 by studying only Mathematical Methods 1 and 2, a much firmer basis for further study is obtained by also studying Specialist Mathematics 1 and 2. This factor should be taken into account by students when weighing up the advantages of a broad subject choice against those of depth and breadth of preparation in mathematics...” (Heads of Mathematics Department, La Trobe University, University of Melbourne, Monash University, Oct. 1992.)



**UNIT 1****ENTRY REQUIREMENTS**

There is no prerequisite for selection of General Mathematics (Further) Unit 1 but it is advisable that students have reached a satisfactory level at Year 10.

This unit involves the study of representation and manipulation of linear relations and equations, including simultaneous linear equations, and their applications in a range of contexts; mental, by-hand and technology assisted computation with rational numbers, practical arithmetic and financial arithmetic, including estimation, order of magnitude and accuracy; representing, analysing and comparing data distributions; manipulation of linear relationships and analysis of linear graphs and their application to model practical situations and solve a range of related problems.

**AREAS OF STUDY**

- Algebra and Structure
- Arithmetic and Number
- Graphs of linear and non-linear relations
- Statistics

**UNIT 2****ENTRY REQUIREMENTS**

There is no prerequisite for selection of General Mathematics (Further) Unit 2 but it is advisable that students have reached a satisfactory level at General Mathematics (Further) Unit 1 or have studied Mathematical Methods Unit 1.

This unit involves the study of: shape and measurement and their application to formulating and solving two- and three-dimensional problems involving length; area, surface area, volume and capacity, and similarity and the application of linear scale factors to measurement; matrices, graphs and networks, and number patterns and recursion and their use to model practical problems and solve related problems; representing, analysing and comparing data distributions and investigating relationships between two numerical variables, including an introduction to correlation.

**AREAS OF STUDY**

- Shape and measurement
- Statistics
- Discrete Mathematics

**ASSESSMENT**

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks including an examination, various problem solving tasks, facts, skills and applications tests, and an investigative project.

**UNIT 1**

Mathematical Methods Units 1 & 2: A minimum of 60% across tests and examinations in 10A Mathematics. Students who are accelerated completing 10A Mathematics in Year 9 would be expected to obtain a minimum of 80% across tests and examinations.

If these grades are not achieved, then progression will include a consultation with the students' Mathematics teacher and Head of Department.

This unit involves the study of graphical representation of simple algebraic functions (polynomial and power functions) of a single real variable and the key features of functions and their graphs such as axis intercepts, domain (including the concept of maximal, natural or implied domain), co-domain and range, stationary points, asymptotic behaviour and symmetry, the behaviour of functions and their graphs is explored in a variety of modelling contexts and theoretical investigations; the algebra of polynomial functions of low degree and transformations of the plane; constant and average rates of change and an introduction to instantaneous rate of change of a function in familiar contexts, including graphical and numerical approaches to estimating and approximating these rates of change; the concepts of event, frequency, probability and representation of finite sample spaces and events using various forms such as lists, grids, venn diagrams, karnaugh maps, tables and tree diagrams. This includes consideration of impossible, certain, complementary, mutually exclusive, conditional and independent events involving one, two or three events (as applicable), including rules for computation of probabilities for compound events.

**AREAS OF STUDY**

- Functions and graphs
- Algebra
- Probability and statistics
- Calculus

**ASSESSMENT**

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks including examinations; facts, skills and applications tests.

**UNIT 2**

Unit 1 is a prerequisite for Mathematical Methods Unit 2. Unit 2 is a prerequisite for Mathematical Methods Units 3 and 4.

This unit involves the study of: graphical representation of functions of a single real variable and the key features of graphs of functions such as axis intercepts, domain (including maximal, natural or implied domain), co-domain and range, asymptotic behaviour, periodicity and symmetry; the algebra of some simple transcendental functions and transformations of the plane; first principles approach to differentiation, differentiation and anti-differentiation of polynomial functions and power functions by rule, and related applications including the analysis of graphs; introductory counting principles and techniques and their application to probability and the law of total probability in the case of two events. Students are required to learn, practise and apply mathematical algorithms, routines and techniques by finding solutions to standard problems; undertake an extended investigative project involving the use of mathematics; and solve problems set in unfamiliar situations and in real-life situations.

**AREAS OF STUDY**

- Functions and graphs
- Algebra
- Calculus
- Probability and statistics

**ASSESSMENT**

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks including examinations; various problem solving tasks; facts, skills and applications tests and an investigative project.

## UNITS 1 AND 2

### ENTRY REQUIREMENTS

A recommendation of 80% across tests and examinations in 10A Mathematics. This is also a unit for students who currently study or have previously studied Unit 1 Mathematical Methods. It is a prerequisite for Units 3 and 4 Specialist Mathematics.

For Units 1 and 2, to cover the four prescribed topics, content must 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
- courses 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 from an area of study provides a clear progression in knowledge and skills from Unit 1 to Unit 2.

These units involve the study of the application of techniques, routines and processes involving rational, real and complex arithmetic, sets, lists and tables, diagrams and geometric constructions, algebraic manipulation, equations and graphs with and without the use of technology; facilitate 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.

### AREAS OF STUDY

1. Algebra and structure
2. Arithmetic and number
3. Discrete mathematics
4. Geometry, measurement and trigonometry
5. Graphs of linear and non-linear relations
6. Statistics

# SPECIALIST MATHEMATICS

## PRESCRIBED TOPICS

The prescribed topics are included in Areas of Study 2, 4 and 5. Two of these prescribed topics must be covered in their entirety in Unit 1 and the other two prescribed topics must be covered in their entirety in Unit 2.

- Area of study 2. Arithmetic and number - Number systems and recursion
- Area of study 4. Geometry, measurement and trigonometry - Geometry in the plane and proof
- Area of study 5. Graphs of linear and non-linear relations - Graphs of non-linear relations
- Area of study 4. Vectors in the plane

## OTHER TOPICS

Other topics are to be selected from the following additional advanced mathematics topics and/or topics from General Mathematics Units 1 and 2. Two or more of these other topics must also be covered in their entirety in each of Unit 1 and Unit 2 as well as covering the two prescribed topics in their entirety.

- Area of study 1. Algebra and structure - Logic and algebra; Transformations, trigonometry and matrices
- Area of study 2. Arithmetic and number - Principles of counting
- Area of study 3. Discrete mathematics - Graph theory
- Area of study 5. Graphs of linear and non-linear relations - Kinematics
- Area of study 6. Statistics - Simulation, sampling and sampling distributions.

## ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks: examinations, facts, skills and applications tests and an investigative project.

# FURTHER MATHEMATICS UNITS 3 AND 4

## UNITS 3 AND 4

### ENTRY REQUIREMENTS

There is no formal prerequisite for Further Mathematics Units 3 and 4 but assumed knowledge is drawn from General Mathematics (Further) Units 1 and 2.

These units involve the study of a compulsory core: investigating data distributions, associations between two variables, investigating and modelling linear associations, investigating and modelling time series data, depreciation of assets, compound interest investments and loans, reducing balance loans (compound interest loans with periodic repayments), annuities and perpetuities (compound interest investments with periodic payments made from the investment), compound interest investment with periodic and equal additions to the principal (an annuity investment).

Students also study two modules. The two modules are selected from four different modules: geometry and measurement; graphs and relations; networks and decision mathematics; and matrices.

Students are required to learn, practise and apply mathematical algorithms, routines and techniques by finding solutions to standard problems; undertake an extended investigative project involving the use of mathematics; and solve problems set in unfamiliar situations and in real-life situations.

### AREAS OF STUDY

Core:

- Data analysis
- Recursion and financial modelling

Applications Modules (selection of two from):

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

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework (20% for Unit 3 and 14% for Unit 4)
- Two written examinations in November, each of duration 90 minutes.
  - Examination 1: A set of multiple choice questions designed to assess facts, skills and standard applications. Approved CAS calculator and notes permitted: 33%.
  - Examination 2: Four sets of extended-answer questions requiring interpretation and analysis. Approved CAS calculator and notes permitted: 33%.

**UNITS 3 AND 4****ENTRY REQUIREMENTS**

Assumed knowledge is drawn from Mathematical Methods Units 1 and 2; however, students must achieve a minimum of a 60% in both Tests and Exams in Mathematical Methods Units 1 and 2 to progress to Units 3 and 4.

These units involve the study of transformations of the plane and the behaviour of some elementary functions of a single real variable, including key features of their graphs such as axis intercepts, stationary points, points of inflection, domain (including maximal, implied or natural domain), co-domain and range, asymptotic behaviour and symmetry, the behaviour of these functions and their graphs is to be linked to applications in practical situations; the algebra of functions, including composition of functions, simple functional relations, inverse functions and the solution of equations, the identification of appropriate solution processes for solving equations, and systems of simultaneous equations, presented in various forms, recognition of equations and systems of equations that are solvable using inverse operations or factorisation, and the use of graphical and numerical approaches for problems involving equations where exact value solutions are not required or which are not solvable by other methods; graphical treatment of limits, continuity and differentiability of functions of a single real variable, and differentiation, anti-differentiation and integration of these functions, material is to be linked to applications in practical situations; discrete and continuous random variables, their representation using tables, probability functions (specified by rule and defining parameters as appropriate); the calculation and interpretation of central measures and measures of spread; and statistical inference for sample proportions.

The focus is on understanding the notion of a random variable, related parameters, properties and application and interpretation in context for a given probability distribution.

Students are required to learn, practise and apply mathematical algorithms, routines and techniques by finding solutions to standard problems; undertake an extended investigative project involving the use of mathematics; and solve problems in unfamiliar situations and in real-life situations.

**AREAS OF STUDY**

- Functions and graphs
- Algebra
- Calculus
- Probability and statistics

**ASSESSMENT: UNITS 3 AND 4**

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework (17% for Unit 3 and 17% for Unit 4)
- Two written examinations in November:
  - Examination 1 – 60 minutes: Short answer and some extended answer questions. No calculator or notes permitted: 22%.
  - Examination 2 – 120 minutes: Multiple choice and extended-answer questions. Approved CAS calculator and notes permitted: 44%.

## UNITS 3 AND 4

### ENTRY REQUIREMENTS

*Assumed knowledge is drawn from Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2. Mathematical Methods Units 3 and 4 is a prerequisite for Specialist Mathematics Units 3 and 4, and can be studied either concurrently or previously.*

*These units develop and extend the material on functions and graphs, algebra and calculus from Mathematical Methods Units 3 and 4 as well as vectors, mechanics, probability and statistics.*

These units involve the study of inverse circular functions, reciprocal functions, rational functions and other simple quotient functions, the absolute value function, graphical representation of these functions, and the analysis of key features of their graphs including intercepts, asymptotic behaviour and the nature and location of stationary points, points of inflection, periodicity, and symmetry; the expression of simple rational functions as a sum of partial fractions; the arithmetic and algebra of complex numbers, including polar form; points and curves in the complex plane; introduction to factorisation of polynomial functions over the complex field; and an informal treatment of the fundamental theorem of algebra; advanced calculus techniques for analytic and numeric differentiation and integration of a range of functions, and combinations of functions; and their application in a variety of theoretical and practical situations, including curve sketching, evaluation of arc length, area and volume, differential equations and kinematics; the arithmetic and algebra of vectors, linear dependence and independence of a set of vectors, proof of geometric results using vectors, vector representation of curves in the plane and vector kinematics in one, two and three dimensions; an introduction to Newtonian mechanics, for both constant and variable acceleration; statistical inference related to the definition and distribution of sample means, simulations and confidence interval.

Students are required to learn, practise and apply mathematical algorithms, routines and techniques by undertaking investigative projects involving the use of mathematics; solve problems set in unfamiliar situations and in real-life situations and find solutions to standard problems.

# SPECIALIST MATHEMATICS

### AREAS OF STUDY

- Functions and graphs
- Algebra
- Calculus
- Vectors
- Mechanics
- Probability and statistics

### PRESCRIBED TOPICS

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework (17% for Unit 3 and 17% for Unit 4)
- Two written examinations in November:
- Examination 1 – 60 minutes: Short answer and some extended answer questions. No calculator or notes permitted: 22%.
- Examination 2 – 120 minutes: Multiple choice and extended-answer questions. Approved CAS calculator and notes permitted: 44%.

## UNIT 1: MEDIA FORMS, REPRESENTATIONS AND AUSTRALIAN STORIES

The relationship between audiences and the media is dynamic and changing. Audiences engage with media products in many ways. They share a common language with media producers and construct meanings from the representations within a media product. In this unit students develop an understanding of audiences and the core concepts underpinning the construction of representations and meaning in different media forms. They explore media codes and conventions and the construction of meaning in media products. Students analyse how representations, narrative and media codes and conventions contribute to the construction of the media realities audiences engage with and read. Students gain an understanding of audiences as producers and consumers of media products. Through analysing the structure of narratives, students consider the impact of media creators and institutions on production.

They develop research skills to investigate and analyse selected narratives focusing on the influence of media professionals on production genre and style. Students develop an understanding of the features of Australian fictional and non-fictional narratives in different media forms. Students work in a range of media forms and develop and produce representations to demonstrate an understanding of the characteristics of each media form, and how they contribute to the communication of meaning.

### AREAS OF STUDY

- Media representations
- Media forms in production
- Australian stories

## UNIT 2: NARRATIVE ACROSS MEDIA FORMS

Fictional and non-fictional narratives are fundamental to the media and are found in all media forms. Media industries such as journalism and filmmaking are built upon the creation and distribution of narratives constructed in the form of a series of interconnected images and/or sounds and/or words, and using media codes and conventions. New media forms and technologies enable participants to design, create and distribute narratives in hybrid forms such as collaborative and user-generated content, which challenges the traditional understanding of narrative form and content. Narratives in new media forms have generated new modes of audience engagement, consumption and reception. In this unit students further develop an understanding of the concept of narrative in media products and forms in different contexts. Narratives in both traditional and newer forms include film, television, sound, news, print, photography, games, and interactive digital forms. Students analyse the influence of developments in media technologies on individuals and society, examining in a range of media forms the effects of media convergence and hybridisation on the design, production and distribution of narratives in the media and audience engagement, consumption and reception. Students undertake production activities to design and create narratives that demonstrate an awareness of the structures and media codes and conventions appropriate to corresponding media forms.

### AREAS OF STUDY

- Narrative, style and genre
- Narratives in production
- Media and Change

### AREAS OF STUDY

The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit. All assessments at Units 1 and 2 are school-based. Procedures for assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Suitable tasks for assessment in this unit may be selected from the following: audiovisual or video sequences; radio or audio sequences; photographs; print layouts; sequences or presentations using digital technologies; posters; written responses; or oral reports.

**ENTRY: UNITS 3 AND 4**

*There are no prerequisites for entry into Unit 3. Students must undertake Unit 3 prior to undertaking Unit 4.*

**UNIT 3: MEDIA NARRATIVES AND PRE-PRODUCTION**

In this unit students explore stories that circulate in society through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological and institutional contexts of production, distribution, consumption and reception. Students assess how audiences from different periods of time and contexts are engaged by, consume and read narratives using appropriate media language. Narratives are defined as a chain of events in a cause and effect relationship occurring in physical and/or virtual space and time in non-fictional and fictional media products. Students use the pre-production stage of the media production process to design the production of a media product for a specified audience. They investigate a media form that aligns with their interests and intent, developing an understanding of the media codes and conventions appropriate to audience engagement, consumption and reception within the selected media form.

They explore and experiment with media technologies to develop skills in their selected media form, reflecting on and documenting their progress. Students undertake pre-production processes appropriate to their selected media form and develop written and visual documentation to support the production and post-production of a media product in Unit 4.

**AREAS OF STUDY**

- Narrative and ideology
- Media production development
- Media production design

**UNIT 3: MEDIA NARRATIVES AND PRE-PRODUCTION**

In this unit students focus on the production and post-production stages of the media production process, bringing the media production design created in Unit 3 to its realisation. They refine their media production in response to feedback and through personal reflection, documenting the iterations of their production as they work towards completion. Students explore the relationship between the media and audiences, focusing on the opportunities and challenges afforded by current developments in the media industry. They consider the nature of communication between the media and audiences, explore the capacity of the media to be used by governments, institutions and audiences, and analyse the role of the Australian government in regulating the media.

**AREAS OF STUDY**

- Media production
- Agency and control in and of the media

**ASSESSMENT: UNITS 3 AND 4**

Units 3 and 4 The VCAA specifies the assessment procedures for students undertaking scored assessment in Units 3 and 4. Designated assessment tasks are provided in the details for each unit in VCE study designs. The student's level of achievement in Units 3 and 4 will be determined by School-assessed Coursework (SACs) and a School-assessed Task (SAT) as specified in the VCE study design, and external assessment. The VCAA will report the student's level of achievement on each assessment component as a grade from A+ to E or UG (ungraded). To receive a study score the student must achieve two or more graded assessments and receive S for both Units 3 and 4. The study score is reported on a scale of 0–50; it is a measure of how well the student performed in relation to all others who took the study. Percentage contributions to the study score in VCE Media are as follows:

- School-assessed coursework in Unit 3 and 4: 20%
- School-assessed task in Unit 3 and 4: 40%
- End-of-year examination: 40%



**ENTRY**

Students generally require at least three years' experience prior to study of VCE Music Performance and there is an expectation that students will have an understanding of scales, key signatures and chords. This understanding may be observed in the Year 7 and 8 Classroom Music program or AMEB Theory lessons and examination results from grades earned in school or externally.

**UNITS 1 AND 2**

This course focuses on building performance and musicianship skills. The course may be undertaken in Year 10 or Year 11, but not both.

Timetabled classes focus mainly on the theoretical and aural aspects of the course. Practical classes with an official accompanist enable students to workshop parts of their pieces and technical work for invaluable feedback, as they prepare for a performance of a complete program. Students must belong to at least one school ensemble (or a combination of ensembles) for the whole school year in order to satisfy the ensemble performance requirements.

Working with the class teacher and instrumental tutor, Students also identify the technical issues with their pieces and devise exercises to overcome the technical challenges. In Unit 2 students compose a piece of music that features elements they have noted in one of their pieces.

**UNIT 1 AREAS OF STUDY**

- Performance
- Preparing for Performance
- Music Language

**UNIT 2 AREAS OF STUDY**

- Performance
- Preparing for Performance
- Music Language
- Organisation of Sound

**ASSESSMENT**

- 15 minute performance including at least one group work and one solo work
- Demonstration of technical work and exercises
- Aural report, backed by written research, that explains how selected technical work and exercises support the student's development as a performer and preparation of the performance
- Aural test
- Practical and written tasks completed in class
- Composition exercises

**ENTRY**

Students generally need to have had at least four years' experience prior to study of VCE Music Performance and they must be having regular lessons with an instrumental teacher. It is recommended that students complete VCE Music Performance Units 1 & 2 before undertaking Units 3 & 4 Music Performance. Students work with their teacher to prepare a program of pieces from the Prescribed List of Notated Solo Works that is available on the Victorian Curriculum and Assessment website.

**UNITS 3 AND 4**

Students select a program of pieces showing a range of styles. They develop instrumental techniques that enable them to interpret the works and expressively shape the performance. Students develop skills in aural comprehension, music theory and analysis. The vast majority of students elect to complete a Solo Performance program, but students may be directed, or elect to do, Group Performance, if an appropriate ensemble is available to assist a candidate and their particular instrument.

Timetabled classes focus mainly on the aural and written components of the course. Workshop classes enable students to play parts of their pieces and technical work in in the class for invaluable feedback. Students must belong to at least one school ensemble for the whole school year in order to satisfy the ensemble performance requirements. Students must have an accompanist with whom they rehearse regularly and they must be prepared to perform at soirees and assemblies.

Students present convincing performances of solo and group works.

**UNIT 3 AND 4 AREAS OF STUDY**

- Performance
- Preparing for Performance
- Music Language

**ASSESSMENT: UNITS 3 AND 4**

Students' levels of achievement are determined by:

- School-assessed coursework: Unit 3 (20%) Unit 4 (10%)
- A solo performance recital examination (up to 25 minutes) (October-November) (50%)
- End of year aural and written examination (90 minutes) (20%)

Music Performance enables students to gain VCE credit for continuing to learn an instrument, including voice, and for being in a school ensemble. Students are expected to have individual regular, weekly lessons with a music tutor, either from a School provider, or an experienced VCE external provider teacher. During each semester, students perform a number of pieces showing a variety of musical styles. At Unit 1 and 2 level, there is no prescribed list of works, therefore students are free to select works that they would like to play. Some students choose pieces they are preparing for AMEB exams, but this is not a requirement. When choosing works for study in Units 1 and 2, it is wise to develop skills that will enable future study at Unit 3 and 4 level.

## UNIT 1: THE HUMAN BODY IN MOTION

Students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. They investigate the role and function of the main structures in each system and how they respond to physical activity, sport and exercise. Students explore how the capacity and function of each system acts as an enabler or barrier to movement and participation in physical activity.

Using a contemporary approach, students evaluate the social, cultural and environmental influences on movement as well as the implications of the use of legal and illegal practices to improve performance.

They also recommend and implement strategies to minimise the risk of illness or injury to each system.

### AREAS OF STUDY

- How does the musculoskeletal system work to produce movement?
- How does the cardiorespiratory system function at rest and during physical activity?

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes through performance on a selection of assessment tasks including: conversation or an interview; obtaining information from spoken and written texts, and creating a written presentation through the support of media.

## UNIT 2: PHYSICAL ACTIVITY, SPORT AND SOCIETY

Students develop an understanding of physical activity, sport and society from a participatory perspective by exploring types of physical activity and sedentary behaviour and the part these play in their own health and well-being as well as others in different population groups. They gain an appreciation of the level of physical activity required for health benefits and investigate participation across the lifespan including enablers and barriers to physical activity and opportunities to extend participation in various communities, social, cultural and environmental contexts. Students create and participate in an activity plan that meets the physical activity and sedentary behaviour guidelines relevant to the population group being studied. Students study and apply the social-ecological model and/or the Youth Physical Activity Promotion Model to critique a range of effective strategies to promote regular physical activity.

### AREAS OF STUDY

- What are the relationships between physical activity, sport, health and society?
- What are the contemporary issues associated with physical activity and sport?

### ASSESSMENT

Students demonstrate achievement of VCAA-set outcomes via performance on a selection of assessment tasks which may include: a written report, a practical laboratory report, a case study analysis, a data analysis, a critically reflective folio/diary, a visual presentation, a multimedia presentation, a physical simulation or model, an oral presentation, structure questions or a written plan and reflective folio.

### Entry: Units 3 and 4

*There are no prerequisites for entry to the Unit 3 and 4 sequence.*

## UNIT 3: MOVEMENT SKILLS AND ENERGY FOR PHYSICAL ACTIVITY

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 acquisition principles to improve and refine movement in physical activity, sport and exercise.

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.

### AREAS OF STUDY

- How are movement skills improved?
- How does the body produce energy?

## UNIT 4: TRAINING TO IMPROVE PERFORMANCE

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance with 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 the theoretical perspective.

### AREAS OF STUDY

- What are the foundations of an effective training program?
- How is training implemented effectively to improve fitness?

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that students have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework in Unit 3 and 4: 25% + 25%
- A two hour written examination: 50%

## UNIT 1: THE HUMAN BODY IN MOTION

In this unit students examine some of the fundamental ideas and models used by physicists in an attempt to understand and explain the world. 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 changed since the origins of the Universe.

### AREAS OF STUDY

The three prescribed areas of study are:

- How can thermal effects be explained?
- How do electric circuits work?
- What is matter and how is it formed?

## UNIT 2: PHYSICAL ACTIVITY, SPORT AND SOCIETY

In this unit students explore the power of experiments in developing models and theories. Students 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. In the core component of this unit students investigate the ways in which forces are involved both in moving objects and in keeping objects stationary.

### AREAS OF STUDY

- How can motion be described and explained?
- Twelve options are available for selection in Area of Study 2. Each option is based on a different observation of the physical world. One option is to be selected by the student from the following: astrobiology, astrophysics, bioelectricity, biomechanics, electronics, flight, medical physics, nuclear energy, nuclear physics, optics, sound and sports science.
- Practical investigation. The investigation requires the student to develop a question, plan a course of action that attempts to answer the question, undertake an investigation to collect the appropriate primary qualitative and/or quantitative data, organise and interpret the data, and reach a conclusion in response to the selected question.

### ASSESSMENT

Students demonstrate achievement of VCAA-prescribed outcomes via performance on a selection of assessment tasks including short and long practical investigations; topic test; an examination (short and extended response questions); and a selection from the following: an annotated folio of practical activities; a data analysis; a multimedia or webpage presentation; a response to a media article; a written report or poster; maintenance of logbook of practical investigations.

## 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 enabled an understanding of why objects move when they are not apparently in contact with other objects. Applications of concepts related to fields include the transmission of electricity over large distances and the design and operation of particle accelerators. They explore the interactions, effects and applications of gravitational, electric and magnetic fields. Students 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 existing explanations of the physical world, requiring a review of conceptual models and theories. Students design and undertake investigations involving at least two continuous independent variables.

### AREAS OF STUDY

- How do things move without contact?
- How are fields used to move electrical energy?
- How fast can things go?

## UNIT 4: HOW CAN TWO CONTRADICTORY MODELS EXPLAIN BOTH LIGHT AND MATTER?

In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behavior. Students further investigate light by using a particle model to explain its behavior. A wave model is also used to explain the behavior 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.

### AREAS OF STUDY

- How can waves explain the behavior of light?
- How are light and matter similar?
- Practical investigation

### ASSESSMENT: UNITS 3 AND 4

The award of satisfactory completion of units is based on the teacher's decision that student have demonstrated achievement of a set of VCAA-specified outcomes. Students' levels of achievement are determined by:

- School-assessed coursework for Unit 3: 21%
- School-assessed coursework for Unit 4: 19%
- 2 ½ hour written examination: 60%

## UNIT 1: HOW ARE BEHAVIOUR AND MENTAL PROCESSES SHAPED?

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

### AREAS OF STUDY

- How does the brain function?
- What influences psychological development?
- Student-directed research investigation

## UNIT 2: HOW DO EXTERNAL FACTORS INFLUENCE BEHAVIOUR AND MENTAL PROCESSES?

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

### AREAS OF STUDY

- What influences a person's perception of the world?
- How are people influenced to behave in particular ways?
- Student directed practical investigation

### ASSESSMENT

- a report of a practical activity involving the collection of primary data
- a research investigation involving the collection of secondary data
- a brain structure modelling activity
- a logbook of practical activities
- analysis of data/results including generalisations/conclusions
- media analysis/response
- problem solving involving psychological concepts, skills and/or issues

- a test comprising multiple choice and/or short answer and/or extended response
- a reflective learning journal/blog related to selected activities or in response to an issue
- Student-directed research investigation and a practical investigation related to brain function and/or development

## UNIT 3: HOW DOES EXPERIENCE AFFECT BEHAVIOUR AND MENTAL PROCESSES?

The nervous system influences behaviour and the way people experience the world. In this unit students examine 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.

### AREAS OF STUDY

- How does the nervous system enable psychological functioning?
- How do people learn and remember?

## UNIT 4: HOW IS WELLBEING DEVELOPED AND MAINTAINED?

Consciousness and mental health are two of many psychological constructs that can be explored by studying the relationship between the mind, brain and behaviour. 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.

### AREAS OF STUDY

- How do levels of consciousness affect mental processes and behaviour?
- What influences mental wellbeing?
- Practical investigation

### ASSESSMENT: UNITS 3 AND 4

- School-assessed coursework for Unit 3: 16%
- School-assessed coursework for Unit 4: 24%
- The level of achievement for Units 3 and 4 is also assessed by an end-of-year examination. The examination will contribute 60%.

### UNIT 3: STUDIO PRACTICES AND PROCESSES

In this unit students focus on the implementation exploration and development of an individual studio process leading to the production of a range of potential directions. Students develop and use an exploration proposal to define an area of creative exploration.

They plan and apply a studio process to explore and develop their individual ideas. Analysis of these explorations and the development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4.

For this study, the exploration proposal supports the student to identify a direction for their studio process. Students will select some of these potential directions from which to develop at least two artworks in Unit 4.

The study of artists and their work practices and processes may provide inspiration for students' own approaches to art making. Students investigate and analyse the response of artists to a wide range of source material and examine their use of materials and techniques. They explore professional art practices of artists from different historical and cultural contexts in relation to particular artworks and art forms.

#### AREAS OF STUDY

- Exploration proposal
- Studio process
- Artists and studio practices

### UNIT 4: STUDIO PRACTICES AND ART INDUSTRY CONTEXTS

In this unit students focus on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3. To support the creation of artworks, students present visual and written evaluation that explains why they selected a range of potential directions from Unit 3 to produce at least two finished artworks in Unit 4.

This unit also investigates aspects of artists' involvement in the art industry, focusing on at least two different exhibitions, that the student has visited in the current year of study with reference to specific artworks in those exhibitions. Students examine a range of environments for the presentation of artworks including public galleries and museums, commercial and private galleries, university art galleries, artist-run spaces, alternative art spaces and online gallery spaces.

#### AREAS OF STUDY

- Production and presentation of artworks
- Evaluation
- Art Industry Contexts

#### ASSESSMENT

Students' level of achievement in Unit 3 and 4 will be determined by:

- School-assessed task for Unit 3: 30%
- School Assessed Coursework for Unit 3: 5%
- School-assessed task for Unit 4: 30%
- School Assessed Coursework for Unit 4: 5%
- End of year examination: 30%

## UNIT 1: INTRODUCTION TO VISUAL COMMUNICATION

The main purpose of Unit 1 is to introduce students to the preparation of drawings using instruments and to explore techniques in freehand drawing using different methods, media and materials. Students are also introduced to the design elements and principles in the assessment of their own work and the work of others. They are introduced to the role of design in the historical, social and political context.

### AREAS OF STUDY

- Drawing as a means of communication
- The design elements and design principles
- Visual communication design in context

Students demonstrate achievement of the VCAA outcomes via performance on assessment tasks. The assessment tasks may be in the form of a folio of work or written and/ or oral presentations. Each outcome is assessed according to a set of criteria which is numerically scored and translated into a letter grade.

### AREAS OF STUDY

Students will sit a 90 minute examination\* towards the end of the unit. The examination consists of written questions and practical exercises. The unit coursework prepares the students for the examination.

\* The examination is assessed separately from the unit course work and appears as a separate mark on the report.

## UNIT 2: APPLICATION OF VISUAL COMMUNICATION DESIGN

The main purpose of Unit 2 is to enable students to further develop their skills in technical drawing within the different design fields of Communication Design, Industrial Design and Environmental Design. They also explore historical and contemporary anatomy and contexts of type and its relationship with imagery, and put the design process into practice through a major design project.

### AREAS OF STUDY

- Technical Drawing in Context
- Type and Imagery in Context
- Applying the Design Process

### ASSESSMENT

Students demonstrate achievement of the VCAA outcomes via performance on assessment tasks. The assessment tasks may be in the form of a folio/s of work or written and/ or oral presentations. Each outcome is assessed according to a set of criteria which is numerically scored and translated into a letter grade.

### ASSESSMENT

Students will sit a 90 minute examination\* at the end of the unit. The examination consists of written questions and practical exercises. The unit coursework prepares the students for the examination.

\*The examination is assessed separately from the unit course work and appears as a separate mark on the report.

## UNIT 3: DESIGN THINKING AND PRACTICE

In Unit 3 students will research and analyse existing communications in a variety of design practices which will inform their own design work. They will also investigate professional practices in different design fields and learn about how designers and specialists work together in industry.

Students will develop a brief for two final presentations and work through generating ideas for a range of possible design solutions for each of the presentations using the Design Process. These possible solutions will be refined and presented in Unit 4.

### AREAS OF STUDY

- Analysis and practice in context
- Design Industry Practice
- Developing a brief and generating ideas

## UNIT 4: DESIGN DEVELOPMENT, EVALUATION AND PRESENTATION

The focus of this Unit is the developments of design concepts and presentation of visual communications to meet the requirements of the brief. Using separate design processes students develop and refine and evaluate design concepts that satisfy each of the needs of the brief established in Unit 3.

Students will focus on the finals stage of the design process, the resolution of presentations. Students produce two final visual communication presentations, which are the refinements of the concepts developed in outcome 1.

### AREAS OF STUDY

- Development, refinement and evaluation
- Final Presentations

### ASSESSMENT: UNITS 3 AND 4

Assessment tasks are in the form of a folio of practical work which is developed in Unit 3 and refined and presented in Unit 4 as well as written and/ or oral presentations on Analysis and Practice, Design Industry Practice and Evaluation and Explanation of ideas.

The students' level of achievement will be determined by School Assessed Coursework, the School Assessed Task and an end of Year examination:

- Unit 3 School Assessed Coursework 25%
- Unit 4 School Assessed Task 40%
- End of Year Examination 35%

# BEYOND THE CLASSROOM

The wide array of co-curricular activities complements and adds to the learning that occurs in the classroom. We encourage our students to explore the breadth of experiences to discover their passions, many of which could last a lifetime.



## MUSIC

There are a number of ensembles on offer for students of all abilities to become actively involved with, both instrumental and voice. There is something for everyone, from choirs, the orchestra, wind symphony and the stage band to jazz, saxophone, strings and rock bands.

## DANCE AND DRAMA

With a wide variety of performance opportunities on offer, students can participate in performing arts productions, plays, dance showcases and concerts. A School Production is held every year, alternating between Senior and Cripps year levels.

## SPEECH, DRAMA AND EFFECTIVE COMMUNICATION

This program is designed to develop a student's individual communication skills and performance techniques. The skills of oracy (reading, listening and speaking) are emphasised to enable students to develop clarity and confidence in all areas of oral communication. Private lessons are also available.

## QUEST

This program runs after school in the STEAM Lab and provides students with access to internal and external industry experts within short term programs. Workshops have included engineering projects, wearable tech, 3D printing, robotics and digital film making.

## SPORT

Sport and physical activity is essential to general health and wellbeing. At Korowa we encourage positive physical activity behaviour through school sport, Physical Education, recreation and leisure time activities both at school and through community and club links outside school.

There's something for everyone from House sport competitions to inter-school and intra-school sporting opportunities, as well as the Club Sports at Korowa in Netball, Snowsports and Rowing. Regardless of skill level, students have the opportunity to participate, it's a great way to make new friends, have fun and stay fit.

## DEBATING

Korowa competes in the Debating Association of Victoria's Schools Competition with teams from Years 8 to 12. Students can also participate in inter-House debates held at Korowa, or staff-student debates.

Debating develops confidence in public speaking, is invaluable for interviews later in life, fosters the ability to analyse and research topics, serves as an excellent aid to essay writing and stimulates the ability to "think on one's feet". It is also great fun!

## LANGUAGE IMMERSION PROGRAMS

Partnerships with an array of schools in France, China, Japan and Germany allow students to practise their language skills in real life situations and to immerse themselves in a different culture living with host families for up to four weeks.



# CLUBS

## STEAM CLUB (YEARS 7–12)

Throughout the year, the STEAM Team run a number of fun lunchtime activities in the STEAM Lab to give students the chance to explore different technologies and their applications. Students often discover they have a real passion for all things STEAM and select from a number of elective STEAM classes or continue this interest through one of our co-curricular QUEST programs.

## PRISM (YEARS 7–12)

Prism is a discussion group where students come together to build connections with their peers, and discuss ideas and issues associated with sexual identity and gender identity.

## WRITERS' CLUB (YEARS 7–12)

Aspiring writers have fun while developing their skills through writing games, writing collaborative magnet poetry, learning how to edit stories, and much more. Any student of any writing level is welcome to join.

## BOOK CLUB (YEARS 7–12)

Each week, like minded students discuss what they love most in the Learning Commons: books! All students are welcome to come along and be involved in general discussions with no set books or required reading.

## CHESS CLUB (YEARS 7–9)

A chess coach from Melbourne University Chess Club runs regular sessions with Chess Club members, along with another coach who leads Masterclasses to prepare members for Interschool Chess Tournaments throughout the year.

## ART CLUB (YEARS 7–12)

Students meet weekly to share their love of the visual arts. In a relaxed environment, students have fun learning about a range of art forms by engaging in a variety of stimulating art activities.

## ENVIRONMENT GROUP (YEARS 7–12)

Sometimes known as Evergreen Korowa, the environment group is an assembly of students from all year levels oriented towards an enthusiasm for our natural environment. Throughout the year, they meet to discuss and implement ways to promote environmental sustainability, sometimes they just like to leave a space open for discussion and the sharing of ideas.