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INTRODUCTION

GENERAL INFORMATION 2017

All Saints’ College offers a broad and engaging curriculum and all students are encouraged to choose a balanced selection of courses that will enable them to both optimise their learning and satisfy their intellectual curiosity. This handbook describes the courses that the College may offer to Year 11 students in 2017, subject to adequate demand.

During Year 10, you will have acquired information about the postschool courses that you could study in order to achieve qualifications in the area that you are interested in pursuing. You must now look at the courses that you will need to study in Years 11 and 12 in order to meet the requirements for the course or field of work.

You should then select courses which meet these requirements and which fulfil the criteria for achieving the Western Australian Certificate of Education (WACE). In doing this, you must also take into account the areas of study you have so far found interesting, and the areas in which you have been more successful. Your present teachers’ advice must also play a part in your thinking and you must closely follow the course recommendations.

In Year 11, 2017, All Saints’ College will offer ATAR and General courses. ATAR courses are recommended for students who intend to obtain an Australian Tertiary Entrance Rank (ATAR) in order to apply for university entrance. General courses are suitable for students who intend to apply to State or private training providers to undertake an apprenticeship or to seek employment after leaving school. Students who intend to take a General pathway must complete a minimum of a Certificate II qualification in Years 11 and 12.

Each course consists of two semester-long units. At All Saints’ College, it is a requirement that students undertake SIX courses in Year 11. In Year 12, students may undertake SIX or FIVE courses.

WESTERN AUSTRALIAN CERTIFICATE OF EDUCATION REQUIREMENTS

Achievement of a WACE signifies that you have successfully met the breadth and depth, the achievement standard and literacy and numeracy requirements in your senior secondary schooling. For 2017, these requirements follow. To qualify for the Western Australian Certificate of Education (WACE) you must meet the following requirements.

Breadth and Depth Requirement

You must complete a minimum of 20 units over Years 11 and 12. (An example of a ‘unit’ is Unit 1 Politics and Law and an example of a ‘course’ is Unit 1 and Unit 2 Politics and Law. For all courses, units 1 and 2 will be taken in Year 11 and units 3 and 4 will be taken in Year 12.)

The breadth-of-study requirement must be fulfilled through the study of ATAR or General Courses. VET certificates and endorsed programs cannot be used to meet breadth-of-study requirement.
The 20 course units must include at least:

- 10 course units (or the equivalent) at Year 12;
- two Year 11 units from an English course and one pair of units from a Year 12 course;
- one pair of course units from each of List A (Arts/Languages/Social Sciences) and List B (Mathematics/Science/Technology) completed in Year 12. (See below).

(Up to 8 unit equivalents can be from ‘endorsed programs’, four in Year 11 and four in Year 12. A complete list of endorsed programs can be found at www.scsa.wa.edu.au — Senior Secondary — Endorsed Programs.)

**Achievement Standard Requirement**

- You must achieve a ‘C’ grade average or higher (or the equivalent) across the best 14 course units in Years 11 and 12 with a minimum of six ‘C’ grades at Year 12.
- You must complete four or more Year 12 ATAR courses or complete an AQF VET Certificate II or higher.

**Literacy and Numeracy Competence Requirement**

- You must complete at least four units of an English course in Years 11 and 12. You are required to complete two Year 11 English units and a pair of Year 12 English units.
- You must demonstrate the minimum standard of literacy and numeracy.

**WACE EXAMINATION AND EXTERNALLY SET TASK REQUIREMENTS**

You must sit for WACE examinations in each course when enrolled in Units 3 and 4 in ATAR courses. Year 12 students enrolled in Units 3 and 4 in an ATAR course must sit the external examination in that course. If you do not sit, or do not make a genuine attempt in this examination, the grades for the pair of units completed in that year will not contribute to the calculation of the achievement standard, but they will still count in the breadth/depth requirement.

Year 12 students enrolled in Units 3 and 4 in a General course must sit the externally set task (EST) in that course. This task is set by the School Curriculum and Standards Authority and will comprise 15% of your mark in all General courses. If you do not sit the EST, or do not make a genuine attempt in this task, the grades for the pair of units completed in that year will not contribute to the calculation of the achievement standard, but they will still count in the breadth/depth requirement.
WACE BREADTH-OF-STUDY LIST (FOR COURSES OFFERED AT ALL SAINTS’ COLLEGE)

In Year 12, at least one pair of course units must be chosen from List A and at least one pair of course units must be chosen from List B.

<table>
<thead>
<tr>
<th>LIST A (Arts/Languages/Social Sciences)</th>
<th>LIST B (Mathematics/Science/Technology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance (ATAR) *</td>
<td>Accounting and Finance (ATAR)</td>
</tr>
<tr>
<td>Drama (ATAR) *</td>
<td>Applied Information Technology (ATAR)</td>
</tr>
<tr>
<td>Economics (ATAR)</td>
<td>Biology (ATAR)</td>
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<td>English (ATAR)</td>
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<td>English (General)</td>
<td>Computer Science (ATAR)</td>
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<tr>
<td>EAL/D (ATAR)</td>
<td>Design (Photography) (ATAR and General)</td>
</tr>
<tr>
<td>French: Second Language (ATAR) *</td>
<td>Food Science and Technology (General)</td>
</tr>
<tr>
<td>Geography (ATAR)</td>
<td>Human Biology (ATAR)</td>
</tr>
<tr>
<td>Italian: Second Language (ATAR) *</td>
<td>Integrated Science (ATAR and General)</td>
</tr>
<tr>
<td>Literature (ATAR)</td>
<td>Mathematics: Methods (ATAR)</td>
</tr>
<tr>
<td>Media Production and Analysis (ATAR) *</td>
<td>Mathematics Specialist (ATAR)</td>
</tr>
<tr>
<td>Modern History (ATAR)</td>
<td>Mathematics: Essentials (General)</td>
</tr>
<tr>
<td>Music (ATAR) *</td>
<td>Outdoor Education (General)</td>
</tr>
<tr>
<td>Politics and Law (ATAR)</td>
<td>Psychology (ATAR)</td>
</tr>
<tr>
<td>Visual Arts (ATAR and General) *</td>
<td>Physical Education Studies (ATAR and General) *</td>
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<tr>
<td>Authority Developed Workplace Learning</td>
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<tr>
<td>(Endorsed Program)</td>
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</tbody>
</table>

* These courses have both written and practical examinations.

THE WESTERN AUSTRALIAN STATEMENT OF STUDENT ACHIEVEMENT (WASSA)

A WASSA will be issued to all Year 12 students who complete any study that contributes towards a WACE. It will list all courses and programs students have completed in Years 11 and 12.

REPEATING COURSE UNITS

Course units can be repeated. However, if those units which have the same code are repeated, they do NOT contribute to the WACE requirements more than once. If the course unit is repeated, the highest grade recorded for the unit will be used when calculating the ‘C’ grade average.

ENROLMENT CRITERIA FOR WACE LANGUAGES COURSES

If you wish to study a WACE Language course, there is a form that needs to be completed to ensure you are permitted to enrol in that Language course. Enrolment criteria considerations include residency in the country where that language is spoken and exposure to that language either at school or in the home. To view the application form on the School Curriculum and Standards Authority website.

ENROLMENT CRITERIA FOR ENGLISH AS AN ADDITIONAL LANGUAGE OR DIALECT (EAL/D)

If you do not speak Standard Australian English as your home language or you have had limited schooling in English or a limited period of residence in a country where English is spoken, you may be eligible to enrol in EAL/D. The application form is available on the School Curriculum and Standards Authority website.
**VOCATIONAL EDUCATION AND TRAINING (VET) PROGRAMS**

If you are not studying four ATAR courses in Year 12, you will need to complete a Certificate II or higher qualification to achieve the WACE.

VET is recognised across Australia. VET programs can give you the opportunity to gain core skills for work and, in some cases, complete training in industry through workplace learning. You can begin training for your career while still at school by undertaking a VET qualification. Among the range of VET programs on offer are school-based apprenticeships and traineeships.

VET can contribute up to eight of the 20 units you need to achieve the WACE.

There are a variety of VET's certificates available but their scope is limited and may not address the individual needs of the student. In this case the College Career Counsellor will work with each individual student to target a Certificate and RTO that meets the student's unique needs.

If you are planning on undertaking General courses and not doing four ATAR courses in Year 12, you must speak with the Careers Counsellor before enrolling in any courses or programs.

**TERTIARY ENTRANCE 2017-2018**

The booklet, University Admission 2017: Admission Requirements for School Leavers, published by the Tertiary Institutions Service Centre (TISC) is located on the Senior School Curriculum page of the College’s Portal or may be viewed at [www.tisc.edu.au](http://www.tisc.edu.au). The information listed below is based on this booklet and pertains to the four public universities in Western Australia: Curtin University, Edith Cowan University, Murdoch University and The University of Western Australia.

**REQUIREMENTS FOR UNIVERSITY ADMISSION**

To be considered for university admission as a school leaver applicant you must:

1. meet the requirements for the Western Australian Certificate of Education (WACE), prescribed by the School Curriculum and Standards Authority, and
2. achieve competence in English as prescribed by the individual universities, and
3. obtain a sufficiently high ATAR to qualify for entry to a particular university and/or course, and
4. satisfy any prerequisites or special requirements for entry to particular courses.

1. **WESTERN AUSTRALIAN CERTIFICATE OF EDUCATION (WACE)**

   It is essential for you to satisfy the requirements of the WACE to enter any of the four public universities.

   Detailed information about the WACE may be obtained from the School Curriculum and Standards Authority, [www.curriculum.wa.edu.au](http://www.curriculum.wa.edu.au).
2. **COMPETENCE IN ENGLISH**

For university admission purposes, you demonstrate competence in English by achieving the prescribed standard in a course from the English Learning Area: English ATAR, Literature ATAR or English as an Additional Language/Dialect ATAR (for eligible students – see above).

You can meet the competence in English requirement with Year 12 results obtained in any calendar year.

**ENGLISH ATAR; LITERATURE ATAR; EAL/D ATAR**

Curtin University of Technology  
Murdoch University  
The University of Western Australia

- You must achieve a scaled mark of at least 50.

Edith Cowan University

- You must achieve a scaled mark of at least 50 or a letter grade of A, B or C in units 3 and 4 studied in Year 12.

If English Language competence is not met, the universities do offer concessions. These are outlined in the booklet, University Admission 2017: Admission Requirements for School Leavers.

3. **AUSTRALIAN TERTIARY ADMISSION RANK (ATAR)**

The Australian Tertiary Admission Rank is the basis of admission to most university courses. You are ranked in order of merit based on your ATAR.

The ATAR ranges between zero and 99.95. It reports your rank relative to all other WA students of Year 12 school leaving age and takes into account the number of students with a Tertiary Entrance Aggregate (TEA) as well as the number of people of Year 12 school leaving age in the population of this state. An ATAR of 75.00 indicates that you have an overall rating equal to or better than 75% of the Year 12 school leaving age population in Western Australia.

The ATAR is calculated using scaled scores in ATAR courses.

**CALCULATION OF THE TERTIARY ENTRANCE AGGREGATE (TEA – OUT OF 400)**

The ATAR is derived from the Tertiary Entrance Aggregate (TEA).

The TEA will be calculated by adding a student’s best four final scaled scores plus 1.0% of any language or Mathematics bonus. (See Appendix at end of this document).

- For all universities, you may accumulate scaled scores which contribute to your ATAR over five consecutive years, with no course counting more than once.
- No more than two mathematics scaled scores can be used in the calculation of an ATAR.
- There are unacceptable course combinations whereby scores in both courses cannot both be used (see ‘Unacceptable Course Combinations’ in the booklet, University Admission 2017: Admission Requirements for School Leavers’). It may be possible to study ‘unacceptable
course combinations’ such as Integrated Science and Chemistry and English and Literature, for example, but the result in only one – the higher result – may be used to calculate your ATAR.

- A Languages Bonus of 10% of a Languages scaled score is added to the aggregate of the best four scaled scores, subject to no languages scaled score earlier than 2012 being used. You receive the Languages Bonus irrespective of whether your languages course was counted as one of the best four.
- In calculating the scaled score, equal weight is given to the final school mark and the final examination mark (50:50), except where courses are taken on a private basis (see below).
- The maximum TEA is 410.

**TEA to ATAR**

TISC will construct a table to convert your TEA to an ATAR. This will take into account the number of students with a TEA and the number of people of Year 12 school leaving age in the State. This table is constructed annually. See [www.tisc.edu.au](http://www.tisc.edu.au) for the 2014 conversion chart.

**COMPARISON OF FINAL SCALED MARKS, TEAs and ATARs**

The following are based on 2014 results.

- Average final scaled marks of 99 produce a TEA of 396 = 99.95 ATAR
- Average final scaled marks of 95 produce a TEA of 380 = 99.85 ATAR
- Average final scaled marks of 90 produce a TEA of 360 = 99.55 ATAR
- Average final scaled marks of 85 produce a TEA of 340 = 98.75 ATAR
- Average final scaled marks of 80 produce a TEA of 320 = 97.15 ATAR
- Average final scaled marks of 75 produce a TEA of 300 = 94.25 ATAR
- Average final scaled marks of 70 produce a TEA of 280 = 89.90 ATAR
- Average final scaled marks of 65 produce a TEA of 260 = 84.05 ATAR
- Average final scaled marks of 60 produce a TEA of 240 = 77.00 ATAR
- Average final scaled marks of 55 produce a TEA of 220 = 69.00 ATAR
- Average final scaled marks of 50 produce a TEA of 200 = 60.95 ATAR
- Average final scaled marks of 45 produce a TEA of 180 = 52.50 ATAR

### 4. PREREQUISITES

Make sure that you satisfy the prerequisites for admission to the university course of your choice. Prerequisites are courses or special requirements that must be successfully completed for entry to particular university courses.

Generally a scaled mark of 50 or more in an ATAR course is required for prerequisite purposes. Specific Course Prerequisites are listed in the TISC booklet, University Admission 2017: Admission Requirements for School Leavers.

For some university courses, the special requirements may include bridging/special course units, interviews, auditions, folio presentations, manual dexterity tests, aptitude tests, fitness requirements, etc. Detailed information is available from the individual universities and is listed in the booklet, University Admission 2017: Admission Requirements for School Leavers.
SPECIAL EXAMINATION ARRANGEMENTS

You may be eligible to apply for special examination arrangements. It is imperative that anyone who will be applying for special arrangements in Year 12 also applies for them in Year 11. Schools are required to submit applications for and evidence about students with permanent disabilities. (ADD, ADHD and dyslexia have been recognised as such disabilities.) These applications must include evidence of similar arrangements being applied during Year 11 examinations.

The Special Examination Arrangements will require diagnosis by a paediatrician/psychologist, as well as test information on the specific problem you have had in the examination situation, and details on the arrangements made by the school for examinations over a period of time including why they were granted and the effect they have had on your output.

If you believe you have a permanent disability that would qualify you for special examination arrangements, please arrange an early interview with the Learning Support Coordinator so that documentation about your individual situation can begin.

ALL SAINTS’ COLLEGE: ASSESSMENT AND GRADING POLICIES

A full explanation of the processes, practices and procedures accompanying all aspects of assessment and grading at All Saints’ College can be found in the Assessment and Reporting Policy on the Senior Secondary Curriculum page of the College’s Portal.

Information on Marks Adjustments of Standardisation, Moderation and Scaling are also available on this Portal page.

ENTRY TO STATE AND PRIVATE TRAINING PROVIDERS (PREVIOUSLY KNOW AS TAFE)

In order to enrol in any training course, you must meet minimum requirements. These can be met by either having achieved a suitable lower level qualification within the special training providers system or by demonstrating an appropriate level of communication and mathematics skills. Please be aware that it is increasingly possible to transfer from completed training courses to a range of university courses.

CHOOSING YOUR YEAR 11 COURSE

Year 11 courses lead to Year 12 courses. If you are capable of going to university, you are strongly encouraged to choose ATAR courses in Years 11 and 12.

If you wish to undertake General courses, you must complete a Certificate II or higher. You must also have previously discussed your options with the Careers Counsellor.

A syllabus for each course listed in this handbook may be found in the School Curriculum and Standards Authority Syllabus Manuals which are available at [www.scsa.wa.edu.au](http://www.scsa.wa.edu.au) – Senior Secondary - Courses. You and your parents/guardians are encouraged to consult the syllabus for full details of course content, types of assessment, relative weightings of assessments, and suggested reading material.

Prior to finalising the courses you intend to undertake in Year 11, ensure that you have given considerable thought to the following.

1. Determine what you are good at and what you like doing.

2. Establish your preferred post-school intentions, eg university, Training Providers, apprenticeship or other employment.
3. Compare those intentions with your demonstrated ability. Look at your Year 9 and Year 10 reports. What marks and grades were achieved? Are your goals realistic with the abilities you have shown so far? (Research and experience have shown that your Year 11 results will be very similar to your Year 10 results, without considerable adjustments to your study habits and classroom, homework and study practices.) Be realistic in your course choices.

4. Be aware that it is very difficult and unsettling to change courses once you have commenced these in Year 11. Your teachers have recommended particular courses and you are strongly advised to heed these recommendations which are based on professional experience and understanding of the significant demands of Year 11.

5. Find out about any prerequisites needed for following postschool intentions. Read the brochures distributed by the tertiary institutions and by the State and private Training Providers. Contact employers to find out the background they recommend for students entering the workforce.

6. Establish the probable Year 12 course best suited to meeting graduation requirements and for commencing post-Year 12 options.

7. Finally, select your Year 11 courses, bearing in mind the following:
   - You must have sufficient units to achieve a WACE.
   - In Year 12, you must have at least one course from List A and one from List B.
   - You must do an English course.
   - If you have any aspirations for further study at university or through the State Training Provider, check to see if there are any prerequisites.

**RELIGION AND PHILOSOPHY**

All students in Year 11 will study one period per week of Religion and Philosophy.

The curriculum is designed internally for our students at All Saints’ College. Students will have the opportunity to choose three out of nine topics on offer. The topics are chosen to help students explore philosophical, ethical and religious issues from an objective point of view through discussion, research and an open mind. Classes will provide opportunity for open debate as well as personal individual reflection. A component of each class will be Stillness and Silence which encourages the students to develop relaxation skills.
## COURSES

### Design and Technologies Learning Area
- Design – General Course
- Food Science Technology – General Course
- Materials Design and Technology – General Course
- Design Photography – ATAR Course
- Applied Information Technology ATAR Course
- Computer Science – ATAR Course

### English Learning Area
- English ATAR and General Course
- English as an Additional Language/Dialect (EAL/D) ATAR Course
- Literature – ATAR Course

### Health and Physical Education Learning Area
- Outdoor Education – General Course
- Physical Education Studies – ATAR Course
- Physical Education Studies – General Course

### Languages Learning Area
- French: Second Language – ATAR Course
- Italian: Second Language – ATAR Course
- Japanese: Second Language – ATAR Course

### Mathematics Learning Area
- Mathematics Essentials – General Course
- Mathematics Applications – ATAR Course
- Mathematics Methods – ATAR Course
- Mathematics Specialist – ATAR Course

### Arts Learning Area
- Visual Arts – ATAR Course
- Visual Arts – General Course
- Dance – ATAR Course
- Drama – ATAR Course
- Media Production and Analysis – ATAR Course
- Music – ATAR Course

### Science Learning Area
- Biology – ATAR Course
- Chemistry – ATAR Course
- Human Biology – ATAR Course
- Integrated Science – ATAR Course
- Integrated Science – General Course
- Physics – ATAR Course
- Psychology – ATAR Course

### Humanities Learning Area
- Accounting and Finance – ATAR Course
- Economics – ATAR Course
- Geography – ATAR Course
- Modern History – ATAR Course
- Politics and Law – ATAR Course

### Vocational Education and Training (VET) Endorsed Program
- Authority Developed Workplace Learning (ADWPL)

### Awards for Outstanding Achievement
In the Design General Course students develop skills and processes for current and future industry and employment markets. Students are equipped with the knowledge and skills to understand design principles and processes, analyse problems and devise innovative strategies through projects. Students are able to focus on particular contexts from a choice of photography, graphics, dimensional design and technical graphics. The Design General course also emphasises the scope of design in trade based industries allowing students to maximise vocational pathways.

A consumable charge applies to these courses. This cost will be separate to Tuition fees.

Year 11

Unit 1: Design Fundamentals
The focus of this unit is to introduce design process and practice. Students learn that design can be used to provide solutions to design problems and communication needs. They are introduced to basic design skills and a range of techniques within a defined context to demonstrate control over the elements and principles of design.

Unit 2: Personal Design
The focus of this unit is personal design. Students learn that they visually communicate aspects of their personality, values and beliefs through their affiliations and their manipulation of personal surroundings and environments. Students explore design elements and principles and the design process in a project communicating something of themselves. Students increase familiarity with basic production skills and processes, materials and technologies.

Year 12

Unit 3: Product Design
The focus of this unit is product design. Students learn that the commercial world is comprised of companies, requiring consumer products, services and brands for a particular audience. They are introduced to the concept of intellectual property. Using the design process, they create products/services, visuals and/or layouts with an awareness of codes and conventions. They use relevant and appropriate production skills and processes, materials and technologies relevant to the design.

Unit 4: Cultural Design
The focus of this unit is cultural design. Students learn that society is made up of different groups of people who share diverse values, attitudes, beliefs, behaviours and needs, and that different forms of visual communication transmit these values and beliefs. Students are encouraged to create designs that link to a culture or subculture and are introduced to ethical issues concerning representation. Students develop a design process with an understanding of codes and conventions. They consider communication strategies and audience. They define and establish contemporary production skills and processes, materials and technologies.
Food impacts every aspect of daily life and is essential for maintaining overall health and wellbeing. The application of science and technology plays an important role in understanding how the properties of food are used to meet the needs of consumers and producers. Food laws and regulations govern the production, supply and distribution of safe foods. Students develop practical food-related skills, understandings and attitudes that enhance their problem-solving abilities and decision-making skills.

In the Food Science and Technology General course, students develop their interests and skills through the design, production and management of food-related tasks. They develop knowledge of the sensory, physical, chemical and functional properties of food and apply these in practical situations. Students explore innovations in science and technology and changing consumer demands. New and emerging foods encourage the design, development and marketing of a range of products, services and systems.

Food and allied health sectors represent a robust and expanding area of the Australian and global employment markets. The Food Science and Technology General course enables students to connect with further education, training and employment pathways and enhances employability and career opportunities in areas that include nutrition, health, food and beverage manufacturing, food processing, community services, hospitality, and retail.

Students will sit an external Task set by the School Curriculum and Standards Authority. The criteria and content is set by the Authority.

A consumable charge applies to these courses. This cost will be separate to Tuition fees.

**Year 11**

**Unit 1: Food Choices and Health**

This unit focuses on the sensory and physical properties of food that affect the consumption of raw and processed foods. Students investigate balanced diets, the function of nutrients in the body and apply nutrition concepts that promote healthy eating. They study health and environmental issues that arise from lifestyle choices and investigate factors which influence the purchase of locally produced commodities.

Students devise food products, interpret and adapt recipes to prepare healthy meals and snacks that meet individual needs. They demonstrate a variety of mise-en-place and precision cutting skills, and processing techniques to ensure that safe food handling practices prevent food contamination. Students recognise the importance of using appropriate equipment, accurate measurement and work individually, and in teams, to generate food products and systems.

**Unit 2: Food for Communities**

This unit focuses on the supply of staple foods and the factors that influence adolescent food choices and ethical considerations. Students recognise factors, including processing systems that affect the sensory and physical properties of staple foods. They explore food sources and the role of macronutrients and water for health, and nutrition-related health conditions, such as coeliac and lactose intolerance, which often require specialised diets. Students consider how food and beverage labelling and packaging requirements protect consumers and ensure the supply of safe, quality foods.

Students work with a range of staple foods, adapt basic recipes and apply the technology process to investigate, devise, and produce food products to achieve specific dietary requirements. They evaluate food products and demonstrate a variety of safe workplace procedures, processing techniques and food handling practices.
Year 12

Unit 3: Food Science
This unit explores the societal, lifestyle and economic issues that influence food choices. Students research the effect of underconsumption and overconsumption of nutrients on health and investigate a range of dietrelated health conditions that affect individuals and families.

Using scientific methods, students examine the functional properties that determine the performance of food and apply these in the planning and preparation of food products and processing systems.

Students develop their expertise with technology and communication skills to implement strategies to design food products and processing systems. They select resources to meet performance requirements and use evaluation strategies to monitor and maintain optimum standards. Students follow occupational safety and health requirements, implement safe food handling practices and use a variety of foods and processing techniques to produce safe, quality food products.

Unit 4: The Undercover Story
This unit focuses on food spoilage and contamination and explores reasons for preserving food. Students investigate food processing techniques and the principles of food preservation. They examine the regulations which determine the way food is packaged, labelled and stored and how the principles of the Hazard Analysis Critical Control Point (HACCP) system are administered and implemented to guide the production and provision of safe food.

Students investigate the food supply chain and value-adding techniques applied to food to meet consumer and producer requirements. Food choices are often determined by location, income, supply and demand and the environmental impact of food provision. Students examine influences on the nutritional wellbeing of individuals that arise from lifestyle and cultural traditions. They implement principles of dietary planning and adapt recipes and processing techniques when considering specific nutritional needs of demographic groups.

Students apply the technology process to address a product proposal and produce a preserved food product. They justify the equipment, resources and processing techniques used, and evaluate sensory properties. Students show the use of the preserved food product in another food product.
The Materials Design and Technology General course is a practical course. The course is offered in the context of wood, with the design and manufacture of products as the major focus. There is also the flexibility to incorporate additional materials from outside the designated contexts. This will enhance and complement the knowledge and skills developed within the course as many modern-day products are manufactured using a range of different material types.

Working with materials, students develop a range of manipulation, processing, manufacturing and organisational skills. When designing with materials, they develop cognitive skills, such as solving problems, generating ideas, creative design strategies and communicating what they do. This makes them more technologically literate and, as consumers, enables them to make more informed decisions about the use and misuse of technology.

A consumable charge applies to these courses. This cost will be separate to Tuition fees.

**Year 11**

**Unit 1**
Students interact with a variety of items that have been specifically designed to meet certain needs. Students are introduced to the fundamentals of design. They learn to communicate various aspects of the technology process by constructing what they design.

Throughout the process, students learn about the origins, classifications, properties and suitability for purpose of the materials they are using, and are introduced to a range of production equipment and techniques. They develop materials manipulation skills and production management strategies, and are given the opportunity to realise their design ideas through the production of their design project.

**Unit 2**
Students interact with products designed for a specific market. They use a range of techniques to gather information about existing products and apply the fundamentals of design. Students learn to conceptualise and communicate their ideas and various aspects of the design process within the context of constructing what they design.

Throughout the process, students learn about the origins, classifications, properties and suitability for end use of materials they are working with. Students are introduced to a range of technology skills and are encouraged to generate ideas and realise them through the production of their design projects. They work within a defined environment and learn to use a variety of relevant technologies safely and effectively.
Year 12

Unit 3
Students develop an understanding of the elements and fundamentals of design and consider human factors involved in the design, production and use of their projects. They develop creative thinking strategies and work on design projects within specified constraints. Students learn about the classification and properties of a variety of materials and make appropriate materials selection for design needs.

Students learn about manufacturing and production skills and techniques. They develop the skills and techniques appropriate to the materials being used and gain practice in planning and managing processes through the production of design project. They learn about risk management and ongoing evaluation processes.

Unit 4
Students learn about the nature of designing for a client, target audience or market. Students apply an understanding of the elements and fundamentals of design and consider human factors involved in their design projects. Students learn about the nature, properties and environmental impacts related to a variety of materials and production techniques. They develop creative thinking strategies, work on design projects within specified constraints and consider the environmental impacts of recycling of materials.

Students extend their understanding of safe working practices and contemporary manufacturing techniques and develop the knowledge, understanding and skills required to manage the processes of designing and manufacturing.
DESIGN (PHOTOGRAPHY) – ATAR COURSE

In the Design ATAR course students develop skills and processes for current and future industry and employment markets. Students are equipped with the knowledge and skills to understand design principles and processes, analyse problems and possibilities, and devise innovative strategies within design contexts. These include photography, graphics, dimensional design and technical graphics. The Design ATAR course also emphasises the scope of design in professional industries allowing students to maximise university pathways.

Year 11
Unit 1: Produce Design

Students learn that the commercial world is comprised of companies requiring consumer products, services and brands for a particular audience. They are introduced to the concept of intellectual property. They create products/services, visuals and/or layouts with an understanding of codes and conventions. They use relevant and appropriate production skills and processes, materials and technologies relevant to the design.

Unit 2: Cultural Design

Students learn that society is made up of different groups of people who share diverse values, attitudes, beliefs, behaviour and needs and that different forms of visual communication transmit these values and beliefs. Students are encouraged to create designs that link to a culture or sub-culture and are introduced to ethical issues concerning representation. Students develop a design process with an understanding of codes and conventions. They analyse communication situations and audience. They define and establish contemporary production skills and processes, materials and technologies.

Year 12
Unit 3: Commercial Design

Students become aware that design has commercial considerations that are influenced by various stakeholders to produce products, services and brands. Commercial design is client and market driven and is a reflection of contemporary consumer demands. Students are introduced to a client-focused design brief to create a product or service. They plan, develop and analyse to create designs that reflect the client, audience, and market needs. They also consider commercial and manufacturing requirements for a real world solution, with relevant production skills and processes, materials, and technologies.

Unit 4: Influential Design

The focus of this unit is the communication of ideals, messages, information and values, to influence opinion and attitudes. Students produce products and visual layouts for specific and applied contexts with an understanding of applied semiotics and the construction of meaning. They analyse the audience in terms of empathy, profiling and stereotyping, and develop persuasive solutions using a research, testing and feedback mechanism.
The development and application of digital technologies impacts most aspects of living and working in our society. Digital technologies have changed how people interact and exchange information. These developments have created new challenges and opportunities in lifestyle, entertainment, education and commerce.

Throughout the Applied Information Technology ATAR course, students investigate client-driven issues and challenges, devise solutions, produce models or prototypes and then evaluate and refine the design solution in collaboration with the client. Students are provided with the opportunity to experience, albeit in a school environment, developing digital solutions for real situations.

The practical application of skills, techniques and strategies to solve information problems is a key focus of the course. Students also gain an understanding of computer systems and networks. In undertaking projects and designing solutions the legal, ethical and social issues associated with each solution are also considered and evaluated.

This course provides students with the opportunity to develop the knowledge and skills of digital technologies. It also encourages students to use digital technologies in order to use them in a responsible and informed manner.

The Applied Information Technology ATAR course provides a sound theoretical and practical foundation, offering pathways to further studies and a wide range of technology based careers.

**Year 11**

**Unit 1: Media Information and Communication Technologies**
This unit focuses on the use of digital technologies to create and manipulate digital media. Students use a range of applications to create visual and audio communications. They examine trends in digital media transmissions and implications arising from the use of these technologies.

**Unit 2: Digital Technologies in Business**
This unit focuses on the skills, principles and practices associated with various types of documents and communications. Students identify the components and configuration of networks to meet the needs of a business. They design digital solutions for clients, being mindful of the various impacts of technologies within legal, ethical and social boundaries.

**Year 12 Applied Information Technology ATAR Course**

**Unit 3: Evolving digital technologies**
This unit focuses on the use of applications to create, modify, manipulate, use and/or manage technologies.

Students consider the nature and impact of technological change and the effect this has when creating products for a particular purpose and audience.

**Unit 4: Digital technologies within a global society**
This unit focuses on the production of a digital solution for a particular client. Students undertake the management of data and develop an appreciation of the social, ethical and legal impacts of digital technologies within a global community.
The Computer Science ATAR course focuses on the fundamental principles, concepts and skills within the field of computing and provides students with opportunities to develop flexibility and adaptability in the application of these, in the roles of developers and users. The underpinning knowledge and skills in computer science are practically applied to the development of computer systems and software, and the connectivity between computers, peripheral devices and software used in the home, workplace and in education is examined. Students develop problem-solving abilities and technical skills as they learn how to diagnose and solve problems in the course of understanding the building blocks of computing.

In this course, the impact of technological developments on the personal, social and professional lives of individuals, businesses and communities is investigated. The ethical, moral and legal factors that influence developments in computing are explored so that students recognise the consequences of decisions made by developers and users in respect to the development and use of technology.

This course provides students with practical and technical skills that equip them to function effectively in a world where these attributes are vital for employability and daily life in a technological society. It provides a sound understanding of computing to support students pursuing further studies in related fields.

Year 11

Unit 1: Developing computer-based systems and producing spreadsheet and database solutions
The focus for this unit is developing computer-based systems and producing spreadsheet and database solutions. Students are introduced to the internal, interrelating components of computer-based systems in an industry context. They examine a variety of systems, build on their spreadsheet and database skills and gain an appreciation of how these concepts and technologies are used in industry.

Unit 2: Developing computer-based systems solutions and communications
The focus for this unit is developing computer-based systems solutions and communications. Students are introduced to networking concepts, as applied to industry. Through the use of algorithms, students develop programming skills. They create solutions exploring the ethical, legal and societal implications of industry-based applications.

Year 12

Unit 3: Design and development of computer-based systems and database solutions
In this unit, students understand the design concepts and tools used to develop relational database systems. They consider the complex interactions between users, developers, the law, ethics and society when computer systems are used and developed.

Unit 4: Design and development of communication systems and software solutions
In this unit, students gain the knowledge and skills to create software. They use algorithms and structured programming to design and implement software solutions for a range of problems using the Software Development Cycle. Students examine attitudes and values that lead to the creation and use of computer-based systems and their effect on society. Students consider networks, communication systems, including security and protocols.
The English ATAR course focuses on developing students’ analytical, creative, and critical thinking and communication skills in all language modes, encouraging students to critically engage with texts from their contemporary world, the past, and from Australian and other cultures. Through close study and wide reading, viewing and listening, students develop the ability to analyse and evaluate the purpose, stylistic qualities and conventions of texts and to enjoy creating imaginative, interpretive, persuasive and analytical responses in a range of written, oral, multimodal and digital forms.

**English General Course**

The English General course focuses on consolidating and refining the skills and knowledge needed by students to become competent, confident and engaged users of English in everyday, community, social, further education, training and workplace contexts. The course is designed to provide students with the skills to succeed in a wide range of postsecondary pathways by developing their language, literacy and literary skills. Students comprehend, analyse, interpret, evaluate and create analytical, imaginative, interpretive and persuasive texts in a range of written, oral, multimodal and digital forms.

To complete the English course and to meet the requirements of the Western Australian Certificate of Education (WACE), students must complete a pair of units in both Year 11 and 12. Therefore by the end of Year 12, students will have completed 4 units. These units will prepare them for the WACE English Examination.

**English Units ATAR 1 and 2**

**General 1 and 2**

There are two pathways available to Year 11 students; The English ATAR pathway will ensure students are eligible for tertiary entrance if they achieve the prerequisites set by the tertiary institutions. Students on either pathway will be eligible for TAFE, if they meet the prerequisites prescribed.

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Year</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>English ATAR</td>
<td>Year 11</td>
<td>Units 1 and 2</td>
</tr>
<tr>
<td></td>
<td>Year 12</td>
<td>Units 3 and 4</td>
</tr>
<tr>
<td>English General</td>
<td>Year 11</td>
<td>Units 1 and 2</td>
</tr>
<tr>
<td></td>
<td>Year 12</td>
<td>Units 3 and 4</td>
</tr>
</tbody>
</table>

Students need to carefully consider the English Pathway that they will study in Year 11. If they achieved a ‘C’ grade or higher in Year 10, it is recommended that they study English ATAR. If they achieved below a ‘C’ grade, it is recommended that they study English General.

Only content from English ATAR will be externally examined in Year 12.

*Please be aware that following English General Course will not allow students to enter university directly from school.*
The units that are studied in Year 12 are a continuation of the Year 11 course.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>Year 11</td>
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</tr>
<tr>
<td></td>
<td>Year 12</td>
<td>Units 3 and 4</td>
</tr>
</tbody>
</table>

There are two starting points in Year 12 English. They are a continuation of the Year 11 Pathways, therefore students studying English ATAR will continue on that pathway and students studying English GENERAL will continue to the Stage 2 units.

*Please be aware that only ATAR units can qualify students for direct University entrance.

**Students must study four (4) units of English to satisfy the requirements of WACE. Therefore, units cannot be repeated.
ENGLISH AS AN ADDITIONAL LANGUAGE/DIALECT - (EALD) – ATAR COURSE

The EAL/D courses are designed for students who speak another language or dialect as their first or ‘home’ language. EAL/D focuses on development of the competent use of Standard Australian English (SAE) in a range of contexts. The EAL/D ATAR course develops academic English skills to prepare students for tertiary study.

Eligibility for enrolment in English as an Additional Language/Dialect

The EAL/D ATAR course is available to students who speak English as a second language or as an additional language or dialect, and whose use of SAE is restricted. The course may provide English language or dialect support for students to the end of Year 11. English as an Additional Language or Dialect eligibility criteria do not apply to the Year 11 period of enrolment.

The specific eligibility criteria for enrolment into Year 12 in the course are set out below. Students who fulfil any of these conditions are eligible to enroll. Such students need to complete an Eligibility Application Form and forward it, with supporting documentation, through their school/college, to the School Curriculum and Standards Authority prior to enrolment. Copies of this form are available on the School Curriculum and Standards Authority website (www.scsa.wa.edu.au) on the EAL/D course page.

The EAL/D course will be available to a student in Year 12:

• whose first language is not English and who has not been a resident in Australia or another predominantly English speaking country for a total period of more than seven years immediately prior to 1 January of the year of enrolment into Year 12, AND for whom English has not been the main medium of communication and/or instruction for more than seven years immediately prior to 1 January of the year of enrolment into Year 12
• who is Aboriginal or Torres Strait Islander, or from Cocos Island or Christmas Island, for whom SAE has been the medium of instruction, but for whom SAE is an additional language/dialect, and whose exposure to SAE is primarily within the school context
• who is deaf or hard-of-hearing and communicates using signing, such as Auslan, as their first language
• whose first language is not English and who was born outside Australia and has had little or no formal education prior to arriving in Australia
• whose first language is not English and who was born outside Australia or in a remote part of Australia and has had a disrupted formal education whose first language is not English and who has been a resident in Australia for more than seven years prior to 1 January of the year of enrolment into Year 12, but who has had little or disrupted formal education in SAE, resulting in significant disadvantage.

• **NOTE:** If a student other than a Year 12 student applies to enroll to sit for the WACE examination, they must meet the eligibility requirements.

The EAL/EAD course of study is designed to facilitate the achievement of the four Course Outcomes:

• Speaking, Listening
• Writing and the combined Outcome of
• Reading and Viewing

In this course, students will learn to use SAE to communicate ideas, feelings and attitudes and interact with others in a range of contexts, code switching effectively. Students will engage within increasingly complex communication.
In the Literature ATAR course, students learn to create readings of literary texts and to create their own texts, including essays, poems, short stories, plays and multimodal texts. Students engage with literary theory and study literary texts in great detail. Students learn to read texts in terms of their cultural, social and historical contexts; their values and attitudes; and their generic conventions and literary techniques. They enter the discourse about readings, reading practices and the possibility of multiple readings. Students learn to create texts paying attention to contexts, values and conventions. Students learn about literary language, narrative, image and the power of representation. Students experience the aesthetic and intellectual pleasure that reading and creating literary texts can bring.

The Literature course differs from the English course in that students will primarily focus on written texts. While some visual and audio texts may be used as part of their study, most course time will be dedicated to the close study of the novels, poetry and stage dramas listed above.

Students studying this course in Year 11 (units 1 and 2) will proceed to study units 3 and 4 in Year 12. The study of Literature in Year 11 provides an important foundation for units 3 and 4 in Year 12. It is recommended that if a student wishes to study Literature in Year 12 then they should study this course in Year 11.

The intensity of reading and writing in Literature means that those students whose previous achievement in English has been limited may find the course difficult.

Although there are no formal prerequisites, students must consider their control of language, interest in reading literature and teacher recommendations.

**Year 11**

Possible texts for study in Year 11 Literature are:

- *Macbeth* by William Shakespeare
- *The Great Gatsby* by F. Scott Fitzgerald
- The Romantic Poets (Wordsworth, Keats, Byron, Shelley)
- *Sorry* by Gail Jones
- *No Sugar* by Jack Davis
- Australian Poets Bruce Dawe and Judith Wright.

*Please note that to complete Literature ATAR in Year 12 (Units 3 and 4) it is imperative that you have completed Year 11 ATAR Literature (Units 1 and 2).*

**Year 12**

Possible texts for study in Year 12 Literature are:

- *Frankenstein* by Mary Shelley
- *Othello* by William Shakespeare
- The poetry of Seamus Heaney and Gwen Harwood
- Translations by Brian Friel
- Remembering Babylon by David Malouf
Through interaction with the natural world, the Outdoor Education General course aims to develop an understanding of our relationships with the environment, others and ourselves. The ultimate goal of the course is to contribute towards a sustainable world.

The Outdoor Education General course is based on the experiential learning cycle. This cycle is made up of three stages: plan, do and review. Students plan for outdoor experiences, participate in these experiences and reflect on their involvement.

The course lends itself to an integrated approach between practical experiences, the environment and conceptual understandings. Students develop self-awareness by engaging in a range of challenging outdoor activities. They enhance personal and group skills and build confidence, empathy and self-understanding. Working with others enables students to better understand group dynamics, and enhance their leadership qualities and decision-making abilities, while showing respect for self, others and the environment.

Students plan and participate in a range of outdoor activities and develop knowledge and skills for participating safely in these activities. They learn to assess risk, and identify and apply appropriate management strategies and emergency response procedures.

A consumable charge applies to this course. This will be charged separately to Tuition fees.

Year 11

Unit 1: Experiencing the Outdoors
Students are encouraged to engage in outdoor adventure activities. An experiential approach is used to discover what being active in the environment is all about. Students are introduced to outdoor adventure activities where they can develop and improve technical skills and apply appropriate practices to ensure safe participation. They understand basic planning and organisational requirements necessary for them to participate in safe, shortduration excursions/expeditions in selected outdoor activities. They begin developing skills in roping and navigation. Students are introduced to personal skills and interpersonal skills, including self-awareness, communication and leadership. Features of natural environments and examples of local environmental management and ‘Leave No Trace’ principles are introduced.

Unit 2: Facing Challenges in the Outdoors
This unit offers the opportunity to engage in a range of outdoor adventure activities that pose challenges and encourage students to step outside their comfort zone. Students consider planning and resource requirements related to extended excursions/shortduration expeditions. They are introduced to simple risk assessment models to assist decision making and apply safe practices to cope with challenging situations and environments. They develop time management and goal setting skills to work with others and explore strategies for building group relationships. They understand the main styles of leadership and how to use strategies to promote effective groups. Features of natural environments and components of weather are introduced. Conservation, biodiversity and environmental management plans are also introduced.
Year 12

Unit 3: Building confidence in the outdoors
Students understand planning and organisational requirements necessary for them to participate in safe, shortduration excursions/expeditions. Students participate in outdoor adventure activities where they develop and improve their technical skills, apply appropriate practices to ensure safe participation, and begin to develop survival skills. Students develop personal skills related to flexibility in coping and adapting to change and in monitoring such things as the elements in an environment, or the participation of individuals in activities and expeditions. Features and relationships in natural environments are examined. Weather components, patterns and forecasting are introduced. Students develop a greater understanding of human interactions with nature, past and present. Sustainability is introduced and local issues are examined.

Unit 4: Outdoor leadership
Students consider planning and organisational requirements necessary for them to participate in positive and safe, shortduration excursions/expeditions in selected outdoor activities. Students engage in outdoor activities where they develop and improve their technical skills and apply appropriate practices to ensure safe participation. They continue to develop navigational skills and respond to an emergency in the outdoors. Students focus on developing commitment, tolerance, resilience and conflict resolution skills. Students lead briefing and debriefing sessions and appraise their own and others’ leadership skills. Students continue to forecast weather and apply strategies to minimise human impact on natural environments. They explore sustainability projects and understand human responsibility for the environment.

Throughout 2015, students conducted units in Roping, Abseiling, Navigation, Orienteering, Kayaking and Mountain Biking. Please be aware that these units are subject to change.
Study of the Physical Education Studies ATAR course contributes to the development of the whole person. It promotes the physical, social and emotional growth of students. Throughout the course, emphasis is placed on understanding and improving performance in physical activities. The integration of theory and practice is central to studies in this course.

The Physical Education Studies ATAR course focuses on the complex interrelationships between motor learning and psychological, biomechanical and physiological factors that influence individual and team performance. Students engage as performers, leaders, coaches, analysts and planners of physical activity. Physical activity serves both as a source of content and data and as a medium for learning. Learning in the Physical Education Studies ATAR course cannot be separated from active participation in physical activities, and involves students in closely integrated written, oral and physical learning experiences, based upon the study of selected physical activities.

The course appeals to students with varying backgrounds, physical activity knowledge and dispositions. Students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance. Physical activity and sport are used to develop skills and performance along with an understanding of physiological, anatomical, psychological, biomechanical and skill learning applications.

The course prepares students for a variety of postschool pathways, including immediate employment or tertiary studies. It provides students with an increasingly diverse range of employment opportunities in the sport, leisure and recreation industries, education, sport development, youth work, and health and medical fields linked to physical activity and sport. The course also equips students to take on volunteer and leadership roles in community activities.

**Year 11**

The Year 11 syllabus is divided into two units, each of one semester duration, which are delivered concurrently. The notional time for each unit is 55 class contact hours.

**Unit 1**

The focus of this unit is to explore anatomical and biomechanical concepts, the body’s responses to physical activity, and stress management processes, to improve the performance of themselves and others in physical activity.

**Unit 2**

The focus of this unit is to identify the relationship between skill, strategy and the body in order to improve the effectiveness and efficiency of performance.

**Organisation of Content**

The course content is divided into six interrelated content areas: Developing Physical Skills and Tactics; Motor Learning and Coaching; Functional Anatomy; Biomechanics; Exercise Physiology; Sport Psychology.

**Practical Component**

- Basketball and Badminton.
- The sports conducted are subject to class numbers and may be subject to change.

**Lesson Allocation per Week**

- Three - four theoretical periods and one practical period per week.
Year 12

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The course appeals to students with varying backgrounds, physical activity knowledge and dispositions. Students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance. Physical activity and sport are used to develop skills and performance along with an understanding of physiological, anatomical, psychological, biomechanical and skill learning applications.

The course prepares students for a variety of post-school pathways, including immediate employment or tertiary studies. It provides students with an increasingly diverse range of employment opportunities in the sport, leisure and recreation industries, education, sport development, youth work, and health and medical fields linked to physical activity and sport. The course also equips students to take on volunteer and leadership roles in community activities.

The Year 12 syllabus is divided into two units which are delivered concurrently. The notional time for each unit is 55 class contact hours.

Unit 3
The focus of this unit is to provide opportunities for students to build upon their acquired physical skills and biomechanical, physiological and psychological understandings to improve the performance of themselves and others in physical activity.

Unit 4
The focus of this unit is to extend the understanding by students of complex biomechanical, psychological and physiological concepts to evaluate their own and others’ performance.

Organisation of Content
The course content is divided into six interrelated content areas: Developing Physical Skills and Tactics; Motor Learning and Coaching; Functional Anatomy; Biomechanics; Exercise Physiology; Sport Psychology.

Practical Component
• Basketball or Badminton (TBC).
• The sport conducted is subject to class numbers and may be subject to change.

Lesson Allocation per Week
• Three – four theoretical periods and one practical period per week (Terms 2 and Term 3 only).

Prescribed list of sports for practical (performance) WACE examination
• AFL, Badminton, Basketball, Cricket, Hockey, Netball, Soccer, Tennis, Touch, Volleyball.
PHYSICAL EDUCATION STUDIES – GENERAL COURSE

The Physical Education Studies General course contributes to the development of the whole person. It promotes the physical, social and emotional growth of students. Throughout the course, emphasis is placed on understanding and improving performance in physical activities. The integration of theory and practice is central to studies in this course.

The Physical Education Studies General course focuses on the complex interrelationships between motor learning and psychological, biomechanical and physiological factors that influence individual and team performance. Students engage as performers, leaders, coaches, analysts and planners of physical activity. Physical activity serves both as a source of content and data and as a medium for learning. Learning in the Physical Education Studies General course cannot be separated from active participation in physical activities and involves students in closely integrated written, oral and physical learning experiences based upon the study of selected physical activities.

The course appeals to students, with varying backgrounds, physical activity knowledge and dispositions. Students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance. Physical activity and sport are used to develop skills and performance, along with an understanding of physiological, anatomical, psychological, biomechanical and skill learning applications.

The course prepares students for a variety of postschool pathways, including immediate employment or tertiary studies. It provides students with an increasingly diverse range of employment opportunities in the sport, leisure and recreation industries, education, sport development, youth work and health and medical fields linked to physical activity and sport. The course also equips students to take on volunteer and leadership roles in community activities.

Year 11

The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered concurrently.

Unit 1
The focus of this unit is the development of students’ knowledge, understanding and application of anatomical, physiological and practical factors associated with performing in physical activities.

Unit 2
The focus of this unit is the impact of physical activity on the body’s anatomical and physiological systems. Students are introduced to these concepts which support them to improve their performance as team members and/or individuals.

Organisation of Content
The course content is divided into six interrelated content areas: Developing Physical Skills and Tactics; Motor Learning and Coaching; Functional Anatomy; Biomechanics; Exercise Physiology; Sport Psychology.

Practical Component
- Over the past two years, sports such as Basketball, Badminton, Volleyball and Golf have been completed.
- The sports conducted are subject to class numbers.

Lesson Allocation per Week
- Two theoretical periods and two practical period per week.
Year 12

The Physical Education Studies General course contributes to the development of the whole person. It promotes the physical, social and emotional growth of students. Throughout the course, emphasis is placed on understanding and improving performance in physical activities. The integration of theory and practice is central to studies in this course.

The Physical Education Studies General course focuses on the complex interrelationships between motor learning and psychological, biomechanical and physiological factors that influence individual and team performance. Students engage as performers, leaders, coaches, analysts and planners of physical activity. Physical activity serves both as a source of content and data and as a medium for learning. Learning in the Physical Education Studies General course cannot be separated from active participation in physical activities and involves students in closely integrated written, oral and physical learning experiences based upon the study of selected physical activities.

The course appeals to students, with varying backgrounds, physical activity knowledge and dispositions. Students analyse the performance of themselves and others, apply theoretical principles and plan programs to enhance performance. Physical activity and sport are used to develop skills and performance, along with an understanding of physiological, anatomical, psychological, biomechanical and skill learning applications.

The course prepares students for a variety of postschool pathways, including immediate employment or tertiary studies. It provides students with an increasingly diverse range of employment opportunities in the sport, leisure and recreation industries, education, sport development, youth work and health and medical fields linked to physical activity and sport. The course also equips students to take on volunteer and leadership roles in community activities.

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3
The focus of this unit is simple movement, biomechanical, physiological, psychological, functional anatomy and motor learning concepts. The understanding of the relationship between skill, movement production and fitness will be further enhanced as students develop and improve.

Unit 4
The focus of this unit is for students to assess their own and others’ movement competency and identify areas for improvement. They will build on their knowledge of training principles, nutrition and goal setting concepts to enhance their own and others’ performance in physical activity.

Organisation of Content
The course content is divided into six interrelated content areas:

- **Developing Physical Skills and Tactics:** Students explore the practical and theoretical components required to improve the performance of themselves and others in skills and tactics related to physical activities. They examine basic and advanced movement patterns, apply tactical awareness, and understand the analysis of movement, in order to improve the quality of skill performance.

- **Motor Learning and Coaching Functional Anatomy:** Biomechanics: Exercise Physiology: Sport Psychology

Practical Component
- Over the past two year, sports such as Basketball, Badminton, Volleyball and Golf have been completed.

Lesson Allocation per Week
- Two theoretical periods and two practical periods per week.
An ability to communicate in French provides opportunities for students to learn about the rich and diverse French culture, traditions and belief systems. In the French course, students analyse, process and respond to texts to understand aspects of the language and culture of a range of French-speaking communities throughout the world.

The French: Second Language ATAR course is designed for students who do not have a French background—that is, students who have learnt the majority of the French they know in an Australian school or similar environment.

In the French course, students develop the skills and knowledge to communicate in French. Communication is facilitated through the achievement of four outcomes.

**Outcome 1: Listening and responding**

**Outcome 2: Spoken interaction**

**Outcome 3: Viewing, reading and responding**

**Outcome 4: Writing**

**Note:** To enrol in the Year 11 ATAR Units, students need to have successfully completed Year 10 French or equivalent.

There will be a charge for subscription to Language Perfect.
Unit 1 Year 11
The focus for this unit is C’est la vie! (That’s life!).
Unit 1 is organised around three learning contexts and a set of three topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>My daily routine</td>
</tr>
<tr>
<td>The French-speaking communities</td>
<td>French sports and leisure</td>
</tr>
<tr>
<td>The changing world</td>
<td>Leading a healthy lifestyle</td>
</tr>
</tbody>
</table>

Unit 2 Year 11
The focus for this unit is Voyages (Travel).
Unit 2 is organised around three learning contexts and a set of three topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>My travel tales and plans</td>
</tr>
<tr>
<td>The French-speaking communities</td>
<td>Australia as a travel destination</td>
</tr>
<tr>
<td>The changing world</td>
<td>Travel in a modern world</td>
</tr>
</tbody>
</table>

Unit 3 Year 12
The focus for this unit is Les médias (the media).
Unit 3 is organised around three learning contexts with a number of prescribed topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>Technology and me</td>
</tr>
<tr>
<td>The French-speaking communities</td>
<td>Television, Cinema, Music</td>
</tr>
<tr>
<td>The changing world</td>
<td>Advertising</td>
</tr>
</tbody>
</table>

Unit 4 Year 12
The focus for this unit is Le monde qui nous entoure (the world around us).
Unit 3 is organised around three learning contexts with a number of prescribed topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>Planning my future</td>
</tr>
<tr>
<td>The French-speaking communities</td>
<td>Immigration, Life in a multicultural society</td>
</tr>
<tr>
<td>The changing world</td>
<td>Youth issues</td>
</tr>
</tbody>
</table>
ITALIAN: SECOND LANGUAGE – ATAR COURSE

The study of Italian is relevant to students in Australia because Italian is a strong community language: the history of Italian settlement in Australia can be traced to the First Fleet in 1788 and Italian-speaking communities in Australia continue to play a significant role in our society. Italy is also a major destination for Australian travellers. The Italian course develops the ability of students to communicate in Italian, understand aspects of the language and develop a greater respect for the Italian people, their rich and diverse culture, traditions and belief systems. The study of Italian may also provide opportunities for continued learning and for future employment and experience, both domestically and internationally, in areas such as public relations, commerce, hospitality, education, marketing, international relations, media and tourism.

The Italian course is designed for students who do not have an Italian background—that is, students who have learnt the majority of the Italian they know in an Australian school or similar environment. Communication is facilitated through the achievement of four outcomes.

**Outcome 1: Listening and responding**

**Outcome 2: Spoken interaction**

**Outcome 3: Viewing, reading and responding**

**Outcome 4: Writing**

>Note: To enrol in the Year 11 ATAR Units, students need to have successfully completed Year 10 Italian or equivalent.

There will be a charge for subscription to Language Perfect.
## Unit 1 Year 11
The focus for this unit is *Rapporti* (*Relationships*).
Unit 1 is organised around three learning contexts and a set of three topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>Family, friend and school relationships</td>
</tr>
<tr>
<td>The Italianspeaking</td>
<td>Traditions, events and celebrations</td>
</tr>
<tr>
<td>communities</td>
<td>Communicating in a modern world</td>
</tr>
</tbody>
</table>

## Unit 2 Year 11
The focus for this unit is *Andiamo!* (*Travel, let’s go!*)
Unit 2 is organised around three learning contexts and a set of four topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>My holiday tales and plans</td>
</tr>
<tr>
<td></td>
<td>Destination Italy</td>
</tr>
<tr>
<td>The Italianspeaking</td>
<td>Destination Australia</td>
</tr>
<tr>
<td>communities</td>
<td>Travel in a modern world</td>
</tr>
<tr>
<td>The changing world</td>
<td></td>
</tr>
</tbody>
</table>

## Unit 3 Year 12
The focus for this unit is *Made in Italy* (*Made in Italy*).
Unit 3 is organised around three learning contexts and four prescribed topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>All things Italian</td>
</tr>
<tr>
<td>The Italianspeaking</td>
<td>Italian passions and trends</td>
</tr>
<tr>
<td>communities</td>
<td>Italian contribution to Australia</td>
</tr>
<tr>
<td>The changing world</td>
<td>Made in Italy around the world</td>
</tr>
</tbody>
</table>

## Unit 4 Year 12
The focus for this unit is *E poi?* (*What next?*)
Unit 4 is organised around three learning contexts and four prescribed topics:

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>Reflecting on my life and planning my future</td>
</tr>
<tr>
<td>The Italianspeaking</td>
<td>The importance of studying the Italian language</td>
</tr>
<tr>
<td>communities</td>
<td>Youth and social issues</td>
</tr>
<tr>
<td>The changing world</td>
<td>Environmental issues</td>
</tr>
</tbody>
</table>
This course gives students a broader and deeper understanding of the Japanese language and extends and refines their communication skills. It can connect to the world of work, further study and travel.

The Japanese: Second Language course is aimed at students for whom Japanese is a second, or subsequent, language. These students have not been exposed to, or interacted in the language outside of the language classroom. They have typically learnt everything they know about the Japanese language and culture, through classroom teaching in an Australian school, or similar environment.

The Japanese: Second Language ATAR course is designed to facilitate achievement of the following outcomes:

**Outcome 1 – Listening and responding**

**Outcome 2 – Spoken interaction**

**Outcome 3 – Viewing, reading and responding**

**Outcome 4 – Writing**

*Note:* To enrol in the Year 11 ATAR Units, students need to have successfully completed Year 10 Japanese or equivalent.

There will be a charge for subscription to Language Perfect.
## Unit 1 Year 11
The focus for this unit is **日常の生活** (Daily life).
Unit 1 is organised around three learning contexts and a set of three topics.

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>My life 私の生活せいかつ</td>
</tr>
<tr>
<td>The Japanese-speaking communities</td>
<td>Home life 学校と家での生活せいかつ</td>
</tr>
<tr>
<td>The changing world</td>
<td>Daily life 生活せいかつをくらべて</td>
</tr>
</tbody>
</table>

## Unit 2 Year 11
The focus for this unit is **ようこそ、私の国へ！** (Welcome to my country).
Unit 2 is organised around three learning contexts and a set of three topics.

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>Welcoming a guest ようこそ！</td>
</tr>
<tr>
<td>The Japanese-speaking communities</td>
<td>Seasonal activities and celebrations しきとイベント</td>
</tr>
<tr>
<td>The changing world</td>
<td>Healthy lifestyles けんこう</td>
</tr>
</tbody>
</table>

## Unit 3 Year 12
The focus for this unit is **若者旅行者** (Young travellers).
Unit 3 is organised around three learning contexts and a set of three topics.

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>Travel 旅行</td>
</tr>
<tr>
<td>The Japanese-speaking communities</td>
<td>Travel 旅行</td>
</tr>
<tr>
<td>The changing world</td>
<td>Travel 旅行</td>
</tr>
</tbody>
</table>

## Unit 4 Year 12
The focus for this unit is **かこと未来みらい** (Reflections and horizons).
Unit 4 is organised around three learning contexts and a set of three topics.

<table>
<thead>
<tr>
<th>Learning contexts</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The individual</td>
<td>This year and beyond 今年ことしと将来しようらい</td>
</tr>
<tr>
<td>The Japanese-speaking communities</td>
<td>Youth events and pathways 若者わかものの行事ぎょうじと進路しんろ</td>
</tr>
<tr>
<td>The changing world</td>
<td>Future plans 未来みらい</td>
</tr>
</tbody>
</table>
The Senior Secondary Australian Curriculum: Mathematics consists of four subjects in mathematics, with each subject organised into four units. The subjects are differentiated, each focusing on a pathway that will meet the learning needs of a particular group of senior secondary students.

Mathematics Essentials (General Course)

Focuses on using mathematics effectively, efficiently and critically to make informed decisions. It provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of workplace, personal, further learning and community settings. This subject provides the opportunity for students to prepare for post-school options of employment and further training.

Mathematics Applications (ATAR Course)

Focuses on using the techniques of discrete mathematics to solve problems in contexts that include financial modelling, network analysis, route and project planning, decision making, and discrete growth and decay. It provides an opportunity to analyse and solve a wide range of geometrical problems in areas such as measurement, scaling, triangulation and navigation. It also provides opportunities to develop systematic strategies based on the statistical investigation process for answering statistical questions that involve comparing groups, investigating associations and analysing time series.

Mathematics Methods (ATAR Course)

Focuses on the development of the use of calculus and statistical analysis. The study of calculus in Mathematical Methods provides a basis for understanding of the physical world involving rates of change, and includes the use of functions, their derivatives and integrals, in modelling physical processes. The study of statistics in Mathematical Methods develops the ability to describe and analyse phenomena involving uncertainty and variation.

Mathematics Specialist (ATAR Course)

Provides opportunities, beyond those presented in Mathematical Methods, to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. Specialist Mathematics contains topics in functions and calculus that build on and deepen the ideas presented in Mathematical Methods as well as demonstrate their application in many areas. Specialist Mathematics also extends understanding and knowledge of probability and statistics and introduces the topics of vectors, complex numbers and matrices. Specialist Mathematics is the only mathematics subject that cannot be taken as a stand-alone subject.
Essential mathematics focuses on enabling students to use mathematics effectively, efficiently and critically to make informed decisions in their daily lives. Essential mathematics provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts, in a range of workplace, personal, further learning and community settings. This subject offers students the opportunity to prepare for postschool options of employment and further training.

**Year 11**

**Unit 1**
Unit 1 provides students with the mathematical skills and understanding to solve problems relating to calculations, applications of measurement, the use of formulas to find an unknown quantity, and the interpretation of graphs. Teachers are encouraged to apply the content of all topics in contexts which are meaningful and of interest to their students. A variety of approaches could be used to achieve this. Two contexts which could be used in this unit are Mathematics and foods and Earning and managing money. However, these contexts may not be relevant for all students, and teachers are encouraged to find a suitable context that will make the mathematical topics of this unit relevant for their particular student cohort.

**Unit 2**
Unit 2 provides students with the mathematical skills and understanding to solve problems related to representing and comparing data, percentages, rates and ratios, and time and motion. Teachers are encouraged to apply the content of all topics in contexts which are meaningful and of interest to the students. A variety of approaches could be used to achieve this purpose. Two possible contexts which could be used in this unit to achieve this goal are Mathematics and cars and Mathematics and independent living. However these contexts may not be relevant for all students, and teachers are encouraged to find a suitable context that will make the mathematical topics of this unit relevant for their particular student cohort.

**Year 12**

**Unit 3**
This unit provides students with the mathematical skills and understanding to solve problems related to measurement, scales, plans and models, drawing and interpreting graphs, and data collection. Teachers are encouraged to apply the content of the four topics in this unit—‘Measurement’, ‘Scales, plans and models’, ‘Graphs’ and ‘Data collection’—in a context which is meaningful and of interest to the students. A variety of approaches can be used to achieve this purpose. Two possible contexts which may be used in this unit are Mathematics and design and Mathematics and medicine. It is assumed that an extensive range of technological applications and techniques will be used in teaching this unit. The ability to choose when and when not to use some form of technology, and the ability to work flexibly with technology, are important skills.

**Unit 4**
This unit provides students with the mathematical skills and understanding to solve problems related to probability, Earth geometry and time zones, and loans and compound interest. Teachers are encouraged to apply the content of the three topics in this unit—‘Probability and relative frequencies’, ‘Earth geometry and time zones’ and ‘Loans and compound interest’—in a context which is meaningful and of interest to the students. A variety of approaches can be used to achieve this purpose. Two possible contexts which may be used in this unit are Mathematics of finance and Mathematics of travelling. It is assumed that an extensive range of technological applications and techniques will be used in teaching this unit. The ability to choose when and when not to use some form of technology, and the ability to work flexibly with technology, are important skills.
Mathematics Applications is designed for those students who want to extend their mathematical skills beyond Year 10 level but whose future studies or employment pathways do not require knowledge of calculus. The subject is designed for students who have a wide range of educational and employment aspirations, including continuing their studies at university or TAFE. Throughout the subject there is also an emphasis on the use and application of digital technologies.

Year 11

Unit 1
Unit 1 has three topics: ‘Consumer arithmetic’, ‘Algebra and matrices’, and ‘Shape and measurement’. ‘Consumer arithmetic’ reviews the concepts of rate and percentage change in the context of earning and managing money, and provides fertile ground for the use of spreadsheets. ‘Algebra and matrices’ continues the F-10 study of algebra and introduces the new topic of matrices. ‘Shape and measurement’ extends the knowledge and skills students developed in the F-10 curriculum with the concept of similarity and associated calculations involving simple and compound geometric shapes. The emphasis in this topic is on applying these skills in a range of practical contexts, including those involving three-dimensional shapes.

Unit 2
Unit 2 has three topics: ‘Univariate data analysis and the statistical investigation process’, ‘Linear equations and their graphs’, and ‘Applications of trigonometry’. ‘Univariate data analysis and the statistical investigation process’ develops students’ ability to organise and summarise univariate data in the context of conducting a statistical investigation. ‘Applications of trigonometry’ extends students’ knowledge of trigonometry to solve practical problems involving non-rightangled triangles in both two and three dimensions, including problems involving the use of angles of elevation and depression, and bearings in navigation ‘Linear equations and their graphs’ uses linear equations and straight-line graphs, as well as linear-piecewise and step graphs, to model and analyse practical situations.

Year 12

Unit 3
This unit has three topics: ‘Bivariate data analysis’, ‘Growth and decay in sequences’ and ‘Graphs and networks’. ‘Bivariate data analysis’ introduces students to some methods for identifying, analysing and describing associations between pairs of variables, including the use of the leastsquares method as a tool for modelling and analysing linear associations. The content is to be taught within the framework of the statistical investigation process. ‘Growth and decay in sequences’ employs recursion to generate sequences that can be used to model and investigate patterns of growth and decay in discrete situations. These sequences find application in a wide range of practical situations, including modelling the growth of a compound interest investment, the growth of a bacterial population, or the decrease in the value of a car over time. Sequences are also essential to understanding the patterns of growth and decay in loans and investments that are studied in detail in Unit 4. ‘Graphs and networks’ introduces students to the language of graphs and the ways in which graphs, represented as a collection of points and interconnecting lines, can be used to model and analyse everyday situations.

Unit 4
This unit has three topics: ‘Time series analysis’; ‘Loans, investments and annuities’ and ‘Networks and decision mathematics’. ‘Time series analysis’ continues students’ study of statistics by introducing them to the concepts and techniques of time series analysis. The content is to be taught within the framework of the statistical investigation process. ‘Loans and investments and annuities’ aims to provide students with sufficient knowledge of financial mathematics to solve practical problems associated with taking out or refinancing a mortgage and making investments. ‘Networks and decision mathematics’ uses networks to model and aid decision making in practical situations.
The major themes of Mathematics Methods are calculus and statistics. They include as necessary prerequisites studies of algebra, functions and their graphs, and probability. They are developed systematically, with increasing levels of sophistication and complexity. Calculus is essential for developing an understanding of the physical world because many of the laws of science are relationships involving rates of change. Statistics is used to describe and analyse phenomena involving uncertainty and variation. For these reasons this subject provides a foundation for further studies in disciplines in which mathematics and statistics have important roles. It is also advantageous for further studies in the health and social sciences. In summary, the subject Mathematical Methods is designed for students whose future pathways may involve mathematics and statistics and their applications in a range of disciplines at the tertiary level.

For all content areas of Mathematical Methods, the proficiency strands of the F-10 curriculum are still applicable and should be inherent in students’ learning of this subject. These strands are Understanding, Fluency, Problem solving and Reasoning, and they are both essential and mutually reinforcing. For all content areas, practice allows students to achieve fluency in skills, such as calculating derivatives and integrals, or solving quadratic equations, and frees up working memory for more complex aspects of problem solving. The ability to transfer skills to solve problems based on a wide range of applications is a vital part of mathematics in this subject. Because both calculus and statistics are widely applicable as models of the world around us, there is ample opportunity for problem solving throughout this subject.

Year 11

Unit 1
Unit 1 begins with a review of the basic algebraic concepts and techniques required for a successful introduction to the study of functions and calculus. Simple relationships between variable quantities are reviewed, and these are used to introduce the key concepts of a function and its graph. The study of probability and statistics begins in this unit with a review of the fundamentals of probability, and the introduction of the concepts of conditional probability and independence. The study of the trigonometric functions begins with a consideration of the unit circle using degrees and the trigonometry of triangles and its application. Radian measure is introduced, and the graphs of the trigonometric functions are examined and their applications in a wide range of settings are explored.

Unit 2
In Unit 2, exponential functions are introduced and their properties and graphs examined. Arithmetic and geometric sequences and their applications are introduced and their recursive definitions applied. Rates and average rates of change are introduced, and this is followed by the key concept of the derivative as an ‘instantaneous rate of change’. These concepts are reinforced numerically (by calculating difference quotients), geometrically (as slopes of chords and tangents), and algebraically. This first calculus topic concludes with derivatives of polynomial functions, using simple applications of the derivative to sketch curves, calculate slopes and equations of tangents, determine instantaneous velocities, and solve optimisation problems.
Year 12

Unit 3
In this unit the study of calculus continues with the derivatives of exponential and trigonometric functions and their applications, together with some differentiation techniques and applications to optimisation problems and graph sketching. It concludes with integration, both as a process that reverses differentiation and as a way of calculating areas. The fundamental theorem of calculus as a link between differentiation and integration is emphasised. In statistics, discrete random variables are introduced, together with their uses in modelling random processes involving chance and variation. This supports the development of a framework for statistical inference.

Unit 4
The calculus in this unit deals with derivatives of logarithmic functions. In probability and statistics, continuous random variables and their applications are introduced and the normal distribution is used in a variety of contexts. The study of statistical inference in this unit is the culmination of earlier work on probability and random variables. Statistical inference is one of the most important parts of statistics, in which the goal is to estimate an unknown parameter associated with a population using a sample of data drawn from that population. In Mathematical Methods statistical inference is restricted to estimating proportions in two-outcome populations.
MATHEMATICS SPECIALIST – ATAR COURSE

Mathematics and statistics provide a framework for thinking and a means of communication that is powerful, logical, concise and precise. Because both mathematics and statistics are widely applicable as models of the world around us, there is ample opportunity for problem solving throughout Specialist Mathematics. There is also a sound logical basis to this subject, and in mastering the subject students will develop logical reasoning skills to a high level.

Specialist Mathematics provides opportunities, beyond those presented in Mathematical Methods, to develop rigorous mathematical arguments and proofs, and to use mathematical and statistical models more extensively. Topics are developed systematically and lay the foundations for future studies in quantitative subjects in a coherent and structured fashion. Students of Specialist Mathematics will be able to appreciate the true nature of mathematics, its beauty and its functionality.

Specialist Mathematics has been designed to be taken in conjunction with Mathematical Methods. The subject contains topics in functions, calculus, probability and statistics that build on and deepen the ideas presented in Mathematical Methods and demonstrate their application in many areas. Vectors, complex numbers and matrices are introduced. Specialist Mathematics is designed for students with a strong interest in mathematics, including those intending to study mathematics, statistics, all sciences and associated fields, economics or engineering at university.

For all content areas of Specialist Mathematics, the proficiency strands of the F–10 curriculum are still applicable and should be inherent in students’ learning of the subject. These strands are Understanding, Fluency, Problem solving and Reasoning and they are both essential and mutually reinforcing. For all content areas, practice allows students to achieve fluency of skills, such as finding the scalar product of two vectors, or finding the area of a region contained between curves, freeing up working memory for more complex aspects of problem solving. In Specialist Mathematics, the formal explanation of reasoning through mathematical proof takes on an important role and the ability to present the solution of any problem in a logical and clear manner is of paramount importance. The ability to transfer skills learned to solve one class of problems, for example integration, to solve another class of problems, such as those in biology, kinematics or statistics, is a vital part of mathematics learning in this subject.

Specialist Mathematics is structured over four units. The topics in Unit 1 broaden students’ mathematical experience and provide different scenarios for incorporating mathematical arguments and problem solving. The unit blends algebraic and geometric thinking. In this subject there is a progression of content, applications, level of sophistication and abstraction. For example, in Unit 1 vectors for two-dimensional space are introduced and then in Unit 3 vectors are studied for three-dimensional space. The Unit 3 vector topic leads to the establishment of the equations of lines and planes and this in turn prepares students for an introduction to solving simultaneous equations in three variables. The study of calculus, which is developed in Mathematical Methods, is applied in Vectors in Unit 3 and applications of calculus and statistics in Unit 4.
Year 11

Unit 1
Unit 1 contains three topics that complement the content of Mathematical Methods. The proficiency strand, ‘Reasoning’, of the F–10 curriculum is continued explicitly in the topic ‘Geometry’ through a discussion of developing mathematical arguments. This topic also provides the opportunity to summarise and extend students’ studies in Euclidean Geometry, knowledge which is of great benefit in the later study of topics such as vectors and complex numbers. The topic ‘Combinatorics’ provides techniques that are very useful in many areas of mathematics, including probability and algebra. The topic ‘Vectors in the plane’ provides new perspectives on working with two-dimensional space, and serves as an introduction to techniques which can be extended to three-dimensional space in Unit 3. These three topics considerably broaden students’ mathematical experience and therefore begin an awakening to the breadth and utility of the subject. They also enable students to increase their mathematical flexibility and versatility.

Unit 2
Unit 2 contains three topics, ‘Trigonometry’, ‘Matrices’ and ‘Real and complex numbers’. ‘Matrices’ provides new perspectives for working with two-dimensional space, ‘Real and complex numbers’ provides a continuation of the study of numbers. The topic ‘Trigonometry’ contains techniques that are used in other topics in both this unit and Units 3 and 4. All of these topics develop students’ ability to construct mathematical arguments. The technique of proof by the principle of mathematical induction is introduced in this unit.

Year 12

Unit 3
Unit 3 of Specialist Mathematics contains three topics: ‘Vectors in three dimensions’, ‘Complex numbers’ and ‘Functions and sketching graphs’. The study of vectors was introduced in Unit 1 with a focus on vectors in two-dimensional space. In this unit, three-dimensional vectors are studied and vector equations and vector calculus are introduced, with the latter extending students’ knowledge of calculus from Mathematical Methods. Cartesian and vector equations, together with equations of planes, enables students to solve geometric problems and to solve problems involving motion in three-dimensional space. The Cartesian form of complex numbers was introduced in Unit 2, and the study of complex numbers is now extended to the polar form. The study of functions and techniques of graph sketching, begun in Mathematical Methods, is extended and applied in sketching graphs and solving problems involving integration. Access to technology to support the computational aspects of these topics is assumed.

Unit 4
Unit 4 of Specialist Mathematics contains three topics: ‘Integration and applications of integration’, ‘Rates of change and differential equations’ and ‘Statistical inference’. In Unit 4, the study of differentiation and integration of functions continues, and the calculus techniques developed in this and previous topics are applied to simple differential equations, in particular in biology and kinematics. These topics demonstrate the real-world applications of the mathematics learned throughout Specialist Mathematics. In this unit all of the students’ previous experience working with probability and statistics is drawn together in the study of statistical inference for the distribution of sample means and confidence intervals for sample means. Access to technology to support the computational aspects of these topics is assumed.
The Visual Arts ATAR course encompasses the practice and theory of the broad areas of art, craft and design. Students have opportunities to express their imagination, develop personal imagery, develop skills and engage in the making and presentation of artwork. They develop aesthetic understandings and a critical awareness that assists them to appreciate and make informed evaluations of art.

This course places value on divergence, uniqueness and individuality. It assists students to value and develop confidence in their own creative abilities and to develop a greater understanding of their environment, community and culture. The Visual Arts ATAR course engages students in a process that helps them develop motivation, self-esteem, discipline, collaborative practice and resilience, all of which are essential life skills. Enterprise and initiative are recognised and encouraged.

Within contemporary society, there is increasing demand for visual literacy: the ability to perceive, understand, interpret and evaluate visual information. The Visual Arts ATAR course enables students to develop their visual literacy and communication skills and become discriminating in their judgements. Particular aspects of life are understood and shared through visual symbol systems that are non-verbal modes of knowing.

A three day Art workshop is offered as part of the ATAR course in Semester 1. The approximate cost will be $300.

A consumable charge applies to this course. This cost will be separate to Tuition fees.
Year 11

Unit 1: Differences
The focus for this unit is identities. In working with this focus, students explore concepts or issues related to personal, social, cultural or gender identity. They become aware that self-expression distinguishes individuals as well as cultures. Students use a variety of stimulus materials and use a range of investigative approaches as starting points to create artwork. They develop a personal approach to the development of ideas and concepts, making informed choices about the materials, skills, techniques and processes used to resolve and present their artwork.

Students develop understandings of the personal and/or public functions of art in the expression of identity, for example, spiritual expression, psychological expression, therapy, ceremony and ritual, and the purposes of art, such as narrative – telling personal stories or exploring myths. They understand that art may give form to ideas and issues that concern the wider community.

Response to artwork stimulates insights, encourages deeper understandings, and challenges preconceived ideas. Students develop an awareness of how the visual arts may be both socially confirming and questioning, analyse their own cultural beliefs and values and develop deeper understandings of their own personal visual arts heritage.

The course content is divided into two content areas:
- Art making (practical)
- Art interpretation (analysis/theory)

Unit 2: Identities
The focus for this unit is identities. In working with this focus, students explore concepts or issues related to personal, social, cultural or gender identity. They become aware that self-expression distinguishes individuals as well as cultures. Students use a variety of stimulus materials and use a range of investigative approaches as starting points to create artwork. They develop a personal approach to the development of ideas and concepts, making informed choices about the materials, skills, techniques and processes used to resolve and present their artwork.

Students develop understandings of the personal and/or public functions of art in the expression of identity, for example, spiritual expression, psychological expression, therapy, ceremony and ritual, and the purposes of art, such as narrative – telling personal stories or exploring myths. They understand that art may give form to ideas and issues that concern the wider community.

Response to artwork stimulates insights, encourages deeper understandings, and challenges preconceived ideas. Students develop an awareness of how the visual arts may be both socially confirming and questioning, analyse their own cultural beliefs and values and develop deeper understandings of their own personal visual arts heritage.

The course content is divided into two content areas:
- Art making (practical)
- Art interpretation (analysis/theory)
Year 12

Unit 3: Commentaries
The focus for this unit is commentaries. In this unit, students engage with the social and cultural purposes of art making to produce a unique and cohesive body of work. Broad and innovative inquiry includes the conceptualisation and documentation of experiences within contemporary society. Students transform ideas and develop concepts using innovative approaches to art making and presentation. They document their thinking and working practices, having the flexibility to work across media and art forms.

Student’s research artwork providing critical comment on the meaning, purpose and values communicated. They examine their own beliefs and consider how the visual arts have reflected and shaped society in different times and places.

Consideration is given to the roles of artists in different societies, for example, hero, outsider, commentator and social critic. Students investigate the social functions of art, for example political and ideological expression, satire, social description or graphic communication. They address the relationship between form, function and meaning and develop understandings of how artists are influenced by pervasive ideas, events and circumstances, and how recontextualisation contributes to meanings and messages in artwork.

The course content is divided into two content areas:
- Art making (practical)
- Art interpretation (analysis/theory)

Unit 4: Points of View
The focus for this unit is points of view. Students identify and explore concepts or issues of personal significance in the presentation of a sustained, articulate and authentic body of work. They engage in sustained inquiry, exploring ideas and developing concepts to communicate a personal point of view.

Students investigate a range of solutions using visual language and document the progressive resolution of thinking and working practices. Skills, techniques and processes are combined in the pursuit of new art forms, innovation and personal style.

Students use critical analysis frameworks to develop an understanding of the practice of art making and art interpretation. They research and analyse factors affecting points of view such as time, place, culture, religion and politics, synthesising this knowledge to express a personal viewpoint or position. In the analysis of their own and others’ artwork, students reflect on the relationship between artwork, audiences and contextual factors, and consider how these contribute to the development of different perspectives.

The course content is divided into two content areas:
- Art making (practical)
- Art interpretation (analysis/theory)
The Visual Arts General course encourages students to develop problem-solving skills together with creative and analytical ways of thinking. Innovation is encouraged through a process of inquiry, exploration and experimentation. Students transform and shape ideas to develop resolved artworks. They engage in art making processes in traditional and new media areas which involve exploring, selecting and manipulating materials, techniques, processes, emerging technologies and responses to life. This course allows them to engage in traditional, modern and contemporary art forms and conventions, such as sculpture, painting, drawing, graphic design, printmaking, collage, ceramics, earth art, video art, installations, textiles, performance, photography, montage, multimedia, and time-based works and environments.

The Visual Arts General course aims to enable students to make connections to relevant fields of study and to more generally prepare them for creative thinking and problem-solving in future work and life. It aims to contribute to a sense of enjoyment, engagement and fulfillment in their everyday lives, as well as to promote an appreciation for the environment and ecological sustainability.

This course is organised into a Year 11 syllabus and a Year 12 syllabus. The cognitive complexity of the syllabus content increases from Year 11 to Year 12. The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair.

**Year 11**

**Unit 1: Experiences**

The focus for this unit is experiences. Students develop artworks based on their lives and personal experiences, observations of the immediate environment, events and/or special occasions. They participate in selected art experiences aimed at developing a sense of observation.

Students discover ways to compile and record their experiences through a range of art activities and projects that promote a fundamental understanding of visual language. They use experiences to develop appreciation of the visual arts in their everyday lives.

Students acquire various skills using processes of experimentation and discovery. Imaginative picture making is primarily concerned with experiences of the self and of the immediate environment, including aspects of family life, social activities, communal occasions and other shared activities. Ample scope for free, imaginative interpretation and experimentation with materials is provided.

The course content is divided into two content areas:

- Art making (practical)
- Art interpretation (analysis/theory)

**Unit 2: Explorations**

The focus for this unit is explorations. Students explore ways to generate and develop ideas using a variety of stimulus materials and explorations from their local environment. They use a variety of inquiry approaches, techniques and processes when creating original artworks. When exploring ideas and approaches to art making, students investigate the work of other artists. They learn to identify stylistic features of art forms from different times and places and explore ways to manipulate art elements and principles to generate, develop and produce their own artwork.

In developing subject matter for artworks, students explore ways to express personal beliefs, opinions and feelings. They manipulate a variety of media and materials in a range of art forms, recording and reflecting on their artistic achievements.

The course content is divided into two content areas:

- Art making (practical)
- Art interpretation (analysis/theory)
Year 12

Unit 3: Inspirations
The focus for this unit is inspirations. Students become aware that artists gain inspiration and generate ideas from diverse sources, including what is experienced, learned about, believed in, valued, imagined or invented. The breadth of this focus allows choice of learning contexts that are related to students’ interests.

In this unit, students develop their knowledge and understanding of visual language and apply this to both art making and art interpretation. Through exploration, investigation and experimentation, they develop skills in inquiry, recording observations and manipulating media to create artworks in selected art forms.

Students, through research and/or firsthand experience of artworks and art making, actively engage in perception, research, reflection and response and consider the ways in which artists, past and present, have been inspired to develop artworks. They are given opportunities to present or exhibit their work, to describe their source(s) of inspiration and to evaluate the process and success of their finished artworks.

The course content is divided into two content areas:
- Art making (practical)
- Art interpretation (analysis/theory)

Unit 4: Investigations
The focus for this unit is investigations. Students explore and develop ideas through the investigation of different artists, art forms, processes and technologies. Students investigate spontaneous and analytical styles of drawing, experimenting with a range of media and techniques. They further develop their knowledge and understanding of visual language and apply this to both art making and art interpretation.

In particular, students explore the expressive potential of media techniques and processes, considering their inherent qualities in the development and presentation of their artworks. They investigate ways to document their thinking and working practices, refining their reflection and decision-making skills.

In this unit, students investigate a variety of artworks and media to further develop their understanding of the creative process and learn how to apply new analytical and production skills and techniques in the communication of their own ideas.

The course content is divided into two content areas:
- Art making (practical)
- Art interpretation (analysis/theory)
The Dance ATAR course acknowledges the interrelationship between practical and theoretical aspects of dance – the making and performing of movement and the appreciation of its meaning. Through critical decision-making in individual and group work, movement is manipulated and refined to reflect the choreographer’s intent. Students use a wide range of creative processes, such as improvisation and the use of choreographic elements and devices and draw on their own physicality and the interpretation of existing work of others to create unique dance works. They investigate how technologies are used to extend and enhance dance design. They also learn how dance styles and forms are historically derived and culturally valued. Through dance, students experience an intrinsic sense of enjoyment and have an opportunity to achieve a high level of movement skills.

**Year 11**

**Unit 1: Popular culture**
This unit focuses on the exploration of dance in popular culture and how this leads to a wider understanding of the diverse contexts and functions of dance in society.

**Unit 2: Australian dance**
This unit focuses on the diverse range of functions and contexts of dance in Australia. Students analyse critically their own cultural beliefs and values in relation to traditional and contemporary dance forms and styles, and develop an understanding of their own dance heritage.

**Year 12**

**Unit 3: Youth voice**
Within the broad focus of youth voice, teachers select learning contexts that relate to the interests of their students and build upon the understandings that they have already acquired. Students explore learning contexts that reflect their own cultural understanding and produce unique work with a personal style. Students research factors affecting points of view, such as time, place, gender, age, culture, religion politics and the environment. They consider how dance reflects and is shaped by society and its values. They also investigate the impact of technologies on dance.

**Unit 4: Extending the boundaries**
The focus of this unit is extending the boundaries. Within the broad focus of extending the boundaries, teachers select learning contexts that relate to the interests of their students and build upon the understandings that they have already acquired. Students investigate learning contexts that reflect their own artistic understanding and produce unique dance work. They investigate how technologies are used to extend and enhance dance design. Students research issues and reflect on events which may influence dance. In their responses, they examine their own values, considering how dance is shaped by society and its values. In the critical analysis and interpretation of their own work and the work of others, they reflect on the relationships between dance works, audiences and contexts, and how these contribute to the development of different perspectives.
DRAMA – ATAR COURSE

The Drama ATAR course focuses on drama in practice and aesthetic understanding as students integrate their knowledge and skills. They engage in drama processes such as improvisation, play building, text interpretation, playwriting and dramaturgy. This allows them to create original drama and interpret a range of texts written or devised by others by adapting the theoretical approaches of drama practitioners like Stanislavski and Brecht. Students’ work in this course includes production and design aspects involving directing, scenography, costumes, props, promotional materials, and sound and lighting. Increasingly, students use new technologies, such as digital sound and multimedia. They present drama to make meaning for a range of audiences and adapt their drama to suit different performance settings. The focus in this course is on both individual and ensemble performance, as well as the roles of actor, director, scenographer, lighting designer, sound designer, costume designer and dramaturge.

Year 11

Unit 1: Representational, realist drama
This unit focuses on representational, realistic drama forms and styles. Students explore techniques of characterisation through different approaches to text interpretation, particularly those based on the work of Stanislavski and other representational drama.

Unit 2: Presentational, non-realist drama
This unit focuses on presentational, non-realistic drama. Students explore techniques of role and/or character through different approaches to text interpretation, particularly those based on the work of Brecht and other presentational drama.

Year 12

Unit 3: Reinterpretation of drama for contemporary audiences
The focus for this unit is to reinterpret dramatic text, context, forms and styles for contemporary audiences through applying theoretical and practitioner approaches. This includes physical theatre approaches, such as Jacques Lecoq, Anne Bogart and Tadashi Suzuki and text-based approaches, such as Theatre of the Absurd, Asian theatre and Poor Theatre. In this unit, students work on the reinterpretation of text, subtext, context, form and style through Contemporary and devised drama unit description in-depth study.

Unit 4: Contemporary and devised drama
The focus for this unit is interpreting, manipulating and synthesising a range of practical and theoretical approaches to contemporary and devised drama. This includes contemporary theatre approaches, such as Barrie Kosky and Robert Lepage and experimental approaches, such as Robert Wilson and VE Meyerhold.

In this unit, students show their understanding of how a range of practical and theoretical approaches manipulate the elements of drama to devise and perform original work.
MEDIA PRODUCTION AND ANALYSIS – ATAR COURSE

The Media Production and Analysis ATAR course aims to prepare students for a future in a digital and interconnected world by providing the skills, knowledge and understandings to tell their own stories and interpret the stories of others. Students are encouraged to explore, experiment and interpret their world, reflecting and analysing contemporary life, while understanding that this is done under social, cultural and institutional constraints. Students, as users and creators of media products, consider the important role of audiences and their context. This course focuses on the application of media theory in the practical process.

Year 11

Unit 1: Popular culture
Students analyse, view, listen to and interact with a range of popular media, develop their own ideas, learn production skills and apply their understandings and skills in creating their own productions.

Unit 2: Journalism
In this unit students will further their understanding of journalistic media. Students will analyse, view, listen to and interact with a range of journalistic genres and they undertake more extensive research into the representation and reporting of groups and issues within media work.

Year 12

Unit 3: Media Art
This unit provides the opportunity for students to explore and select from a range of media art and develop their understanding of media aesthetics. Media aesthetics in the context of this unit is the study of the emotional and intellectual response brought about by the way the techniques, codes and conventions that create the artistic quality of the media work have been applied.

Students analyse, view, listen to and interact with contemporary and traditional examples of media art, identifying techniques and themes, meanings that are created and audiences’ interpretations. They consider the representation of values and technological developments that influence perceptions of art within media work.

Students are encouraged to experiment with technologies, structures, codes and conventions to express their ideas and creativity. They have the opportunity to extend their production skills and processes and the emergence of personal style.

Unit 4: Power and persuasion
The focus for this unit is power and persuasion, which includes the influential nature of media used as a form of propaganda and political persuasion.

Through this broad focus, students extend their understanding of persuasive media, examining the way the media is able to reflect, challenge and shape values and attitudes. They critically analyse, view, listen to, and interact with a range of media work, considering the purposes and values of producers and audiences.

Students synthesise a range of ideas, skills and processes to create their own media productions that express their views.
MUSIC – ATAR COURSE

The Music ATAR course encourages students to explore a range of musical experiences, developing their musical skills and understanding, and creative and expressive potential, through a choice of one of three defined contexts: Western Art Music, Jazz, or Contemporary Music. The course consists of a written component incorporating Aural and Theory, Composition and arrangement, Cultural and historical analysis, and a practical component. The practical component can be delivered in a different context, independent of the written component. Students can choose to perform on an instrument or voice in one of four contexts, and/or submit a composition portfolio. The Music course provides opportunities for creative expression, the development of aesthetic appreciation, and understanding and respect for music and music practices across different times, places, cultures and contexts. Students listen, compose, perform and analyse music, developing skills to confidently engage with a diverse array of musical experiences, both independently and collaboratively. Studying music may also provide a pathway for further training and employment in a range of professions within the music industry.

Year 11

Unit 1 and 2
Across the two units, students extend and apply their skills, knowledge and understanding of music to create, communicate and evaluate music ideas with increasing depth and complexity. They continue to develop and consolidate aural and music literacy skills, learning how the elements of music can be applied, combined and manipulated when listening, performing, composing and analysing music. Students explore how social, cultural and historical factors shape music, developing an understanding of music conventions and practices in the specific context(s) selected for study. They apply critical listening and thinking skills and develop aesthetic understanding through comparing and analysing musical works. Students are encouraged to reach their creative and expressive potential, developing skills and stylistic awareness to confidently engage in music making as performers and audience members, both individually and collaboratively.

Year 12

Unit 1 and 2
Across the two units, students extend and apply their skills, knowledge and understanding of music to create, communicate and evaluate music ideas with increasing depth and complexity. They continue to develop and consolidate aural and music literacy skills, learning how the elements of music can be applied, combined and manipulated when listening, performing, composing and analysing music. Students explore how social, cultural and historical factors shape music, developing an understanding of music conventions and practices in the specific context(s) selected for study. They apply critical listening and thinking skills and develop aesthetic understanding through comparing and analysing musical works. Students are encouraged to reach their creative and expressive potential, developing skills and stylistic awareness to confidently engage in music making as performers and audience members, both individually and collaboratively.
Biology is the study of the fascinating diversity of life as it has evolved and as it interacts and functions. Investigation of biological systems and their interactions, from cellular processes to ecosystem dynamics, has led to biological knowledge and understanding that enable us to explore and explain everyday observations, find solutions to biological issues, and understand the processes of biological continuity and change over time.

Students develop their investigative, analytical and communication skills through field, laboratory and research investigations of living systems and through critical evaluation of the development, ethics, applications and influences of contemporary biological knowledge in a range of contexts.

Studying the course provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers, including those in medical and veterinary fields, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and ecotourism. This course will also provide a foundation for students to critically consider and to make informed decisions about contemporary biological issues in their everyday lives.

Students studying Biology undertake field work on a camp, which incurs an additional cost of approximately $120.

**Year 11**

The syllabus is divided into two units, each of one semester duration and typically delivered as a pair.

**Unit 1: Ecosystems and biodiversity**
In this unit, students analyse abiotic and biotic ecosystem components and their interactions, using classification systems for data collection, comparison and evaluation.

**Unit 2: From single cells to multicellular organisms**
In this unit, students investigate the interdependent components of the cell system and the multiple interacting systems in multicellular organisms.

**Year 12**

The syllabus is divided into two units which are delivered as a pair.

**Unit 3: Continuity of species**
In this unit, students investigate mechanisms of heredity and the ways in which inheritance patterns can be explained, modelled and predicted; they connect these patterns to population dynamics and apply the theory of evolution by natural selection in order to examine changes in populations.

**Unit 4: Surviving in a changing environment**
In this unit, students investigate system change and continuity in response to changing external conditions and pathogens; they investigate homeostasis and the transmission and impact of infectious disease; and they consider the factors that encourage or reduce the spread of infectious disease at the population level.

*Students undertaking this course will be expected to have achieved a ‘C’ grade or above in Year 10 Extension Biology.*
CHEMISTRY – ATAR COURSE

Chemistry is the study of materials and substances and the transformations they undergo through interactions and the transfer of energy. Chemistry develops students’ understanding of the key chemical concepts and models of structure, bonding, and chemical change, including the role of chemical, electrical and thermal energy. Students learn how models of structure and bonding enable chemists to predict properties and reactions and to adapt these for particular purposes.

Students explore key concepts and models through active inquiry into phenomena and through a range of contexts. They design and conduct qualitative and quantitative investigations both individually and collaboratively. They investigate questions and hypotheses, manipulate variables, analyse data, evaluate claims, solve problems and develop and communicate evidence-based arguments and models. Some of the major challenges and opportunities facing the world are inextricably associated with chemistry. Issues of sustainability on local, national and global levels can be tackled by the application of chemical knowledge using a range of technologies.

An understanding of chemistry is relevant to a range of careers, including those in forensic science, environmental science, engineering, medicine, dentistry, pharmacy and sports science. Additionally, chemistry knowledge is valuable in occupations that rely on an understanding of materials and their interactions, such as art, winemaking, agriculture and food technology. Some students will use this course as a foundation to pursue further studies in chemistry, and all students will become more informed citizens, able to use chemical knowledge to inform evidence-based decision making and engage critically with contemporary scientific issues.

Year 11

The syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair.

Unit 1: Chemical fundamentals: structure, properties and reactions
In this unit, students use models of atomic structure and bonding to explain the macroscopic properties of materials. Students develop their understanding of the energy changes associated with reactions and the use of equations to calculate the masses of substances involved in reactions.

Unit 2: Molecular interactions and reactions
In this unit, students continue to develop their understanding of bonding models and the relationship between structure, properties and reactions, including consideration of the factors that affect the rate of reactions. Students investigate the unique properties of water and the properties of acids and bases, and use equations to calculate the concentrations and volumes of solutions involved in reactions.

Year 12

The syllabus is divided into two units which are delivered as a pair.

Unit 3: Equilibrium, acids and bases, and redox reactions
In this unit, students investigate the concept of reversibility of reactions and the dynamic nature of equilibrium in chemical systems; contemporary models of acid-base behaviour that explain their properties and uses; and the principles of oxidation and reduction reactions, including the generation of electricity from electrochemical cells.

Unit 4: Organic chemistry and chemical synthesis
In this unit, students develop their understanding of the relationship between the structure, properties and reactions of different organic functional groups. Students also investigate the process of chemical synthesis to form useful substances and products and the need to consider a range of factors in the design of these processes.

Students undertaking this course will be expected to have achieved a ‘B’ grade or above in Year 10 Extension Chemistry as well as a ‘B’ grade or above in Mathematics.
HUMAN BIOLOGY – ATAR COURSE

Human biology covers a wide range of ideas relating to the functioning human. Students learn about themselves, relating structure to function and how integrated regulation allows individuals to survive in a changing environment. They research new discoveries that are increasing our understanding of the causes of dysfunction, which can lead to new treatments and preventative measures. Reproduction is studied to understand the sources of variation that make each of us unique individuals. Through a combination of classical genetics, and advances in molecular genetics, dynamic new biotechnological processes have resulted. Population genetics is studied to highlight the longer term changes leading to natural selection and evolution of our species.

Students develop their understanding of the cumulative and evolving nature of scientific knowledge and the ways in which such knowledge is obtained through scientific investigations. They learn to think critically, to evaluate evidence, to solve problems and to communicate understandings in scientific ways.

An understanding of human biology is valuable for a variety of career paths. The course content deals directly and indirectly with many different occupations in fields, such as science education, medical and paramedical fields, food and hospitality, childcare, sport and social work.

Year 11

The syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair.

Unit 1: The functioning human body
In this unit, students analyse how the structure and function of body systems, and the interrelationships between systems, support metabolism and body functioning.

Unit 2: Reproduction and inheritance
In this unit, students study the reproductive systems of males and females, the mechanisms of transmission of genetic material from generation to generation, and the effects of the environment on gene expression.

Year 12

The syllabus is divided into two units which are delivered as a pair.

Unit 3: Homeostasis and disease
This unit explores the nervous and endocrine systems and the mechanisms that help maintain the systems of the body to function within normal range, and the body’s immune responses to invading pathogens.

Unit 4: Human variation and evolution
This unit explores the variations in humans, their changing environment and evolutionary trends in hominids.

Students undertaking this course will be expected to have achieved a ‘C’ grade or above in Year 10 Extension Biology.
INTEGRATED SCIENCE – ATAR COURSE

Integrated Science encourages students to be questioning, reflective and critical thinkers about scientific issues. The course is based on an integrated view of scientific knowledge that draws on the traditional disciplines of science and new scientific technology to enable students to investigate issues that are interesting and relevant in a modern world. This course provides opportunities for students to consider contemporary scientific developments. This process enables them to make informed judgements and decisions about questions that directly affect their lives and the lives of others.

The course is grounded in the belief that science is, in essence, a practical activity and seeks to reflect the creative element of science as inquiry. It emphasises formulating and testing hypotheses and the critical importance of evidence in forming conclusions. It requires them to be creative, intellectually honest, to evaluate arguments with scepticism and to conduct their investigations in ways that are ethical, fair and respectful of others.

Integrated Science is an inclusive course and aims to be attractive to students with a wide variety of backgrounds, interests and career aspirations. The course will equip students to undertake tertiary study and/or gain employment.

Year 11

The syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair.

Unit 1: Driver safety and hearing
Through an integrated, scientific approach, this unit explores two major issues for today’s society: safety on the roads, and the effects of listening to loud sounds.

Unit 2: Biodiversity and conservation
This unit focuses on the effects that human activity has on biodiversity, and methods of conservation.

Year 12

The syllabus is divided into two units which are delivered as a pair.

Unit 3: Water
Through an integrated, scientific approach, this unit focuses on water as a resource and its importance to life on Earth.

Unit 4: Energy
This unit focuses on energy, energy uses, energy production and sustainability of energy resources, through an integrated scientific approach.

Students undertaking this course will be expected to have achieved a ‘C’ grade or above in one or more of Year 10 Extension Biology, Chemistry or Physics.

Students who do not wish to study Chemistry (ATAR) and Physics (ATAR) as separate courses should consider this course.
INTEGRATED SCIENCE – GENERAL COURSE

Integrated Science encourages students to be questioning, reflective and critical thinkers about scientific issues. The course is based on an integrated view of scientific knowledge that draws on the traditional disciplines of science and new scientific technology to enable students to investigate issues that are interesting and relevant in a modern world. This course provides opportunities for students to consider contemporary scientific developments. This process enables them to make informed judgements and decisions about questions that directly affect their lives and the lives of others.

The course is grounded in the belief that science is, in essence, a practical activity and seeks to reflect the creative element of science as inquiry. It emphasises formulating and testing hypotheses and the critical importance of evidence in forming conclusions. It requires them to be creative, intellectually honest, to evaluate arguments with scepticism and to conduct their investigations in ways that are ethical, fair and respectful of others.

Integrated Science is an inclusive course and aims to be attractive to students with a wide variety of backgrounds, interests and career aspirations.

Year 11
The syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair. The content may be taught in an integrated way in one or more contexts over the year.

Unit 1
The emphasis of this unit is on biological and Earth systems, focusing on the following topics:
- interrelationships between Earth systems
- structure and function of biological systems
- ecosystems and sustainability
- species continuity and change

Unit 2
The emphasis of this unit is on physical and chemical systems, focusing on the following topics:
- atomic structure
- chemical reactions
- mixtures and solutions
- motion and forces
- energy

Year 12
The syllabus is divided into two units which are delivered as a pair. The content may be taught in an integrated way in one or more contexts over the year.

Unit 3
The emphasis of this unit is on biological and Earth systems focusing on the following topics:
- interrelationships between Earth systems
- structure and function of biological systems
- ecosystems and sustainability
- species continuity and change.

Unit 4
The emphasis of this unit is on physical and chemical systems, focusing on the following topics:
- chemical reactions
- mixtures and solutions
- motion and forces
- energy

This course is available to students who have studied Extension Science or Standard Science in Year 10.
Physics is a fundamental science that endeavours to explain all the natural phenomena in the universe using a small number of assumptions, models, laws and theories. Physics has helped to unlock the mysteries of the universe and provides the foundation of understanding upon which modern technologies and all other sciences are based.

This course uses qualitative and quantitative models and theories to visualise, explain and predict physical phenomena. Predictions are tested by making observations and quantitative measurements. Students gather, analyse and interpret data to investigate a range of phenomena and technologies.

Students investigate how the unifying concept of energy explains diverse phenomena and provides a powerful tool for analysing how systems interact throughout the universe on multiple scales. Students learn how new observations can lead to models and theories being refined and developed.

Students learn how an understanding of physics is central to the identification of, and solutions to, some of the key issues facing an increasingly globalised society. They consider how physics contributes to diverse areas in contemporary life, such as engineering, renewable energy generation, communication, development of new materials, vehicle safety, medical science, and the exploration of the universe.

Studying senior secondary science provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. Studying physics provides a foundation in physics knowledge, understanding and skills for those students who wish to pursue tertiary study in science, engineering, medicine and technology.

Year 11

The syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair.

**UNIT 1: THERMAL, NUCLEAR AND ELECTRICAL PHYSICS**
Students investigate energy production by considering heating processes, radioactivity and nuclear reactions, and investigate energy transfer and transformation in electrical circuits.

**UNIT 2: LINEAR MOTION AND WAVES**
Students describe, explain and predict linear motion, and investigate the application of wave models to sound phenomena.

Year 12

The syllabus is divided into two units which are delivered as a pair.

**UNIT 3: GRAVITY AND ELECTROMAGNETISM**
Students investigate models of motion in gravitational, electric and magnetic fields to explain how forces act at a distance.

**UNIT 4: REVOLUTIONS IN MODERN PHYSICS**
Students use the theory of electromagnetism to explain the production and propagation of electromagnetic waves and investigate how shortcomings in existing theories led to the development of the quantum theory of light and matter, the Special Theory of Relativity, and the Standard Model of particle physics.

Students undertaking this course will be expected to have achieved a ‘B’ grade or above in Year 10 Extension Physics and Chemistry as well as a ‘B’ grade or above in Mathematics. Students must have a demonstrated competency in algebra, the geometry of triangles and trigonometry.
PSYCHOLOGY – ATAR COURSE

In the Psychology ATAR course students will be introduced to psychological knowledge which supports an understanding of the way individuals function in groups. Students learn about major psychological models and theories, and the methods used to conduct scientific investigations in the discipline of psychology. Students apply research methods and ethical principles as they analyse data to illustrate how empirical procedures are used to examine phenomena, such as memory, attention, attitudes, personality and group behaviour. Acquiring this foundation of scientific method and critical thinking is a valuable skill which students can apply throughout their study, work and everyday lives.

Year 11
The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair. The notional time for each unit is 55 class contact hours.

UNIT 1
This unit focuses on a number of concepts that enable students to gain an understanding of how and why people behave the way they do. Students learn about the human brain and explore the impact of external factors on behaviour, such as physical activity and psychoactive drugs. Cognitive processes, such as sensation and perception, and selective and divided attention are investigated. Students examine different types of relationships and the role of verbal and non-verbal communication in initiating, maintaining and regulating these. Students are introduced to ethics in psychological research and carry out investigations.

UNIT 2
This unit focuses on developmental psychology. Students analyse twin and adoption studies to gain insight into the nature/nurture debate and look at the role of play in assisting development. Students explore what is meant by the term personality and examine historical perspectives used to explain personality. They also explore behaviour and causes of prejudice. Psychological research methods studied in Unit 1 are further developed.

Each unit includes:

- A unit description – a short description of the focus of the unit
- Unit content – the content to be taught and learned.

Mathematical skills expected of students studying the Psychology ATAR course

The Psychology ATAR course requires students to use the mathematical skills they have developed through the Year 7–10 Mathematics Curriculum, in addition to the numeracy skills they have developed through the Science Inquiry Skills strand of the Science Curriculum.

Within the Science Inquiry Skills strand, students are required to gather, represent and analyse numerical data to identify the evidence that forms the basis of scientific arguments, claims or conclusions. In gathering and recording numerical data, students are required to make measurements using appropriate units to an appropriate degree of accuracy.

It is assumed that students will be able to:

- Perform calculations involving addition, subtraction, multiplication and division of quantities
- Perform approximate evaluations of numerical expressions
• express fractions as percentages, and percentages as fractions
• calculate percentages
• recognise and use ratios
• transform decimal notation to power of ten notation
• translate information between graphical, numerical and algebraic forms
• construct and interpret frequency tables and diagrams, pie charts and histograms
• describe and compare data sets using mean, median and interquartile range
• interpret the slope of a linear graph.

**Progression from the Year 7–10 curriculum**

This syllabus continues to develop science inquiry skills, building on those acquired in the Year 7–10 Science Curriculum. Science inquiry involves identifying and posing questions; planning, conducting and reflecting on investigations; processing, analysing and interpreting data; and communicating findings.

Science inquiry is also concerned with evaluating claims, investigating ideas, solving problems, reasoning, drawing valid conclusions, and developing evidence-based arguments. Investigations in psychology are activities in which ideas, predictions or hypotheses are tested and conclusions are drawn in response to a question or problem. The collection and analysis of data to provide evidence plays a major role. This can involve collecting or extracting information and reorganising data in the form of tables, graphs, flow charts, diagrams, text, keys, spreadsheets and databases. The analysis of data to identify and select evidence, and the communication of findings, involve the selection, construction and use of specific representations, including mathematical relationships, symbols and diagrams.

The Year 12 syllabus is divided into two units which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

**UNIT 3**

This unit focuses on the functions of the lobes of the cerebral cortex and examines how messages are transmitted from the brain to the body. It explores how behaviour is influenced by learning and other factors, and the impact of others on individual behaviour. Students examine socialisation processes observed within families and how social background and gender can shape communication styles. Students expand on their knowledge of ethics in psychological research as they engage in detailed investigations.

**UNIT 4**

This unit focuses on developmental and contemporary personality theories, and behaviours observed when individuals are examined in the social context. Students analyse the causes of conformity and obedience and gain an understanding of the factors that shape a sense of community. Students continue to develop their understanding and application of psychological research methods.

Each unit includes:

• a unit description — a short description of the focus of the unit
• unit content — the content to be taught and learned.
The Accounting and Finance ATAR course aims to make students financially literate by creating an understanding of the systems and processes through which financial practices and decision making are carried out, as well as the ethical, social and environmental issues involved.

Through engagement with the course, students develop an understanding of the fundamentals on which accounting and financial management are based. Many students will find themselves self-employed and there is a high probability that they will have to engage in some form of accounting practices. Having an understanding of these practices enables them to analyse their own financial data and make informed decisions based on that analysis.

In a rapidly changing world, the impact of technology on financial and accounting practices has been vast. The use of computer systems for record keeping, and the communication of financial data is already vital, and will continue to shape future careers.

Year 11

Unit 1
The focus for this unit is on double entry accounting for small businesses. Students apply their understanding of financial principles, systems and institutions to manage financial information and make decisions in a variety of small businesses. Students develop an understanding of the rationale for the use of particular conventions and principles and the consequences of disregarding them. Students record and process financial information using the double entry system and apply the principles of the Goods and Services Tax (GST). Students learn about the various forms of business organisations adopted by small business.

Unit 2
The focus for this unit is on accrual accounting. Students apply financial systems and principles to the operations of businesses and distinguish between cash and accrual methods of accounting. Students prepare and analyse financial reports for a variety of types of business organisations and become familiar with the main aspects of electronic processing of financial data. Students learn of the role and functions of the professional accounting and financial associations.

Year 12

Unit 3
The focus for this unit is on internal management for business. Students prepare and interpret budgets and performance reports in relation to forecasting a business’s future. The unit distinguishes between internal and external reporting requirements. Decisionmaking processes using cost accounting techniques are a feature of the unit. The unit focuses on critical analysis of financial information. The unit also explores the importance of short and long term planning for business.

Unit 4
The focus for this unit is on Australian reporting entities and how they are regulated by the Corporations Act 2001. The Framework for the Preparation and Presentation of General Purpose Financial Reports (The Framework) and the Accounting Standards are used in the preparation of the financial statements for a reporting entity. The financing options of larger entities are identified and evaluated, particularly in relation to conformity with basic principles, including profitability and stability. The unit addresses corporate social disclosure issues and ethical behaviour within corporations.
You will be influenced by Economics as a citizen for your lifetime. Economics is a key discipline in many professional occupations and careers.

Economics investigates the choices which all people, groups and societies face as they confront the ongoing problem of satisfying their unlimited wants with limited resources. Economics aims to understand and analyse the allocation, utilisation and distribution of scarce resources that determine our wealth and wellbeing. Economics develops the knowledge, reasoning and interpretation skills that form an important component of understanding individual, business and government behaviour at the local, national and global levels.

The Economics course develops reasoning, logical thinking and interpretation skills demanded by the world of work, business and government. The learning experiences available through studying this course explore the knowledge, values and opinions which surround the complex range of economic events and issues facing our community, such as unemployment, income distribution, business strategy and international relations.

**Year 11**

**Unit 1: Microeconomics**
This unit explores the theory that markets are an efficient way to allocate scarce resources, using real world markets with an emphasis on the Australian economy. When the forces of demand and supply do not allocate and price resources in a way that society would regard as efficient, equitable or sustainable, market failure can occur. Students examine examples of market failure along with a range of government policy options that can be applied to achieve more desirable outcomes. Students are also introduced to the language of economics and the use of theories and models to explain and interpret economic events and issues.

**Unit 2: Macroeconomics**
This unit explores the government’s role in a modified market economy and Australia’s recent (the last ten years) and contemporary (the last three years) macroeconomic performance. The cyclical fluctuations in the level of economic activity result in changes in the levels of output, income, spending and employment in the economy which, in turn, have implications for economic growth, inflation and unemployment. Students examine the role of government, through its spending and taxing powers, which can affect the allocation and price of resources, and the level of economic activity by targeting economic objectives.

**Year 12**

**Unit 3: Australia and the global economy**
It explores the interdependence of Australia and the rest of the world. Australia is a relatively open economy and, as such, is influenced by changes in the world economy. It explores the linkages between economies and the concepts of globalisation, trade liberalisation and protection in relation to the Australian economy. Students examine Australia’s trade, the recording of international transactions and the impact of these transactions on the Australian economy.

**Unit 4: Economic policies and management**
It explores how economic actions and policies such as fiscal policy, monetary policy and microeconomic reform operate in the pursuit of the Australian Government’s economic objectives. The changes that have taken place in the operation of these policies in recent times are also examined. Students learn to make informed predictions about the operation of these policies using economic models and past and current key economic data. Students apply the language, theories and tools of economics to develop a critical perspective on the role of these policies in the economy.
GEOGRAPHY – ATAR COURSE

Geography is the study of physical and cultural environments from a spatial perspective. It provides students with the knowledge and skills to observe and describe places on the surface of the Earth, and from a spatial perspective analyse and provide explanations on human and physical phenomena and their complex interactions. They develop a range of skills that help them to understand the physical world, interpret the past, scrutinise the present and explore sustainable strategies for the future care of places.

Year 11

Unit 1
The focus of this unit is the understanding of natural and ecological hazards, their impacts and how they can be managed at local, regional and global levels. Management refers to prevention, mitigation and preparedness.

Unit 2
The focus of this unit is the process of international integration (globalisation) and is based on the reality that we live in an increasingly interconnected world. It provides students with an understanding of the economic and cultural transformations taking place in the world today.

Skills
Posing questions, collecting statistical data and finding trends and solutions are all part of Geography. More than ever the course will require the interpretation and presentation of diagrams, photographs, tables and maps. Units 1 and 2 have one day field excursions each.

Year 12

Unit 3
The focus of this unit is the changing biophysical cover of the Earth’s surface, the creation of human environments and the resulting impacts on either the global climate or biodiversity. Students will apply the concepts of sustainability to examine and evaluate programs to address these negative impacts.

Unit 4
The focus of this unit is the geography of planning cities. Challenges exist in designing cities to be more productive, vibrant and sustainable. Urban planning involves a range of stakeholders that contribute to decision-making and the planning process. The present and future needs of society are addressed by the allocation and reallocation of land uses, improving infrastructure and transport systems and enhancing amenities to meet the different perspectives of stakeholders. Students will examine concepts, processes and roles of planning by comparing Perth with a selected megacity.

Units 3 and 4 have one day fieldtrips.
MODERN HISTORY – ATAR COURSE

Studying the Modern History ATAR course enables students to become critical thinkers and helps inform their judgements and actions in a rapidly changing world. Students are exposed to a variety of historical sources, including government papers, extracts from newspapers, letters, diaries, photographs, cartoons, paintings, graphs and secondary sources, in order to determine the cause and effect, and the motives and forces influencing people and events. Through the process of historical inquiry, students are encouraged to question and evaluate historical sources; identify various representations and versions of history; use evidence to formulate and support their own interpretations; and communicate their findings in a variety of ways.

The study of Modern History can lead to careers in: law, journalism, public relations, television, advertising and multimedia development, literature, publishing, performing arts, archaeology, museum curating, conservation and social work, teaching, travel writing, human resources and industrial relations, policing, criminology, crime detection, politics, public service and local government.

Year 11

Unit 1: Understanding the modern world: Capitalism – the American experience (1907–1941)
This unit provides an introduction to significant developments in the modern period that have defined the modern world, and the ideas that underpinned them, such as liberty, equality and fraternity. Key content for this unit includes:

- The main causes of the rise of capitalism in the USA; The role and impact of significant individuals in the period, key ideas of: theories of capitalism; The impact of WWI, the 1920s, and WWII until 1941; The growth of consumerism; and the shaping of American values, for example, film and fashion, prohibition and the ‘Jazz Age’; The causes of the Great Depression, the impact of capitalism on different groups within American society.

Unit 2: Movements for change in the 20th century: Nazism in Germany
This unit examines significant movements developed in response to the ideas studied in Unit 1 that brought about change in the modern world and that have been subject to political debate. The unit focuses on the ways in which individuals, groups and institutions challenge authority and transform society. Key content for this unit includes:

- The economic, political and military circumstances in Germany at the end of WWI and how those circumstances contributed to the rise of Nazism; The reasons for the Nazi Party’s rise to power; The nature and effects of key aspects of the Nazi state; Nazi policies of anti-Semitism and the promotion of the Aryan race, the role and impact of significant individuals in Weimar and Nazi Germany; The legacy of Nazism after WWII.
Year 12

Unit 3: Modern nations in the 20th century: Russia and the Soviet Union 1914–1945 (World War I to the end of World War II)

This unit examines the characteristics of modern nations in the 20th century; the crises that confronted nations, their responses to these crises and the different paths nations have taken to fulfil their goals. Students study the characteristics of one nation. An overview of Russia in 1914 as background for more intensive study of the period. The content for this unit includes:

- the significant ideas of the period, including autocracy, Marxism, communism, Leninism, Stalinism, and collectivisation; the significance of the struggle of Josef Stalin and Leon Trotsky for power and the reasons for the success of Stalin; the changes that transformed Russia, including War Communism; the New Economic Policy; the creation of the USSR; the Five Year Plans and how they contributed to state control of the economy, forced rural collectivisation, state-created famine and the modernisation of the Soviet Union; the social/cultural impact of Bolshevism and Stalin’s Cultural Revolution to 1945; the impact of World War II and the methods that enabled the USSR to secure victory; the role and impact of significant individuals in the period, including political, military and social/cultural leaders.

Unit 4: The modern world since 1945: The changing European world since 1945

This unit examines some significant and distinctive features of the modern world within the period 1945–2001. This includes changes to the nature of the world order: shifting international tensions, alliances and power blocs; the emergence of Asia as a significant international political and economic force, and the nature of engagement by and with Australia; the nature of various conflicts and regional and international attempts to create peace and security. Key content for the unit includes:

- an overview, Cold War to 1948; the significant ideas of the period, including communism, capitalism, democracy, containment, peaceful coexistence, détente, glasnost and perestroika, nationalism, and reintegration; the evolving nature and character of the Cold War in Europe from 1948 through to détente; significant developments that followed the end of the Cold War in 1989; the development of European governance and extension of the ‘European Union’, the changing nature of world order in the period 1989–2001, with specific reference to the place of Europe and the European nation states within that world order; the role of significant political leaders throughout the period.
Politics and Law is a study of the processes of decision-making concerning society’s collective future. It aims to develop knowledge of the principles, structures, institutions and processes of political and legal systems primarily in Australia. It brings together the judicial, executive and legislative arms of government to demonstrate how society is governed and examines the philosophy and values on which society is governed.

Students will be encouraged to participate in the Interschool Mock Trial competition as barristers, witnesses and solicitors. This is held at the Central Law Courts throughout Semester I.

Year 11 students have the option to travel to Canberra for a week to visit Old and New Parliament Houses and observe Question Time and participate in committee hearings, the War Memorial, the Electoral Commission, the High Court, the National Portrait Gallery, National Archive and the Sound and Screen Museum.

Year 11

Units 1 and 2
The study of Politics and Law will play a significant role in producing informed citizens who understand the processes of decision making concerning society’s collective future. The course also aims to support all students in developing a sense of awareness of their basic legal rights, obligations and duties.

The Politics and Law course will allow students to develop knowledge and understanding of the principles, structures, institutions, processes and practices of the political and legal systems, primarily in Australia. The course will, however, encourage students to question, analyse and understand different political and legal systems around the world.

Topics in Year 11 include: the electoral systems, political parties, pressure groups, the operation of Parliament, as well as the Court hierarchy and the criminal and civil trial processes in WA. Contemporary political and legal issues/events are the focus of research assignments.

Recent and current events and issues, both at home and abroad, are the focus of class discussions and will allow students to formulate their own opinions about national and international events.

Year 12

Unit 3: Political and legal power
Students will examine how the roles of the executive, legislative and judicial arms of government maintain and develop the law. Students will consider the influence of individuals, pressure groups, political parties, public opinion, and the media and internal and external factors on law making. There is a close study of the constitution and federalism, the 1975 constitutional crises as well as the High Court and how some of its judicial interpretations affect the federal balance.

Unit 4: Rights and governance
Students will examine the ways political and legal systems respond to contemporary civil, political, economic, social and cultural rights issues. Students will examine the ways countries can uphold or undermine democratic principles by examining their political and legal structures, means of exercising power, judicial independence, representation, and the extent of popular participation, natural justice and the rule of law. The protection of human rights abuses are discussed as well as the judicial activism evident in the recent High Court decisions and a study of the protection of human rights in Australia and another country. This has relevance to the present asylum seeker debate. Accountability of the legislature, executive and the judiciary is a key element of this course and the agencies that keep them accountable are examined e.g., CCC, Royal Commissions etc.
VOCATIONAL EDUCATION AND TRAINING (VET) ENDORSED PROGRAM

Authority Developed Workplace Learning (ADWPL) aims to prepare students for employment by providing them with knowledge about what is valued in a work environment. Employers value Core Skills for Work (CS&W) which are transferable and vital in all forms of employment. These CS&W are developed over a lifetime and are sought after skills in education, training, workplaces and the community. Participating in a supported structured workplace learning program based on CS&W, and involving a number of different workplaces, assists students to make informed decisions about their futures. These decisions are vitally important for students to move successfully from school to further education, training, employment and participation in the community.

AUTHORITY DEVELOPED WORKPLACE LEARNING (ADWPL)

ADWPL is a Vocational Education and Training (VET) Endorsed Program that provides opportunities for students to develop CS&W in the workplace whilst obtaining credit toward the WACE. Students will be placed in an appropriate work situation, that is of interest to them, and be required to maintain a formal record of workplace learning.

In this mode of workplace learning, students will undertake training in a real workplace, during exam fortnights. They will be expected to demonstrate, in a practical way, the CS&W and written understanding of these skills in the context of the industry in which they are working. Achievement of 55 hours of work provides one unit equivalent towards the WACE completion requirement. Students should be able to finish at least 110 hours in any one year, meaning they will complete the equivalent of two units.

Although there are no assignments in this program, students must meet the following expectations.

- Meet workplace hours, dress and behavioural expectations.
- Complete logbook requirements.
- Provide evidence of journal completion.
- Keep a record of tasks completed in the workplace and an attendance record.
- Complete a minimum of 110 hours in the workplace each year, which is equivalent to two units.

This program is STRONGLY recommended for non-ATAR students ONLY as it requires them to do their work placement during exam fortnight. Students will be expected to catch up missed class work and negotiate, directly with their teachers, adjusted deadlines and test dates. ATAR students wishing to do ADWPL must do so in their school holidays.

Students who select this endorsed program will need to ensure that they demonstrate the appropriate ready for work skills. For example:

- Good communication
- Good time management
- Well organised
- Enthusiastic
- Shows initiative

Students that are considered not ready for work, will undergo training prior to work placement.
AWARDS FOR OUTSTANDING ACHIEVEMENT

Beazley Medal: Two peak awards are granted, one recognising outstanding academic achievement (Beazley Medal: WACE) and another recognising outstanding achievement in vocational education and training (Beazley Medal: VET).

The Beazley Medal: WACE is awarded for excellence to the eligible student who achieves the top WACE award score which is used to rank students for General Exhibitions. The WACE award score is based on the average of five scaled examination scores in ATAR courses, calculated to two decimal places, with at least two from each of List A and List B. Where an examination includes both theoretical and practical components an appropriate statistical process will be used to combine the examination marks.

Beazley Medal: VET is awarded for excellence in studies that include training qualifications and School Curriculum and Standards Authority courses. It is awarded to the eligible student who has demonstrated the most outstanding performance in a VET Certificate II or higher and in their other WACE achievements.

Eligibility criteria
Students eligible for this award will have:
- completed a nationally recognised VET qualification to a minimum of AQF level 2,
- achieved a VET exhibition (see subsection 9.5.1) in one of the industry areas.

General Exhibitions: Forty awards, known as General Exhibitions, are awarded to eligible students who obtain the highest WACE award scores based on the average of five untruncated scaled scores, with at least two from List A and two from List B.

Course Exhibitions: A Course Exhibition is awarded to the eligible student obtaining the highest combined mark for each WACE course. To be eligible for a Course Exhibition, the student must have completed at least two course units in the year of the award being granted.

Certificates of Excellence: Certificates of Excellence are awarded to eligible candidates who are in the top 0.5 per cent of candidates in each ATAR course examination, based on the examination mark, or the top two candidates (whichever is the greater) in a course where at least 100 candidates sit the ATAR course examination. The number of Certificates of Excellence issued for each course is based on the number of candidates who sit the ATAR course examination. Where a course includes both written and practical components the examination mark will be determined using an appropriate statistical process to combine the examination marks. To be eligible for a Certificate of excellence, the student must have completed the pair of Year 12 units in the course in the year of the award and have not previously sat the WACE examination for that course.

Certificates of Merit and Certificates of Distinction: Certificates of Merit and Distinction recognise student achievement in the WACE and are dependent on the degree of difficulty of the courses and programs undertaken, together with the student’s level of achievement. These awards will be based solely on the grades awarded to students by their schools. A Certificate of Merit or a Certificate of Distinction is to be awarded to each eligible student who, in their last three consecutive years of senior secondary school WACE enrolment, obtains: Certificates of Merit 150–189 points; Certificates of Distinction 190–200 points, with an ‘A’ grade in an ATAR course worth 10 points and a ‘B’ grade worth 9 points. An ‘A’ grade for a General course is worth 8 points.
WACE Mathematics ATAR courses

Curtin University, Edith Cowan University, Murdoch University and The University of Western Australia have agreed to introduce a Tertiary Entrance Aggregate bonus to encourage students to undertake the more challenging Mathematics ATAR course options.

What is the bonus?
Ten percent of the final scaled score/s in Mathematics Methods and Mathematics Specialist will be added to the Tertiary Entrance Aggregate, from which the Australian Tertiary Admission Rank (ATAR) is derived. (This is how the current bonus for studies in Languages Other Than English (LOTE) is awarded.) The bonus does not apply to Mathematics Applications.

When does the bonus start?
The bonus will apply to the calculation of the Tertiary Entrance Aggregate from 2017 onwards.

Can bonuses from both courses be counted?
Yes, if you take Mathematics Methods and Mathematics Specialist, you will get the bonus from each of them.

Do the maths courses have to be in the best four scores?
No. Even if one or both of the maths courses isn't one of your best four scaled scores, the bonus will still be added to the aggregate.

Can you give an example of how it would work?
Here’s a hypothetical scenario where a student achieves the following scaled scores in the 2017 WACE.

- Music ATAR 76.4
- Human Biological Science ATAR 65.7
- English ATAR 63.2
- Mathematics Methods ATAR 59.1
- Mathematics Specialist ATAR 34.9

The best four scaled scores add up to 264.4, then the Maths bonuses of 5.9 for Methods and 3.5 for Specialist are added, to produce an aggregate of 273.8. Even though the scaled score for Maths Specialist wasn’t one of this student’s best four subjects, they still get the benefit of the bonus.

What difference will it make to the ATAR?
A TEA bonus of 9.4 in this example, does not mean that the ATAR will increase by the same amount. In the example above, the bonus would have increased this person’s ATAR by about 2.7 compared to if they had not taken the two maths courses listed. [This is based on the 2015 TEA to ATAR conversion and is only a broad guide. The ATAR in any year is determined by the distribution of overall results, and so cannot be calculated in advance. The impact of a TEA bonus on your ATAR will also vary, depending on where in the overall distribution of aggregates your results place you.]

Note: Revised 15 April 2016 to clarify that the bonus will be applied in the calculation of the Tertiary Entrance Aggregate in 2017.