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# ABOUT OUR COLLEGE

# Mission Statement:

"To provide educational opportunities of excellence in a Christian context, addressing the needs of individuals for lifelong learning."

# **COLLEGE VALUES**

Kennedy Baptist College upholds core values which form the framework of our pastoral care, discipline and learning programs. The values are:

• Faith • Integrity • Boldness • Growth • Service

# THE FOUNDING OF KENNEDY BAPTIST COLLEGE

The new Kennedy Baptist College is the result of the joining of two neighbouring Colleges, Winthrop Baptist College and Somerville Baptist College (est. 1994 and 1999).

Kennedy Baptist College marks a new chapter in the Colleges' history, providing quality Christian education to around 1,300 students (Years 7-12) from Term 1, 2013.

# ΜΟΤΤΟ

The College motto is "Strive today, Conquer tomorrow"

What drives one to boldly step where no one has gone before, to overcome obstacles and achieve great things against all odds?

The story of WA pioneer Baptist Minister, William Kennedy inspires the answers to these questions and more. His passion and determination saw him overcome seemingly insurmountable odds to establish churches along WA's Great Southern Railway, the Goldfields and the Eastern Hills. Kennedy was renowned as a man of integrity and audacity, by the communities he served.

In today's fast paced world of instant gratification, it is our hope that Kennedy's remarkable qualities of focused determination and persistence will inspire our young people. Informed by Christian values, we aim to encourage our students to live passionately and persevere to overcome obstacles they may face in making the most of life's opportunities.

It is the spirit of Kennedy's story that underpins our College values and will inspire our students to fulfil our College motto of 'strive today, conquer tomorrow'.

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# **GENERAL INFORMATION**

#### INTRODUCTION

This Information Booklet is designed to make the transition into Year 12 as easy as possible, providing important and relevant information to assist in making informed decisions about education over this important period.

It is crucial that the information is read through very carefully, particularly regarding requirements for entrance into further education so that students won't limit their chances or exclude themselves from any course of study.

Year 11 and 12 students complete a program of study involving Western Australian Certificate of Education (WACE) courses, Vocational Education and Training (VET) packages and/or Endorsed programs.

#### There are two groups of WACE courses:

**ATAR courses** – for students who are typically aiming to enrol in University directly from school. These courses will the examined by the School Curriculum and Standards Authority (SCSA) and the results accepted by TISC for the purposes of university entrance.

**General courses** – for students who are typically aiming to complete a University preparation course, enter further training or enter the workforce directly from school. These courses are not examined by SCSA.

Each course has four units; each unit is typically completed in a semester. Units 1 and 2 (Year 11) are typically studied as a pair. Units 3 and 4 (Year 12) **must** be studied as a pair. The complexity of the syllabus increases from Year 11 to Year 12.

# Vocational Education and Training packages are offered in two forms:

**In school** – each VET program is delivered as a 5 period per work school timetabled course.

**Out of school** – the program is delivered by an external provider (RTO), typically one of the State TAFE campuses. Students are off campus for one or two days per week, the number of timetabled classes is reduced but timetabled classes will be missed and this will require diligence from the student to keep up with College timetabled classes.

**Endorsed programs** can also be completed through the College or through community organisations. All endorsed programs can contribute to achievement of the WACE. Students can enrol in the endorsed program of Workplace Learning through the College.

All students at Kennedy Baptist College in Year 12 will study six courses of their choice (subject to timetable restrictions and suitability), each for 5 periods per week. In addition to this each student completes Christian Education (1 period), Physical Education (2 periods), Study Period (1 Period) and Form (1 Period).

Students applying for university entrance must take at least four ATAR courses in year 12, in which they must take the external examination, so that there are four subjects that can be used to calculate an ATAR (Australian Tertiary Admission Rank). Students not applying for university entrance are not required to take ATAR courses.

Generally, students take the same six courses in Year 12 that they took in Year 11. Study lines are available to students who are enrolled in external VET programs or those Year 12 students with an ATAR focus.

Entrance to the four public universities is based on the ATAR (Australian Tertiary Admission Rank) determined from the student's TEA (Tertiary Entrance Aggregate). It is unwise for a student intending to apply for Vocational training to tackle ATAR courses and achieve lower grades than she/he would in General courses. Experience shows that students achieving grades of D in more difficult courses may miss out on BOTH university entrance and vocational training entrance because:

- I. their TEA aggregates are too low for university entrance
- II. they are beaten to vocational education places by students with higher grades of A in easier courses

With the exception of the compulsory subjects, all of the other WACE courses are governed by the syllabuses and assessment structures determined by the School Curriculum and Standards Authority. In accordance with their guidelines, students will be awarded a grade in all Courses at the conclusion of Year 11.

- A Excellent Achievement
- B High Achievement
- C Sound Achievement
- D Limited Achievement
- E Inadequate Achievement

These grades appear on each student's Western Australian Statement of Student Achievement (WASSA), issued by the School Curriculum and Standards Authority when the student finishes school. All completed courses will show a level of achievement for each course undertaken. For courses where the external exam is undertaken, the ATAR will be calculated based on 50% of the school mark and 50% of the external assessment after moderation and scaling.

### CERTIFICATION OF STUDENT ACHIEVEMENT

At the end of senior secondary schooling, all students who have satisfactorily completed any study that contributes toward a WACE will receive a folio of achievement. The folio will contain one or more of the follow items:

- Western Australian Certificate of Education (WACE)
- Certificate of Distinction and Certificate of Merit
- Western Australian Statement of Student Achievement (WASSA)
- ATAR course report

#### MINIMUM LITERACY AND NUMERACY STANDARDS

The minimum literacy and numeracy standards are described as the skills regarded as essential for individuals to meet the demands of everyday life and work in a knowledge-based economy.

A student meets this minimum standard through either NAPLAN or the Online Literacy and Numeracy Assessment (OLNA).

Through NAPLAN the minimum Literacy standard is Band 8 or higher in Reading AND Writing. The minimum Numeracy standard is Band 8 or higher for Numeracy.

A student in Year 10, 11 or 12 who has not met the minimum standard through NAPLAN is required to sit the OLNA. Until the minimum standard is met a student will sit OLNA in March and September in Year 10, repeating in Year 11 and 12 if required.

# WESTERN AUSTRALIAN CERTIFICATE OF EDUCATION (WACE)

The Western Australian Certificate of Education, typically referred to as Graduation, is awarded to secondary students who satisfy its requirements. Generally, students will achieve the WACE through their final two years of senior secondary study.

#### To qualify for the WACE, students must:

- Demonstrate a minimum standard of literacy and numeracy
- Complete at least 20 units or equivalents, at least 10 or equivalent in Year 12
- Achieve a C grade or better across the best 14 course units or equivalent from which at least six must be completed in Year 12.
- Complete at least four units from an English course; typically two in Year 11 and one pair in Year 12
- Complete at least one pair of units from each of list A (arts/languages/social science) and list B (mathematics/science/technology) in Year 12.

Note: VET and Endorsed programs contribute to completed units and may reduce the required number of C grades. These are the "equivalent" courses referred to above.

WACE Breadth of Study: For a student to achieve a WACE they must complete, in year 12, at least one course from each of the following lists.

	<b>List A</b> (ARTS/LANGUAGES/SOCIAL SCIENCE)	List B (MATHEMATICS/SCIENCE/TECHNOLOGY)				
BMF	Business Management & Enterprise	ACF	Accounting and Finance			
CFC	Children, Family and the Community	AIT	Applied Information Technology			
DAN	Dance	BIO	Biology			
DRA	Drama	CHE	Chemistry			
ECO	Economics	EST	Engineering Studies			
ENG	English	FST	Food Science and Technology			
EALD	English as an Additional Language Dialect	HBS	Human Biology			
FRE	French: Second Language	ISC	Integrated Science			
GEO	Geography	MA?	Mathematics (all courses)			
HEA	Health Studies	MAS	Mathematics: Specialist			
LIT	Literature	MDT	Materials Design and Technology			
MPA	Media Production & Analysis	OED	Outdoor Education			
MUS	Modern History	PES	Physical Education Studies			
HIM	Music	PHY	Physics			
PAL	Politics and Law	PSY	Psychology			
VAR	Visual Art					

### UNIVERSITY ENTRANCE

To gain entrance to one of the four public\* universities, a student must satisfy all the following conditions:

# 1. Achievement of the Western Australian Certificate of Education (WACE)

It is essential for you to satisfy the requirements of the WACE to enter all four universities

#### 2. Competence in English

For university admission purposes, usually you demonstrate competence in English by achieving the prescribed standard in one of the WACE ATAR courses: English, Literature or English as an Additional Language or Dialect (ELD)

The prescribed standard is English, Literature or English as an Additional Language or Dialect (ELD)

# • Curtin University, Murdoch University, University of Western Australia

You must achieve a scaled score of at least 50

#### • Edith Cowan University

You must achieve a scaled score of at least 50, or a letter grade of A, B or C in Year 12 English; Literature or English as an Additional Language or Dialect.

#### 3. Achievement of Sufficiently High ATAR

The following points concerning the determination of the ATAR have been agreed to by the four universities.

For a student's course to be used in the calculation of his/her ATAR, at least Units 3 and 4 must be completed and the external examination undertaken.

The final Course Level of Achievement will be a 50:50 combination of internal and external assessment. The highest four final course scaled marks will be combined taking into account any unacceptable combinations to produce a Tertiary Entrance Aggregate (TEA).

The TEA is converted to an ATAR taking into account the number of students with a TEA and the total Year 12 school leaving age population in WA as is currently done.

# 4. Satisfy any PREREQUISITE or special entrance requirements for entry to particular courses.

Prerequisites are courses or special requirements that must be successfully completed for entry to particular university courses. Generally, a scaled score of 50 or more in an ATAR course is required for prerequisite purposes; however, mathematics prerequisites differ across university courses.

*Murdoch University* does not require applicants to have undertaken specific prerequisite courses and instead provides introductory units to enable its students to become skilled in specific areas in which they may be lacking.

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.

\*Entrance to the *University of Notre Dame (Australia)* is made through private application and interview. None of the foregoing conditions applies.

### **COMPARISON OF TEA / ATAR**

Admission into university is competitive and the Australian Tertiary Admission Rank is the basis of admission to most university courses. Students are ranked in order of merit based on their 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.

#### CALCULATION OF THE TEA / ATAR

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

The TEA will be calculated by adding the best four scaled scores, plus 10% of that student's Mathematics Methods, Mathematics Specialist and best LOTE score. These may be in any combination of courses; however, no course can be counted more than once and only two Mathematics courses can be included.

In calculating the scaled score, equal weight is given to the final school mark and the final examination mark, except where courses/subjects are taken on a private basis.

There are unacceptable course combinations whereby scores in both courses cannot both be used.

TISC will construct a table to convert your TEA to an ATAR. The table takes 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. The following table gives an indication of the minimum Tertiary Entrance Aggregate (TEA) out of 430 required to achieve a particular ATAR for university entrance. The table is used to roughly check an ATAR calculation, the up to date ATAR calculator is available on the TISC website: www.tisc.edu.au.

The TEA will be calculated by adding the best four scaled scores. No course can be counted more than once. In calculating the scaled score, equal weight is given to the final school score and the final examination score. The TEA will be measured out of 430.

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ATAR	Minimum TEA for ATAR	ATAR	ATAR Minimum TEA for ATAR		Minimum TEA for ATAR
30.00	131.7	78.00	242.7	92.00	288.5
40.00	155.6	79.00	245.3	93.00	293.5
50.00	176.7	80.00	247.9	94.00	2991
55.00	188.3	81.00	250.9	95.00	305.2
60.00	199.6	82.00	253.8	96.00	312.1
61.00	201.9	83.00	257.4	97.00	320.0
62.00	204.3	84.00	259.9	98.00	330.3
63.00	206.5	85.00	263.1	98.50	336.8
64.00	208.9	86.00	266.0	99.00	344.5
65.00	211.0	87.00	269.4	99.50	359.3
66.00	213.5	88.00	273.3	99.70	367.7
67.00	216.0	89.00	276.8	99.90	388.1
68.00	218.6	90.00	280.3	99.95	392.9
69.00	221.0	91.00	284.1		

#### Example - Four WACE ATAR Courses

Course	Scaled Score
English	66
Mathematics	78
Modern History	67
Psychology	70

Four subject sum: 66 + 78 + 67+ 70 = 281 TEA= 281

#### Example – Six WACE ATAR Courses

Course	Scaled Score
English	65
Mathematics	78
Indonesian	66
Human Biology	72
Drama	55
Health Studies	53

Best four course sum:

78 + 72 + 66 + 65 + 6.6(LOTE) = 287.6

TEA = 287.6

Specialist

#### UNACCEPTABLE COURSE COMBINATIONS

You cannot use the following course combinations in calculating your ATAR. It may be possible to take both courses but the result in only one may be used to calculate your ATAR.

English **with** English as an Additional Language Dialect English as an Additional Language Dialect **with** Literature Mathematics Applications **with** Mathematics Methods Mathematics Applications **with** Mathematics

#### **EXTERNAL EXAMINATIONS**

Each ATAR course has an ATAR examination. All students who are enrolled in external examinations must make a genuine attempt in the examination. Students who are enrolled in Year 12 ATAR course units are required to sit the ATAR examinations.

There are practical and written examinations for some ATAR courses. A student who is deemed not to have made a genuine attempt will endanger their chances of achievement of the WACE. There are procedures for students who are sick or encounter a misadventure on the scheduled date of an examination.

External examinations are not conducted for General or Foundation WACE courses.

#### ALTERNATE UNIVERSITY ENTRANCE

Students who are not able to achieve an average of at least 65% in their Year 11 ATAR courses should consider alternate option to university.

There are many pathways to University including University Preparation programs or Foundation programs. Typically, these programs are 6 – 12 months long and provided students with an 'indicative ATAR' upon completion. Students apply for a University course at the completion of the program.

To qualify for a university preparation course a Year 12 student could complete a course of subjects with mainly General courses. Achieving the WACE is the goal for all students.

Each University provides a variety of alternate entry programs and methods.

#### MINIMUM LITERACY AND NUMERACY STANDARDS

The minimum literacy and numeracy standards are described as the skills regarded as essential for individuals to meet the demands of everyday life and work in a knowledge-based economy.

A student meets this minimum standard through either NAPLAN or the Online Literacy and Numeracy Assessment (OLNA)

Through NAPLAN the minimum Literacy standard is Band 8 or higher in Reading AND Writing. The minimum Numeracy standard is Band 8 or higher for Numeracy.

A student in Year 10, 11 or 12 who has not met the minimum standard through NAPLAN is required to sit the OLNA. Until the minimum standard is met a student will sit OLNA in March and September in Year 10, repeating in Year 11 and 12 if required.

# TERTIARY VOCATIONAL TRAINING ENTRANCE (TAFE ENTRANCE)

Each semester qualifications offered by state training providers through TAFE will be divided into two groups. The first group of qualifications will require applicants to address both 'entry requirements and selection criteria' and the second group of qualifications will require applicants to address only the 'entry requirements'.

Qualifications that require 'entry requirements and selection criteria' are those where there are more applicants than places available. Qualifications that have 'entry requirements only' are those where there are more places than applicants (approximately 70% of courses).

Applicants for 'entry requirement only' courses will only need to submit their personal information, the name of the qualification for which they are seeking entry and evidence that they meet the minimum entry requirements.

Applicants seeking places in qualifications with 'entry requirements and selection criteria' will be required to address both the minimum entry requirements and the selection criteria. Selection criteria will focus on pathways, work experience and past

A student will typically apply for up to four VET courses, listing them in order of preference.

Selection then depends on the student's ranking compared with other applicants, and the number of places being offered in the relevant course.

There are also a range of private Registered Training Organisations (RTOs) which offer further training to school aged leavers.

# VOCATIONAL EDUCATION AND TRAINING (VET) IN SCHOOL

Vocational education and training (VET) in the senior secondary years engages students in work related learning built on strategic partnerships between schools, training organisations, business, industry and the wider community. VET can be undertaken as an integral part of the WACE and provides students with a broad range of post-school options and pathways. The successful completion of VET provides students with gains a nationally recognised VET qualification within the Australian Qualifications Framework (AQF).

A Certificate II or higher qualification is required of any student who completes two or more Foundation courses.

VET is delivered and certified by Registered Training Organisations (RTOs) which may be a private provider or a State Training Providers (formally TAFE). Kennedy Baptist College is not an RTO and will work in partnership with both private and state RTOs to deliver a variety of VET opportunities for students.

There are two broad categories of provision of VET in school:

- VET arranged and managed by schools
- VET outside of a school arrangement

#### VET arranged and managed by schools

Typically, the student is enrolled as a full-time student who completes a VET program within school hours as part of the senior secondary program. At Kennedy Baptist College there will be two types of VET delivery:

- Timetabled VET a Certificate course delivered by the College; accredited through a private RTO, forming part of the students' weekly timetable.
- External VET a Certificate course delivered by a state training provider where the student is off-campus for one or two days per week. The students' timetable will be adjusted at the beginning of the school year.

#### VET outside of school arrangements

Typically, the student is enrolled in a VET program outside of school hours. This could be attained through community organisations such as St John Ambulance WA or Surf Lifesaving or through an RTO evening or weekend course. In such circumstances it is the student's responsibility to arrange for the Authority to be provided with adequate evidence of achievement and to negotiate the method of reporting to the Authority. If possible, the College will assist with these requirements; however, the student must initiate procedures with the Director of Studies.

#### **Enrolment Procedure**

Vocational Education and Training programs are only available to students enrolled in a General pathway. If timetabled VET programs have available spaces, ATAR pathway students may be considered for the program, however, this would be after the senior school year has commenced.

Timetabled VET is chosen from the grid. Students may choose up to two VET courses; however, spaces in each course are limited. Students who need to reselect due to limited spaces will be advised as soon as possible. External VET is by application to TAFE through the College. Applications are typically required by the end of Term 3 and information is emailed to parents and students. The number of applications for these courses far outweighs the number of available spaces. As acceptance into these courses is not known until the end of the school year, students must complete their College subject selections as if they were not enrolled in an external course. If a student gains acceptance into an external program, they will seek to adjust their course selection. Typically, a student would take up a study line instead of a timetabled VET course.

Note: It is impossible to factor in all External VET scenarios and successful applicants may have to rearrange school timetabled courses, including withdrawing from courses with practical elements, in order to meet both school and external assessment requirements.

# WORKPLACE LEARNING PROGRAM: WL

WL is an Authority (SCSA)-developed endorsed program that is managed by individual schools. To complete the program a student works in one or more real workplace/s to develop a set of transferable workplace skills. A student must record the number of hours completed and the tasks undertaken in the workplace in the Authority's Workplace Learning Logbook. A student must also provide evidence of his/her knowledge and understanding of the workplace skills by completing the Authority's Workplace Learning Skills Journal after each 55 hours in the workplace.

Unit equivalence for Workplace Learning endorsed program is based on one-unit equivalent for each 55 hours completed in the workplace to a maximum of four units (220 hours). The total number of hours completed in the workplace is reported on the student's WASSA.

WL is recommended for students wishing to enter Vocational training, apprenticeships, traineeships and the workforce in general. Students who wish to participate in Workplace Learning may be out of the College for one day per week. Therefore, WL places will be limited and not available to students pursuing an ATAR pathway or students who are enrolled in an externally provided VET course (unless WL is a requirement of the external provider).

#### **Enrolment Procedure**

Students considering WL should discuss with the WL coordinator at the start of Year 12.

Not all applicants are accepted. Students must have a positive attitude towards school and be motivated to learn from different situations. They will also need to display a mature attitude toward their work placement.

Please note it is the student's responsibility to catch up on schoolwork missed during their placement.

# YEAR 12 – PREREQUISITES FOR COURSES OF STUDY

ATAR Courses	Prerequisites
Accounting and Finance	Grade C (60%) or better in Year 11 Accounting and Finance
Biology	Grade C (60%) or better in Year 11 Biology
Business Management & Enterprise	Grade C (60%) or better in Year 11 Business Management and Enterprise (ATAR)
Chemistry	Grade C (60%) or better in Year 11 Chemistry
Dance	Grade C (60%) or better in Year 11 Dance
Drama	Grade C (60%) or better in Year 11 Drama
Economics	Grade C (60%) or better in Year 11 Economics
Engineering Studies	Grade C (60%) or better in Year 11 Engineering Studies (ATAR)
English	Grade C (60%) or better in Year 11 English (ATAR)
English Additional Language or Dialect	Grade C (60%) or better in Year 11 English Additional Language or Dialect
French: Second Language	Grade C (60%) or better in Year 11 French: Second Language
Geography	Grade C (60%) or better in Year 11 Geography (ATAR)
Health Studies	Grade C (60%) or better in Year 11 Health Studies (ATAR)
Human Biology	Grade C (60%) or better in Year 11 Human Biology
Literature	Grade C (60%) or better in Year 11 Literature
Mathematics: Applications	Grade C (60%) or better in Year 11 Mathematics: Applications
Mathematics: Methods	Grade C (60%) or better in Year 11 Mathematics: Methods
Mathematics: Specialist	Grade C (60%) or better in Year 11 Mathematics: Specialist and Methods
Modern History	Grade C (60%) or better in Year 11 Modern History
Music	Grade C (60%) or better in Year 11 Music (ATAR)
Physical Education Studies	Grade C (60%) or better in Year 11 Physical Education Studies (ATAR)
Physics	Grade C (60%) or better in Year 11 Physics and a Mathematics ATAR course
Politics and Law	Grade C (60%) or better in Year 11 Politics and Law
Psychology	Grade C (60%) or better in Year 11 Psychology
Visual Arts	Grade C (60%) or better in Year 11 Visual Arts (ATAR)
General Courses	Prerequisites (if required)
Business Management & Enterprise	Recommended Grade C(60%) or better in Year 11 Business Management and Enterprise (General)
Engineering Studies	Recommended Grade C (60%) or better in Year 11 Engineering Studies (General)
Music	Year 11 Music: Contemporary Music and additional music lessons.
Outdoor Education	Recreational Skipper's Ticket

## KENNEDY BAPTIST COLLEGE: YEAR 12 GRIDLINES - SAMPLE

GRID:

										-					
					ATAR							GENERAL			VET
1	Business Management & Enterprise	Chemistry	Dance	English	Human Biology	Maths Applications	Physics	Study		Engineering Studies	Food Science Technology	Geography	Maths Essential	Physical Education Studies	
2	Accounting & Finance	Chemistry	English	French	Geography	Maths Method	Study			Children Family & Community	English (General)	Food Science Technology	Integrated Science	Materials Design & Technology Wood	
3	Biology	English	Human Biology	Maths Applications	Maths Specialist	Physical Education Studies	Politics & Law	Visual Art	Study	English (General)	Health Studies	Media Production & Analysis	Physical Education Studies		Certificate II Finance
4	Drama	Economics	English	Maths Applications	Music	Physics	Psychology	Study		Drama	Integrated Science	Maths Essential	Music		Certificate II Business
5	Biology	Business Management & Enterprise	Chemistry	English	Health Studies	Human Biology	Literature	Study		Applied Information Technology	Business Management & Enterprise	Integrated Science	Maths Essential	Outdoor Education	
6	English Additional Language	English	Maths Applications	Maths Methods	Modern History	Physical Education Studies	Psychology	Study		English (General)	Integrated Science	Materials Design & Technology Metal	Outdoor Education	Visual Art	

A student selects one subject per grid line

There are six lines - all students choose one subject from each line. A total of six chosen subjects. Each subject is studied for 5 periods per week. The subjects offered on Lines 1 to 6 can only run if sufficient numbers of students choose to enrol in the subject.

# **SAMPLE ONLY**

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# **COURSE INFORMATION - ATAR**

# ACCOUNTING AND FINANCE

PREREQUISITE - Grade C (60%) or better in Year 11 Accounting and Finance

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. It helps students to analyse and make informed decisions about finances.

#### 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. Decision-making 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.

#### CAREERS

Banking, Business, Commerce, Industry, Government, Marketing, Public Service.

### BIOLOGY

PREREQUISITE - Grade C (60%) or better in Year 11 Biology

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.

#### 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.

#### CAREERS

Studying the Biology ATAR course provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. Understanding of biological concepts, as well as general science knowledge and skills, is relevant to a range of careers, including those in medical, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and eco-tourism. 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.

## **BUSINESS MANAGEMENT & ENTERPRISE (ATAR)**

PREREQUISITE - Grade C (60%) or better in Year 11 Business Management and Enterprise

The Business Management and Enterprise ATAR course gives students the opportunity to understand how vital business is to individuals and society, and how it impacts on many aspects of our lives. Business has a complex and dynamic organisational structure that requires a combination of skills, aptitude, creativity, initiative and enterprise to operate effectively. In a constantly changing world, individuals, businesses and nations must adapt their position in an increasingly global economy and generate the wealth to sustain economic growth. To do this, business requires people with strategic vision who are enterprising, innovative and creative. This course focuses on the development of these skills within the business cycle of day-to-day running and continuing viability and expansion of a business. Exposure to a wide range of business activities, management strategies and an understanding of enterprise helps students to appreciate the significance of their role as both participants and consumers in the business world.

#### Unit 3

The focus of this unit is on strategic international business growth. The unit explores the need for global expansion and change management. It also addresses the opportunities provided by the global environment and the factors that drive international business development.

#### Unit 4

The focus of this unit is on global business operations. The unit explores how businesses operate strategically and examines the features and traits of successful management. It addresses the significance of strategic planning and the concept of competitive advantage.

#### CAREERS

The study of Business Management and Enterprise can lead to a variety of fields. Possible vocations are Commerce, Management, Marketing and Occupational Health & Safety.

# CHEMISTRY

PREREQUISITE - Grade C (60%) or better in Year 11 Chemistry

Chemistry is the study of materials and substances and the transformations they undergo through interactions and the transfer of energy. Chemists can use an understanding of chemical structures and processes to adapt, control and manipulate systems to meet particular economic, environmental and social needs. This includes addressing the global challenges of climate change and security of water, food and energy supplies, and designing processes to maximise the efficient use of Earth's finite resources. 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.

#### 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 chemical 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.

#### CAREERS

Studying Chemistry provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. 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, wine making, 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.

### DANCE

#### PREREQUISITE - Grade C (60%) or better in Year 11 Dance

Dance is dynamic and powerful. It embodies our ideas, thoughts, emotions and values and provides a unique opportunity to develop physically, creatively, aesthetically, emotionally and intellectually. People have always danced, and dance continues to evolve as a form of expression, fulfilling a variety of functions in society. As an art form, dance encourages artistic creativity and the active use of the imagination. The study of dance acknowledges the interrelationship between practical and theoretical aspects – the making and performing of movement and the appreciation of its meaning. It allows students to make and present dance relevant to their lives.

The Dance ATAR course develops and presents ideas through a variety of genres, styles and forms, as it provides a unique way in which to express our cultural view and understanding of the world. 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 make dance works.

Dance has examinable practical and written components.

#### Unit 3 – Youth voice

This unit focuses on creating dance that explores original concepts and expresses personal ideas. The students will consider how dance reflects and is shaped by society and its values.

#### Unit 4 – Extending the boundaries

This unit focuses on the development of choreographic ideas to create unique dance work with personal style. The students analyse critically and evaluate the relationships between dance works, audiences and contexts.

### DRAMA

PREREQUISITE - Nil

Drama is a vibrant and varied art form found in play, storytelling, street theatre, festivals, film, television, interactive games, performance art and theatres. It is one of the oldest art forms and part of our everyday life.

Through taking on roles and enacting real and imagined events, performers engage audiences who suspend their disbelief to enter the world of the drama. Through drama, human experience is shared. Drama entertains, informs, communicates and challenges.

Drama has examinable practical and written components.

#### Unit 3 – Reinterpretation of drama for contemporary audiences

This unit focuses on reinterpretation of dramatic text, context, forms and styles for contemporary audiences through applying theoretical and practitioner approaches.

Unit 4 – Contemporary and devised drama

This unit focuses on interpreting, manipulating and synthesising a range of practical and theoretical approaches to contemporary and devised drama.

#### CAREERS

Drama provides an excellent complement to studies in English and Literature. It is relevant to courses at the Academy of Performing Arts, Arts Management, theatre work and teaching.

# ECONOMICS

#### PREREQUISITE - Grade C (60%) or better in Year 11 Economics

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.

#### Unit 3 – Australia and the global economy

This unit 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.

#### Unit 4 – Economic policies and management

This unit explores the economic objectives of the Australian Government and the actions and policies taken in the pursuit of these objectives. Changes in the level of economic activity influence the policy mix and the government's capacity to achieve its objectives.

#### CAREERS

Banking, Business, Commerce, Community Development, Economist, Industry, Government, Marketing, Public Service, Political Adviser, Public Relations.

## **ENGINEERING STUDIES (ATAR)**

PREREQUISITE - Grade C (60%) or better in Year 11 Engineering Studies

Engineers are involved in the design, manufacture and maintenance of a diverse range of products and infrastructure integral to the functioning of society, business and industry. They rely strongly on their creativity and problem solving to turn ideas into reality by applying lateral thinking and mathematical and scientific principles to develop solutions to problems, needs and opportunities. An engineer also needs to be socially aware and involved in broader community issues: impacts on the environment, sustainable energy, health and safety, and consultation processes to understand social attitudes and opinion.

#### Unit 3

In this unit, students develop their understanding of core and specialist area theory. They also study the impacts of obtaining and using the different forms of renewable and non-renewable energy on society, business and the environment.

Students use the engineering design process beginning with the development of a comprehensive design brief that has a focus on a problem, need or opportunity. They synthesise responses to the brief by engaging in a range of activities that include: detailed research of similar existing engineered products; construction materials and components; sketching, drawing and notating concepts; analysing and justifying the choice of the most promising of these for production as a prototype or working model. Students refine their understanding and skills of the engineering design process, undertaking tasks to produce, test and evaluate the product.

#### Unit 4

In this unit, students consider and analyse the stages within the life cycle of engineering products. Students develop and demonstrate an understanding of the impacts on society, business and the environment that occur during the life cycle of engineered products.

Students continue to refine their understanding and skills of the engineering design process, undertaking tasks to produce, test and evaluate the product. Core and specialist area theory continues to be studied to forge greater understanding of the scientific, mathematical and technical concepts that explain how engineered products function

#### CAREERS

Engineering, Mechanics, Electrical, Electronics, Science and Education.

# **ENGLISH (ATAR)**

#### PREREQUISITE - Grade C (60%) or better in Year 11 English ATAR

The English ATAR course focuses on developing students' analytical, creative, and critical thinking and communication skills in all language modes. It encourages students to critically engage with texts from their contemporary world, with texts from the past and with texts from Australian and other cultures. Such engagement helps students develop a sense of themselves, their world and their place in it.

#### Unit 3

Students explore representations of themes, issues, ideas and concepts through a comparison of texts. They analyse and compare the relationships between language, genre and contexts, comparing texts within and/or across different genres and modes. Students recognise and analyse the conventions of genre in texts and consider how those conventions may assist interpretation. Students compare and evaluate the effect of different media, forms and modes on the structure of texts and how audiences respond to them. Understanding of these concepts is demonstrated through the creation of imaginative, interpretive, persuasive and analytical responses.

#### Unit 4

Students examine different interpretations and perspectives to develop further their knowledge and analysis of purpose and style. They challenge perspectives, values and attitudes in texts, developing and testing their own interpretations through debate and argument. Through close study of texts, students explore relationships between content and structure, voice and perspectives and the text and context. This provides the opportunity for students to extend their experience of language and of texts and explore their ideas through their own reading and viewing. Students demonstrate understanding of the texts studied through creation of imaginative, interpretive, persuasive and analytical responses.

# ENGLISH AS AN ADDITIONAL LANGUAGE OR DIALECT

# PREREQUISITE - Grade C (60%) or better in Year 11 English as an Additional Language or Dialect

The English as an Additional Language or Dialect (EAL/D) ATAR course focuses on language learning and the explicit teaching of the structure, linguistic features and sociolinguistic and sociocultural aspects of Standard Australian English (SAE). Through close study of language and meaning, students of English as an Additional Language or Dialect explore how learning in and through English language and literature influences their own and others' personal, social and cultural identities and thought processes. They develop skills that enable them to use different registers of spoken and written SAE so they can communicate effectively in a range of contexts and for a variety of purposes in order to become effective cross-cultural users of language and dialect. In the Western Australian context, the English as an Additional Language or Dialect ATAR course makes specific provision for the development of SAE by users of Aboriginal English (AE) in a bi-dialectal approach based on the growing understanding of Aboriginal English as a marker of identity and deep level cultural conceptualisations.

#### Unit 3

Focuses on analysing how language choices are used to achieve different purposes and effects in a range of contexts. SAE language skills are developed so that they can be used to describe, inform, express a point of view and persuade for different purposes and audiences. The ways in which language choices shape meaning and influence audiences are explored through the study and creation of a range of oral, written and multimodal texts. The representation of ideas, attitudes and values and how these vary across cultures and within different contexts, particularly the Australian context, is analysed and evaluated. Effective and independent research skills are consolidated throughout the unit.

#### Unit 4

Focuses on analysing, evaluating and using language to represent and respond to issues, ideas and attitudes in a range of contexts. By extending and consolidating language and communication skills, critical use of SAE for a range of contexts, purposes and audiences is developed. Independent and collaborative investigation and analysis are used to explore how language and texts achieve specific purposes and effects. Extended oral, written and multimodal texts and presentations are created, adapted and refined for a variety of contexts, purposes and audiences. Effective research strategies and referencing protocols are used to present ideas, information, conclusions, arguments and recommendations.

#### Eligibility

The English as an Additional Language or Dialect 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.

There are specific eligibility criteria for enrolment into Year 12. Students who fulfil any of these conditions are eligible to enrol. 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 on the English as an Additional Language or Dialect course page.

# FRENCH: SECOND LANGUAGE

PREREQUISITE - Grade C (60%) or better in Year 11 French: Second Language

The French: Second Language ATAR course can connect to the world of work, further study and travel. It also offers opportunities for students to participate in student exchange programs between Western Australia and France. The French: Second Language ATAR course is designed to equip students with the skills needed to function in an increasingly globalised society, a culturally and linguistically diverse local community, and to provide the foundation for life-long language learning.

This course is aimed at students for whom French 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 French language and culture through classroom teaching in an Australian school, or similar environment, where English is the language of school instruction. Students have typically studied French for 200–400 hours at the commencement of Year 11 and may have experienced some short stays or exchanges in a country where the language is a medium of communication.

French has examinable practical and written components.

#### Unit 3

This unit focuses on *Les médias* (The media). Through the three topics: Technology and me, Film and music, and in the media, students extend and refine their communication skills in French and gain a broader and deeper understanding of the language and culture.

#### Unit 4

This unit focuses on *Le monde qui nous entoure* (The world around us). Through the three topics: Planning my future, Migrant experiences, and Youth issues, students extend and refine their communication skills in French and gain a broader and deeper understanding of the language and culture.

# **GEOGRAPHY (ATAR)**

PREREQUISITE - Grade C (60%) or better in Year 11 Geography

The study of geography draws on students' curiosity about the diversity of the world's places and their peoples, cultures and environments. It enables them to appreciate the complexity of our world and the diversity of its environments, economies and cultures and use this knowledge to promote a more sustainable way of life and awareness of social and spatial inequalities.

In the senior secondary years, the Geography ATAR course provides a structured, disciplinary framework to investigate and analyse a range of challenges and associated opportunities facing Australia and the global community. These challenges include rapid change in biophysical environments, the sustainability of places, dealing with environmental risks, and the consequences of international integration.

Unit 3 – Global environmental change

In this unit, students assess the impacts of land cover transformations with particular reference to climate change or biodiversity loss.

Unit 4 – Planning sustainable places

In this unit, students investigate how the outcomes of processes vary depending on local responses and adaptations, for example, population growth and decline, and economic restructuring. Students also examine the causes and consequences of urbanisation as well as challenges that exist in metropolitan and regional centres and megacities.

#### CAREERS

Agronomy, Cartography, Community Development, Demography, Diplomacy, Economic Development, Environmental Science, Geology, Land Care, Local Government, Natural Resource Management, Public Service, Surveying, Teaching, Town Planning.

### **HEALTH STUDIES (ATAR)**

#### PREREQUISITE - Grade C (60%) or better in Year 11 Health Studies

The Health Studies ATAR course focuses on the study of health as a dynamic quality of human life. Students undertaking this course develop the knowledge, understanding and skills necessary to promote an understanding of the importance of personal and community action in promoting health. The influence of social, environmental, economic and biomedical determinants of health is a key focus of the course. Other course content includes the influence of beliefs, attitudes and values on health behaviour, and the importance of self-management and interpersonal skills in making healthy decisions. Using the inquiry process, students draw on their knowledge and understandings of health concepts and investigate health issues of interest. Through this process, they develop research skills that can be applied to a range of health issues or concerns. This course will prepare students for career and employment pathways in a range of health and community service industries. Students will have the opportunity to develop key employability and life skills, including communication, leadership, initiative and enterprise. Inquiry skills will equip students to adapt to current and future studies and work environments

#### Unit 3

This unit focuses on the health of specific populations and reasons why some groups do not enjoy the same level of health as the general population. Students learn about factors creating these disparities and ways of improving the health and wellbeing of specific groups. Students apply inquiry skills to examine and interpret data and explain and respond to inequities in health.

#### Unit 4

This unit focuses on local, regional and global challenges to health. Students learn about the impact of determinants on global health inequities and explore approaches to address barriers preventing groups from experiencing better health. Students apply well-developed health inquiry skills to analyse health issues, develop arguments and draw evidence-based conclusions.

#### CAREERS

Occupational Therapist, Speech Therapist, Nursing, Physical and Health Education Teaching, Environmental Scientist, Psychologist, Medical professions, Medical Technician.

# HUMAN BIOLOGY

#### PREREQUISITE - Grade C (60%) or better in Year 11 Human Biology

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.

#### 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.

#### CAREERS

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. Appreciation of the range and scope of such professions broadens their horizons and enables them to make informed choices. This helps to prepare all students, regardless of their background or career aspirations, to take their place as responsible citizens in society.

# LITERATURE

#### PREREQUISITE - Grade C (60%) or better in Year 11 Literature

The Literature ATAR course focuses on the study of literary texts and developing students as independent, innovative and creative learners and thinkers who appreciate the aesthetic use of language; evaluate perspectives and evidence; and challenge ideas and interpretations. The Literature ATAR course explores how literary texts construct representations, shape perceptions of the world and enable us to enter other worlds of the imagination. In this subject, students actively participate in the dialogue of literary analysis and the creation of imaginative and analytical texts in a range of modes, media and forms.

#### Unit 3

Unit 3 develops students' knowledge and understanding of the relationship between language, culture and identity in literary texts. Students inquire into the power of language to represent ideas, events and people, comparing these across a range of texts, contexts, modes and forms. Through critical analysis and evaluation, the values and attitudes represented in and through texts and their impact on the reader are examined. Throughout the unit, students create analytical responses that are characterised by a confident, engaging style and informed observation. In creating imaginative texts, students experiment with language, adapt forms and challenge conventions and ideas.

#### Unit 4

Unit 4 develops students' appreciation of the significance of literary study through close critical analysis of literary texts drawn from a range of forms, genres and styles. Students reflect upon the creative use of language, and the structural and stylistic features that shape meaning and influence response. The unit focuses on the dynamic nature of literary interpretation and considers the insights texts offer, their use of literary conventions and aesthetic appeal. Analytical responses demonstrate increasing independence in interpreting texts and synthesising a range of perspectives into critical and imaginative responses. In creating imaginative texts, students experiment with literary conventions and reflect on how the created text takes into account the expectations of audiences.

#### CAREERS

Law, Journalism, Library Studies, Arts and Teaching.

# MATHEMATICS: APPLICATIONS

#### PREREQUISITE - Grade C (60%) or better in Year 11 Mathematics: Applications

Mathematics Applications is an ATAR course which focuses on the use of mathematics to solve problems in contexts that involve financial modelling, geometric and trigonometric analysis, graphical and network analysis, and growth and decay in sequences. It also provides opportunities for students to develop systematic strategies based on the statistical investigation process for answering questions that involve analysing univariate and bivariate data, including time series data.

#### Unit 3

Contains the three topics:

- Bivariate data analysis
- Growth and decay in sequences
- Graphs and networks

'Bivariate data analysis' introduces students to some methods for identifying, analysing and describing associations between pairs of variables, including using the least-squares 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' introduce students to the language of graphs and the way in which graphs, represented as a collection of points and interconnecting lines, can be used to analyse everyday situations, such as a rail or social network.

#### Unit 4

Contains the three topics:

- Time series analysis
- Loans, investments and annuities
- Networks and decision mathematics.

'Time series analysis' continue 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, 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' use networks to model and aid decision making in practical situations.

#### CAREERS

Actuary, Biologist, Cartographer, Commerce, Computer Science, Finance, Geographer, Geologist, Hydrologist, Nurse, Operations Research, Sales, Statistician, Teacher, Urban Planner.

# **MATHEMATICS: METHODS**

PREREQUISITE - Grade C (60%) or better in Year 11 Mathematics: Methods

Mathematics Methods is an ATAR course which focuses on the use of calculus and statistical analysis. The study of calculus provides a basis for understanding rates of change in the physical world, and includes the use of functions, their derivatives and integrals, in modelling physical processes. The study of statistics develops students' ability to describe and analyse phenomena that involve uncertainty and variation.

Unit 3

Contains the three topics:

- Further differentiation and applications
- Integrals
- Discrete random variables.

The study of calculus continues by introducing the derivatives of exponential and trigonometric functions and their applications, as well as some basic differentiation techniques and the concept of a second derivative, its meaning and applications. The aim is to demonstrate to students the beauty and power of calculus and the breadth of its applications. The unit includes 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. Discrete random variables are introduced, together with their uses in modelling random processes involving chance and variation. The purpose here is to develop a framework for statistical inference.

#### Unit 4

Contains the three topics:

- The logarithmic function
- Continuous random variables and the normal distribution
- Interval estimates for proportions.

The logarithmic function and its derivative are studied. Continuous random variables are introduced and their applications examined. Probabilities associated with continuous distributions are calculated using definite integrals. In this unit, students are introduced to one of the most important parts of statistics, namely, statistical inference, where the goal is to estimate an unknown parameter associated with a population using a sample of that population. In this unit, inference is restricted to estimating proportions in two-outcome populations. Students will already be familiar with many examples of these types of populations.

#### CAREERS

Actuary, Air Traffic Control, Analyst, Architect, Biologist, Cartographer, Chemist, Commerce, Computer Science, Doctor, Economist, Engineer, Finance, Geographer, Geologist, Hydrologist, Operations Research, Statistician, Stockbroker, Teacher, Urban Planner.

## **MATHEMATICS: SPECIALIST**

# PREREQUISITE - Grade C (60%) or better in Year 11 Mathematics: Specialist and Methods

Mathematics Specialist is an ATAR course which provides opportunities, beyond those presented in the Mathematics Methods ATAR course, to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. The Mathematics Specialist ATAR course contains topics in functions and calculus that build on and deepen the ideas presented in the Mathematics Methods ATAR course, as well as demonstrate their application in many areas. This course also extends understanding and knowledge of statistics and introduces the topics of vectors, complex numbers and matrices. The Mathematics Specialist ATAR course is the only ATAR mathematics course that should not be taken as a stand-alone course.

#### Unit 3

This unit contains the three topics:

- Complex numbers
- Functions and sketching graphs
- Vectors in three dimensions

The Cartesian form of complex numbers was introduced in Unit 2, and in Unit 3, the study of complex numbers is extended to the polar form. The study of functions and techniques of calculus begun in the Mathematics Methods ATAR course is extended and utilised in the sketching of graphs and the solution of problems involving integration. The study of vectors begun in Unit 1, which focused on vectors in one- and two-dimensional space, is extended in Unit 3 to three-dimensional vectors, vector equations and vector calculus, with the latter building on students' knowledge of calculus from the Mathematics Methods ATAR course. 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.

#### Unit 4

This unit contains the three topics:

- Integration and applications of integration
- Rates of change and differential equations
- Statistical inference

In this unit, the study of differentiation and integration of functions is continued, and the techniques developed from this and previous topics in calculus are applied to the area of simple differential equations, in particular in biology and kinematics. These topics serve to demonstrate the applicability of the mathematics learnt throughout this course. Also, in this unit, all of the students' previous experience in statistics is drawn together in the study of the distribution of sample means. This is a topic that demonstrates the utility and power of statistics.

#### CAREERS

Actuary, Air Traffic Control, Analyst, Architect, Biologist, Cartographer, Chemist, Commerce, Computer Science, Doctor, Economist, Engineer, Finance, Geographer, Geologist, Hydrologist, Operations Research, Statistician, Stockbroker, Teacher, Urban Planner.

## **MODERN HISTORY**

PREREQUISITE - Grade C (60%) or better in Year 11 Modern History

The Modern History ATAR course enables students to study the forces that have shaped today's world and provides them with a broader and deeper comprehension of the world in which they live. While the focus is on the 20th century, the course refers back to formative changes from the late 18th century onwards and encourages students to make connections with the changing world of the 21st century.

Modern history enhances students' curiosity and imagination and their appreciation of larger themes, individuals, movements, events and ideas that have shaped the contemporary world. The themes that run through the units include: local, national and global conflicts and their resolution; the rise of nationalism and its consequences; the decline of imperialism and the process of decolonisation; the continuing struggle for the recognition of human rights; the transformation of social and economic life; the regional shifts in power and the rise of Asia; and the changing nature and influence of ideologies.

Unit 3 – Modern nations in the 20th century

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. Specifically, students will undertake an investigation into Russia and the Soviet Union 1914–1945.

Unit 4 – The modern world since 1945

This unit examines some significant and distinctive features of the modern world within the period 1945–2001 in order to build students' understanding of the contemporary world – that is, why we are here at this point in time. Specifically, students will undertake an investigation into the changing European world since 1945.

#### CAREERS

Archaeologist, Anthropologist, Advertising, Author, Historian, Journalist, Police Officer, Politician, Psychologist, Public Relations, Public Servant, Social Worker, Teacher, Writer.

## **MUSIC: CONTEMPORARY MUSIC**

PREREQUISITE - Grade C (60%) or better in Year 11 Music: Contemporary Music and additional music lessons.

The Music ATAR course encourages students to explore a range of musical experiences, developing their musical skills, understanding, creative and expressive potential, through the genre of Contemporary/Popular Music. The course consists of a written component, incorporating aural skills, theory and composition, cultural and historical analysis; and a practical component focused on solo and group performance opportunities. The practical component can be delivered in a different context (such as Musical Theatre or Jazz), independent of the written component, and students can choose to perform on an instrument or voice focusing on this different context. Students are required to have two weekly instrumental lessons to assist with the practical component of the course, incorporating technical requirements and repertoire preparation.

The Music course provides opportunities for creative expression, aesthetic appreciation for music across different times, places, cultures and contexts, and development of instrumental and performance skills on selected instruments. Students listen, analyse, compose, and perform 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.

#### Units 3 & 4

Contemporary Music encompasses popular music from the 1950s to the present day. It is predominantly commercial in nature and is constantly evolving through the influence of youth culture and the emergence of new artists and styles.

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 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.

## PHYSICAL EDUCATION STUDIES

PREREQUISITE - Grade C (60%) or better in Year 11 Physical Education Studies

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.

Physical Education Studies has examinable practical and written components. The theoretical component of Physical Education studies will form the majority of class time. Students should be participating in a sport outside of school 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.

#### CAREERS

Fitness, Human Movement, Personal Trainer, Physiotherapy, Sports Science, Teaching, Recreation Centre Management.

## PHYSICS

PREREQUISITE - Grade C (60%) or better in Year 11 Physics and a Mathematics ATAR course

Physics is a fundamental science that endeavours to explain all the natural phenomena that occur in the universe.

Its power lies in the use of a comparatively small number of assumptions, models, laws and theories to explain a wide range of phenomena, from the incredibly small to the incredibly large. 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

#### 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.

#### CAREERS

Studying physics will enable students to become citizens who are better informed about the world around them and who have the critical skills to evaluate and make evidence-based decisions about current scientific issues. The Physics ATAR course will also provide a foundation in physics knowledge, understanding and skills for those students who wish to pursue tertiary study in science, engineering, medicine and technology.

## POLITICS AND LAW

#### PREREQUISITE - Grade C (60%) or better in Year 11 Politics and Law

Politics and law is a critical study of the processes of decision-making concerning society's collective future. The study of politics examines the structures and processes through which individuals and groups with different interests, beliefs and goals, deliberate and negotiate in order to make choices, respond to changing circumstances and enact laws. The study of law examines the system of laws governing the conduct of the people of a community, society or nation, in response to the need for regularity, consistency and justice based upon collective human experience.

A close relationship exists between politics and law. They relate through the judicial, executive and legislative arms of government; together they constitute how societies are governed. Laws generally embody social and political values that usually have a philosophical foundation.

#### Unit 3 – Political and legal power

This unit examines the political and legal system established by the Commonwealth Constitution (Australia) and the power wielded within the system, making reference to particular political and legal developments and issues.

#### Unit 4 – Accountability and rights

This unit examines avenues for, and the effectiveness of, accountability in relation to the three branches of government in Australia. The ways, and the extent to which, rights are protected, and democratic principles are upheld and/or undermined in Australia, and one other country, are also examined.

#### CAREERS

Armed Forces, Journalism, Law Clerk, Lawyer, Police Force, Politician, Security, Teacher, Various Legal Departments.

## PSYCHOLOGY

#### PREREQUISITE - Grade C (60%) or better in Year 11 Psychology

Psychology is the scientific study of how people think, feel and act. It aims to answer important questions such as what factors influence human development. While there are other disciplines that overlap with psychology's main aim to understand humans, psychology is rigorous in its use of scientific method. This allows for systematic exploration into the complexities of human behaviour based on evidence gathered through planned investigations.

#### 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.

#### CAREERS

Health, Education, Social Work, Psychology, Counselling, Law

## VISUAL ARTS (ATAR)

#### PREREQUISITE - Grade C (60%) or better in Year 11 Visual Arts (ATAR)

In the Visual Arts ATAR course, students engage in traditional, modern and contemporary media and techniques within the broad areas of art forms. The course promotes innovative practice. Students are encouraged to explore and represent their ideas and gain an awareness of the role that artists and designers play in reflecting, challenging and shaping societal values. The Visual Arts ATAR course allows students to develop aesthetic understandings and a critical awareness to appreciate and make informed evaluations of art through their engagement of their own art practice and the work of others.

Visual Arts ATAR has examinable practical and written components.

#### 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.

#### 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.

# **COURSE INFORMATION - GENERAL**

## APPLIED INFORMATION TECHNOLOGY

PREREQUISITE - Nil

In this course, students use a range of computer hardware and software to create, manipulate and communicate information. Using a range of applications, students investigate, design, construct and evaluate ICT solutions in a range of environments. The result is a set of skills to equip the student for the 21st century and give them an appreciation of the impact of information technology on society in general.

#### Unit 3 – Media information and communication technologies

The emphasis of this unit is 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 4 – Digital technologies in business

The emphasis of this unit is 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. Students design digital solutions for clients, being mindful of the various impacts of technologies within legal, ethical and social boundaries.

## **BUSINESS MANAGEMENT & ENTERPRISE (GENERAL)**

PREREQUISITE - Recommended Grade C (60%) or better in Year 11 Business Management and Enterprise (General)

The Business Management and Enterprise General gives students the opportunity to understand how vital business is to individuals and society, and how it impacts on many aspects of our lives. This course focuses on the development of enterprising, innovative and creative skills within the business cycle, day-to-day running, continuing viability and expansion of a business. Exposure to a wide range of business activities, management strategies and an understanding of enterprise helps students to appreciate the significance of their role as both participants and consumers in the business world.

#### Unit 3

The focus of this unit is on success in business at a national level. It explores what it takes to be successful beyond the initial start-up stage. Students investigate the features of successful marketing campaigns and report on how businesses succeed and prosper through methods, such as expansion in products, market share or diversification. The unit explores how the marketing plan contributes to the overall business plan.

#### Unit 4

The focus of this unit is on business growth and the challenges faced by businesses expanding at a national level. The unit explores issues in the business environment, including the importance of intellectual property in protecting business ideas. The unit addresses the significance of employee motivation and the development of a business plan in the overall success of expansion.

## CHILDREN, FAMILY AND THE COMMUNITY

PREREQUISITE - Nil

The Children, Family and the Community course provides opportunities for students to develop an understanding of the diversity of the Australian society. Recognising this diversity and promoting inclusivity among the individuals, families and groups makes up our society and provides the foundation for a cohesive community. This course examines the factors that impact on the ability of individuals and families to develop skills that enable them to live independently or to care for others.

#### Unit 3 – Building on relationships

In this unit, students investigate the principles of development and how these relate to the domains and theories of development. Students examine and evaluate the features of products, services and systems for individuals and families. They examine the diverse and dynamic nature of families in Australia. They recognise and acknowledge cultural diversity, and inequity and injustice issues. Students develop effective self-management and interpersonal skills to recognise and enhance personal relationships, enabling them to take active roles in society.

#### Unit 4 – My place in the community

In this unit, students examine the effect on an individual's development and wellbeing in a society characterised by rapid change. They explore contemporary Australian issues or trends relating to families and communities at the state and national level and are introduced to a range of advocacy types. Students examine developmental theories and their influence on cognitive development.

Students use effective self-management and interpersonal skills when developing or assessing products, processes, services, systems or environments.

#### CAREERS

Knowledge understandings and skills gained in the above units are valuable for further study at University or VET. Relevant courses include: Children's Services, Childcare, Teaching, Special Needs Assistant, Social Worker, Hospitality.

## **DRAMA (GENERAL)**

PREREQUISITE

Drama in Year 11

The Drama General course focuses on aesthetic understanding and drama in practice as students integrate their knowledge and skills. They use the elements and conventions of drama to develop and present ideas and explore personal and cultural issues. They engage in drama processes, such as improvisation, play building, text interpretation, playwriting and dramaturgy which allow them to create original drama and interpret a range of texts written or devised by others. Their work in this course includes production and design aspects involving sets, costumes, makeup, props, promotional materials, stage management, front-of-house activities, and sound and lighting. Increasingly, students use technologies, such as digital sound and multimedia. They present drama to a range of audiences and work in different performance settings.

#### Unit 3 - Representational, realist drama

This unit focuses on representational, realistic drama. Students explore techniques of characterisation through different approaches to text interpretation, particularly those based on the work of Stanislavski and others.

#### Unit 4 – Presentational, non-realist drama

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

#### CAREERS

Drama provides an excellent complement to studies in English and Literature. It is relevant to courses at the Academy of Performing Arts, Arts Management, theatre work and teaching.

## **ENGINEERING STUDIES (GENERAL)**

PREREQUISITE - Grade C (60%) or better in Year 11 Engineering Studies (General)

The Engineering Studies General course provides opportunities for students to investigate, research and present information, design and make products and undertake project development. These opportunities allow students to apply engineering processes, understand underpinning scientific and mathematical principles, develop engineering technology skills and explore the interrelationships between engineering and society.

The course is essentially a practical course focusing on real-life contexts. It aims to prepare students for a future in an increasingly technological world, by providing the foundation for life-long learning about engineering. It is particularly suited to those students who are interested in engineering and technical industries as future careers.

Unit 3

In the development of an engineering project, students study core engineering theory and theory in their chosen specialist area. They develop an understanding of the different forms of energy, uses of these different forms and sources of renewable and non-renewable energy. In this unit, students also develop a greater understanding of the engineering design process and learn and apply more complex theory and understanding to a student developed design brief. Given guidelines and a context, students develop and respond to the design brief through a process that requires them to investigate existing products, construction materials and components. Design ideas are developed through annotated sketches and concept drawings. Students select and analyse the most suitable concept for production as a prototype or working model.

Students finalise their chosen design by documenting its specifications in the form of appropriate orthographic drawings and lists of materials and components. They calculate the cost of the prototype or model. They follow a given timeline to undertake tasks required to produce, test and evaluate the product.

Unit 4

In this unit, students develop their understanding of core and specialist area theory to better understand the scientific, mathematical and technical concepts that explain how engineered products function. They study the impact of the different forms of obsolescence in engineering products, on society, business and the environment.

Students refine their understanding of the engineering design process. Students develop a design brief, and respond to the brief, through a process that requires them to engage in a range of activities, and investigate construction constraints, materials and components. Design ideas are developed through annotated sketches and concept drawings. Students select and analyse the most suitable concept for production as a prototype or working model.

#### CAREERS

Engineering, Mechanics, Electrical, Electronics, Science and Education.

## ENGLISH (GENERAL)

PREREQUISITE - Nil

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 English General course is designed to provide students with the skills that will empower them to succeed in a wide range of post-secondary pathways.

#### Unit 3

Focuses on exploring different perspectives presented in a range of texts and contexts. Students:

- explore attitudes, text structures and language features to understand a text's meaning and purpose
- examine relationships between context, purpose and audience in different language modes and types of texts, and their impact on meaning
- consider how perspectives and values are presented in texts to influence specific audiences
- develop and justify their own interpretations when responding to texts
- learn how to communicate logically, persuasively and imaginatively in different contexts, for different purposes, using a variety of types of texts.

#### Unit 4

Focuses on community, local or global issues and ideas presented in texts and on developing students' reasoned responses to them.

Students:

- explore how ideas, attitudes and values are presented by synthesising information from a range of sources to develop independent perspectives
- analyse the ways in which authors influence and position audiences
- investigate differing perspectives and develop reasoned responses to these in a range of text forms for a variety of audiences
- construct and clearly express coherent, logical and sustained arguments and demonstrate an understanding of purpose, audience and context
- consider intended purpose and audience response when creating their own persuasive, analytical, imaginative, and interpretive texts.

## FOOD SCIENCE AND TECHNOLOGY

PREREQUISITE - Nil

The Food Science and Technology General course provides opportunities for students to explore and develop food-related interests and skills. Food impacts on every aspect of daily life and is essential for maintaining overall health and wellbeing. Students organise, implement and manage production processes in a range of food environments and understand systems that regulate food availability, safety and quality. Knowledge of the sensory, physical, chemical and functional properties of food is applied in practical situations. Students investigate the food supply chain and value-adding techniques applied to food to meet consumer and producer requirements. Principles of dietary planning, adapting recipes, and processing techniques, are considered for specific nutritional needs of demographic groups. Occupational safety and health requirements, safe food handling practices, and a variety of processing techniques, are implemented to produce safe, quality food products. This course may enhance employability and career opportunities in areas that include nutrition, health, food and beverage manufacturing, food processing, community services, hospitality and retail.

#### Unit 3 – Food science

This unit explores the societal, lifestyle and economic issues that influence food choices. Students research the effect of under-consumption and over-consumption of nutrients on health and investigate a range of diet-related 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, preparation and processing of food.

Students develop their expertise with technology 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 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.

## **GEOGRAPHY (GENERAL)**

PREREQUISITE - Nil

The study of geography draws on students' curiosity about the diversity of the world's places and their peoples, cultures and environments. It enables them to appreciate the complexity of our world and the diversity of its environments, economies and cultures and use this knowledge to promote a more sustainable way of life and awareness of social and spatial inequalities.

In the senior secondary years, the Geography General course provides a structured, disciplinary framework to investigate and analyse a range of challenges and associated opportunities facing Australia and the global community. These challenges include rapid change in biophysical environments, the sustainability of places, dealing with environmental risks and the consequences of international integration.

#### Unit 3 – Natural and ecological hazards

In this unit, students explore the management of hazards and the risks they pose to people and environments. Risk management is defined in terms of preparedness, mitigation and/or prevention.

#### Unit 4 - Global networks and interconnections

In this unit, students explore the economic and cultural transformations taking place in the world, the spatial outcomes of these processes, and their social and geopolitical consequences that will enable them to better understand the dynamic nature of the world in which they live.

#### CAREERS

Students 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. They are able to understand recent and future developments, such as urban planning, climate change, environments at risk, sustainable development practices and the unequal distribution of resources throughout the world.

### **HEALTH STUDIES (GENERAL)**

#### PREREQUISITE - Nil

In this General course students explore health as a dynamic quality of life. They examine the impact of social, environmental, economic and biomedical determinants on health and their collective contribution to health disparities, as well as exploring approaches to address barriers which prevent groups from experiencing better health. Students apply inquiry skills to examine and analyse health issues, develop arguments and draw evidence-based conclusions. The course also provides students with opportunities to develop skills that will enable them to pursue careers in health promotion, research or community health care.

#### Unit 3

This unit focuses on building students' knowledge and understandings of health determinants and their interaction and contribution to personal and community health. Students define and consolidate understandings of health promotion and are introduced to key health literacy skills. Students expand on their understanding of the impact of beliefs on health behaviour and continue to develop personal and interpersonal skills which support health. Inquiry skills are consolidated and applied, including the ability to identify trends and patterns in data.

#### Unit 4

This unit focuses on the impact of health determinants on personal and community health. The concept of community development and the importance of participation and empowerment is introduced. Students learn about how chronic conditions are defined in the National Strategic Framework. The use of social marketing in health is explored and students are introduced to emotional intelligence as a mechanism for perceiving, controlling and evaluating emotions. Students continue to refine inquiry skills as they address relevant issues and produce insightful and well-researched reports.

#### CAREERS

Nurse, medical professional, occupational therapist, physiotherapist, health promotion officer, community development officer, social worker.

## INTEGRATED SCIENCE

PREREQUISITE - Nil

The Integrated Science General course is a course grounded in the belief that science is, in essence, a practical activity. From this stems the view that conceptual understandings in science derive from a need to find solutions to real problems in the first instance. The inquiring scientist may then take these understandings and apply them in a new context, often quite removed from their original field. This course seeks to reflect this creative element of science as inquiry. It should involve students in research that develops a variety of skills, including the use of appropriate technology, an array of diverse methods of investigation, and a sense of the practical application of the domain. It emphasises formulating and testing hypotheses and the critical importance of evidence in forming conclusions. This course enables them to investigate science issues in the context of the world around them and encourages student collaboration and cooperation with community members employed in scientific pursuits. 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.

Unit 3 – Environmental Science and Horticulture

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 – Science of Flight

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.

#### CAREERS

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

## **MATERIALS DESIGN & TECHNOLOGY**

PREREQUISITE - Nil

The Materials Design and Technology General course is a practical course. Students will work with timber or metal to design and manufacture products as the major focus for this course. Students have the opportunity to develop and practise skills that contribute to creating a physical product, while acquiring an appreciation for the application of the design process, and an understanding for material sustainability. Students will learn and practise manufacturing processes and technologies, including principles of design, planning and management.

#### Two contexts offered = Metal and Wood

#### 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. They 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 their 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.

## MATHEMATICS: ESSENTIAL

PREREQUISITE - Nil

Mathematics Essential is a General course which 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 course provides the opportunity for students to prepare for post-school options of employment and further training.

#### Unit 3

This unit includes the following four topics:

- Measurement
- Scales, plans and models
- Graphs in practical situations
- Data collection

This unit provides students with the mathematical knowledge, understanding and skills relating to concepts and techniques used in measurement, scales, plans and models, graphs and data collection; apply reasoning skills and solve practical problems in measurement, scales, plans and models, graphs and data collection; communicate their arguments and strategies when solving mathematical and statistical problems using appropriate mathematical or statistical language; interpret mathematical and statistical information and ascertain the reasonableness of their solutions to problems.

#### Unit 4

This unit includes the following three topics:

- Probability and relative frequencies
- Earth geometry and time zones
- Loans and compound interest

This unit provides students with the mathematical knowledge, understanding and skills relating to concepts and techniques used in probability and relative frequencies, earth geometry and time zones, loans and compound interest; apply reasoning skills and solve practical problems in probability and relative frequencies, earth geometry and time zones, loans and compound interest; communicate their arguments and strategies when solving mathematical problems using appropriate mathematical or statistical language; interpret mathematical information and ascertain the reasonableness of their solutions to problems.

## MEDIA PRODUCTION AND ANALYSIS

PREREQUISITE - Nil

The Media Production and Analysis General course aims to prepare all students for a future in a digital and interconnected world by providing the skills, knowledge and understandings to tell their own stories and interpret others' stories. Students learn the languages of media communication and how a story is constructed using representations. 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.

#### Unit 3 – Entertainment

Within this broad focus, students will expand their understanding of media languages, learning how codes and conventions are used to construct entertainment media in the mediums of television and internet. Students will cover all the material through an exploration of marketing and advertising; analysing the strategies and mediums advertisers employ to target the consumer audience.

#### Unit 4 – Representation and Reality

Students will consider different types of representations/stereotypes presented in the media. They will look into their influence on society as a whole, and how society then has an impact on the content producers are creating. Some of the television genres covered are lifestyle and reality television.

## **MUSIC: CONTEMPORARY MUSIC (GENERAL)**

PREREQUISITE - Year 11 Music: Contemporary Music and additional music lessons.

The Music General course encourages students to explore a range of musical experiences through different musical contexts. The course consists of a written component and a practical component, incorporating the following content areas: Aural and theory, Composing and arranging, Investigation and analysis, and Performance. Students can choose to perform on voice or instrument, submit a composition portfolio or complete a production/practical project to fulfil the requirements of the practical component.

The Music General course provides an opportunity for creative expression, the development of aesthetic appreciation and the pleasure and satisfaction that comes from listening to and making music independently and collaboratively with others. Studying music may also provide a pathway for further training and employment in a range of professions within the music industry.

Units 3 & 4

In this unit, students develop their skills, knowledge and understanding to listen to, compose, perform and analyse music. They develop aural and music literacy skills and learn how the elements of music can be applied when performing, composing and responding to music. Students learn about how music is created and performed, analysing musical works and exploring how social, cultural and historical factors shape music in the specific context selected for study.

Students develop skills, confidence and stylistic awareness to engage in music making as performers and audience members both individually and collaboratively.

## OUTDOOR EDUCATION

#### PREREQUISITE - Recreational Skipper's Ticket

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.

#### Unit 3 Sailing

The focus for this unit is outdoor program development, focussing on sailing. This provides the opportunity for students to address planning considerations, including risk assessment and management, emergency response, and logistical planning in the outdoors. In this unit, students plan and then participate in an extended expedition. Students use theories and models to determine how these programs impact on personal and group development and understand leadership strategies to add value to outdoor experiences. They continue to develop a deeper understanding of the environment and its current state, examine how human relationships with the environment have changed over time, and develop strategies to encourage positive relationships with nature in others.

Students are required to attend a camp which involves sailing, usually at Rottnest Island. Camp attendance requires students to obtain a Skippers Ticket, obtained in Year 11. Failure to attend camp will result in an E grade.

#### Unit 4 Hiking

The focus for this unit is developing and facilitating outdoor experiences, focussing on hiking. Students draw from their previous experiences and knowledge to synthesise a range of ideas, skills, technologies and processes to develop, manage, instruct and facilitate experiences in the outdoors. They explore applications of outdoor experiences that address issues and requirements of specific groups. Students continue to develop and apply theoretical understandings in facilitating experiential learning and use instructional strategies to assist others to develop a positive relationship with nature. They understand the concepts related to outdoor leadership and provide meaningful experiences for people to explore values related to self, others, and the environment.

Students are required to attend a camp which involves hiking, usually around Margaret River. Failure to attend camp will result in an E grade.

## PHYSICAL EDUCATION STUDIES (GENERAL)

PREREQUISITE - Nil

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.

#### Unit 3

The focus of this unit is simple movement, biomechanical, physiological, psychological, functional anatomy and motor leaning 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.

## **VISUAL ARTS (GENERAL)**

PREREQUISITE - Nil

In the Visual Arts General course, students engage in traditional, modern and contemporary media and techniques within the broad areas of art forms. The course promotes innovative practice. Students are encouraged to explore and represent their ideas and gain an awareness of the role that artists and designers play in reflecting, challenging and shaping societal values. Students are encouraged to appreciate the work of other artists and engage in their own art practice.

#### 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.

#### 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.

# **COURSE INFORMATION - VET**

## **CERTIFICATE II IN WORKPLACE SKILLS**

#### Description

This qualification reflects the role of individuals in a variety of entry-level Business Services job roles.

This qualification also reflects the role of individuals who have not yet entered the workforce and are developing the necessary skills in preparation for work.

These individuals carry out a range of basic procedural, clerical, administrative or operational tasks that require self-management and technology skills. They perform a range of mainly routine tasks using limited practical skills and fundamental operational knowledge in a defined context. Individuals in these roles generally work under direct supervision.

#### Pathways from the qualification

After achieving this qualification candidates may undertake a variety of Certificate III qualifications.

#### Completion

It is the aim to deliver the Certificate in 1 year. In order to complete the qualification students must demonstrate to a satisfactory standard all competencies within the package.

Compulsory Core Units		
BSBCMM211	Apply communication skills	
BSBOPS201	Work effectively in business environments	
BSBPEF202	Plan and apply time management	
BSBSUS211	Participate in sustainable work practices	
BSBWHS211	Contribute to the health and safety of self and others	
Electives (11)		
BSBCRT201	Develop and apply thinking and problem-solving skills	
BSBTEC101	Operate digital devices	
BSBTEC201	Use business software applications	
BSBTEC202	Use digital technologies to communicate in a work environment	
BSBTWK201	Work effectively with others	

#### Example of a typical Certificate II in Business Qualification

#### Future Employment

Completed certificates carry considerable points towards VET entry aggregate. Graduates will gain the skills and knowledge to undertake entry level administrative roles such as Receptionist, Administrative Assistant, Clerical Officer.

## **CERTIFICATE II IN FINANCIAL SERVICES**

#### Description

This qualification is intended to meet the financial literacy and basic financial skill needs of remote and indigenous communities or new entrants wishing to build potential pathways into the industry, particularly through VET in Schools programs.

#### Pathways from the qualification

This qualification has elective options in financial literacy and basic industry skills. However, Certificate III in Financial Services, Certificate III in Accounts Administration or a qualification in the personal injury management or insurance sectors may be more suitable for entry level employment opportunities.

#### Completion

It is the aim to deliver the Certificate in 1 year. In order to complete the qualification students must demonstrate to a satisfactory standard all competencies within the package.

Compulsory Core Units		
BSBWHS201	Contribute to the health and safety of self and others	
BSBWOR203	Work effectively with others	
BSBWOR204	Use business technology	
FNSINC301	Work effectively in the financial services industry	
Electives (4)		
FNSFLT201	Develop and use a personal budget	
FNSFLT203	Develop understanding of debt and consumer credit	
FNSFLT205	Develop knowledge of the Australian financial system and markets	
FNSFLT206	Develop understanding of taxation	

#### Example of a typical Certificate II in Financial Services Qualification

#### Future Employment

Financial services work can be used as a basis for careers in areas such as office management, marketing records management, project management, sales and human resources.

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# **FREQUENTLY ASKED QUESTIONS**

### FREQUENTLY ASKED QUESTIONS

## Q: I don't know what I want to be, how can I possibly choose courses?

A: If you still do not know what you want to be when you come to filling out your grid, go with your strengths and do the highest Course of which you are capable. It is better to leave your options open.

## Q: What happens if I don't want to go to school in Year 11 & 12?

A: Legislature states: All young people in Western Australia, in their 17th and 18th year, must be in education, training or employment. What this means is that you do not have the option of staying home. Neither are you allowed to leave school in order to look for employment or wait for a course to begin.

If traditional schooling is really not for you there are a number of things you can do (i.e. VET, apprenticeship, traineeship, employment etc...). If you need any help with any of your options you can contact a Participation Coordinator at Peel-Fremantle Education Office Note: If you leave school and go to a course provided by a community organisation, want to take up full-time employment or do a combination of school, training and/or employment then you need to submit a Notice of Arrangements through the school.

# Q: Will I be able to do a course if my marks in Year 11 don't match up to the prerequisites?

A: The ability for a student to graduate is restricted if a course is chosen without meeting prerequisites. However, we will counsel you about the difficulty of the task before you and give our honest opinion on the likelihood of your success based on previous academic performance, application to study and our understanding of the complexity of the course.

# Q: Will I be able to change my mind about the courses I chose after I complete the course selctions?

A: Yes. If it is before the year has begun <u>and</u> if there is room in the class you wish to move into. Once the course has started it is more difficult to change.

## Q: I've chosen badly, the course is too hard - I need to get out.

A: This happens and it is still possible to change your course, but only if you do it early. All General courses have an Externally Set Task in Term Two, in order to be fully prepared for this task students should be settled into their courses by the middle of Term One.

## Q: The change date has passed but now I want to change a course. Can I?

A: No, in Year 12 courses are paired units. Once the School Curriculum and Standards Authority date is passed (usually mid March Term One) students cannot change their courses. As mentioned above students should have changed earlier than this date in order to allow adequate preparation for the Externally Set Task.

## Q: I'm struggling with my courses what can I do?

A: Make sure you complete your class work and homework tasks and review your solutions. If you do not understand where you went wrong, tell your teacher so that he/she can work with you to clarify any problems.

Go to the scheduled tutoring for that course. If you need help with organisation and/or study, see your Head of Year and they will organise a teacher mentor to help you.

## Q: Can I choose two subjects on the same gridline?

A: No. All classes on the same gridlines run at the same time.

## FREQUENTLY ASKED QUESTIONS

Q: I am used to a particular teacher. Can I request that they teach me again?

A: No. We do not arrange classes based on student preferences for a particular teacher.

#### Q: Can I have a 'Study Line?'

A: This depends on what Year you are in and your circumstances. If you are in Year 12 and you are doing four courses with a final exam, you may choose to take a Study Line. You will be required to either sit at the back of an existing classroom or in a room monitored by a teacher and silently study. This can be of great benefit if used wisely. There are a few (extremely rare) exceptions to this rule and we look at each case individually. In the past we have accommodated students with a long-term illness that necessitated a hospital stay and a member of a National sporting team with a large time commitment to training. If you are unsure, feel free to contact the College.

# Q: We have got a really good price on a holiday and wish to leave early/return later than the term holidays.

A: The College strongly recommends that you do not withdraw your child from scheduled classes for holidays under any circumstances. Time missed from direct teaching has proven to be detrimental to your child's educational success. It is important that students be given the greatest opportunity for success. Please ensure you ring and discuss this with the Deputy of Curriculum. Students missing from class for holidays without prior knowledge will be awarded a zero for assessments not done.

#### Q: Can I have flexitime built into my schedule?

A: No, unless extreme circumstances which will need to be discussed with the Director of Studies, Deputy of Curriculum or the Principal.

#### Q: Are Physical Education and Christian Education really necessary when I could be studying in the Research & Study Centre?

A: Yes. When you enrolled at the College you agreed to undertake the breadth of the educational experience. Physical Education is mandated by the Government and tends to be recreationally focused as a complement to your academic pursuits. It is an expectation that every child participates.

# Q: I am sick and I will not be able to hand in an assignment/sit a scheduled test what do I do?

A: You MUST read the College Assessment Policy. The situation surrounding a student's absence from an assessment will be considered by the Deputy of Curriculum who will determine if the assessment is included in graded or not.



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