# ST. ANDREW'S GRAMMAR



# YEAR 11 SUBJECT SELECTION HANDBOOK

# Contents

# Introduction

St Andrew's Grammar is committed to providing a broad range of courses so that each student can find a pathway that will enable them to achieve success and a fulfilling career post-school.

All students can work towards the Western Australian Certificate of Education (WACE) and will receive a Western Australian Statement of Student Achievement (WASSA at the end of Year 12.

This handbook presents a summary of the possible courses available at St. Andrew's Grammar, and other necessary information to help Year 10 students and their parents/carers select successful pathways for Year 11 and 12.

This handbook does not stand alone; help, advice and information are available from Mrs Dwyer and all the St. Andrew's Grammar Secondary Teaching staff, your teachers, in particular. The School Curriculum and Standards Authority of Western Australia (SCSA) develops and accredits all Western Australian courses for Year 11 and Year 12 and further information about each course is also available from their website: www.scsa.wa.edu.au

St. Andrew's Grammar offers a full range of courses covering all eight Learning Areas:

- The Arts
- English
- Health and Physical Education
- Language
- Mathematics
- Science
- Humanities and Social Sciences
- Technologies

It may not be possible to timetable some courses presented in this handbook, if they are chosen by a very small number of students. In some cases, subjects with very low numbers in both Year 11 and Year 12 may be composited so that they are taught in the same room at the same time. Certain combinations may not be available where courses are timetabled to run at the same time, the timetable will be designed to suit the choices of most of the students.



# Dates to Note

| | |
|---|---|
| Term 2 Week 9 | Year 10 Subject Selection Information Evening |
| Term 2 Week 10 - Monday | Subject Selections open |
| Term 2 Week 10 – Term 3 Week 3 | Subject selection Interviews with students and parents |

# Expectations of Year 11 Students

Year 11 is an important transition for students in which you will have opportunities to:

- choose six courses appropriate to your interests and abilities
- accept more responsibility for your own academic progress, your success, and your shortcomings
- begin to take on more significant leadership roles and responsibilities within the school
- use your experiences to refine and develop your interests and career paths.

# What Will Students be Working Towards?

## Western Australian Statement of Student Achievement (WASSA)

The WASSA is issued to every Year 12 student at the completion of Year 12. It formally records a student's achievements during year 11 and 12. This is a key document that students can use when applying for further training with TAFE, Universities or when seeking employment. The WASSA may list, as appropriate:

- achievement of WACE requirements
- achievement of literacy (reading and writing) and numeracy standards
- school grades, marks, and combined scores in ATAR course
- school grades and marks in General and Foundation courses
- completed VET qualifications and units of competency
- completed endorsed programs
- service hours

## Western Australian Certificate of Education (WACE)

The Western Australian Certificate of Education (WACE) is awarded to students who have successfully completed senior secondary schooling in WACE studies and have met the WACE requirements. There are different pathways by which WACE may be achieved. This handbook outlines these different pathways. The WACE is recognised nationally by universities and other tertiary institutions, industry, and training providers.

# WACE Requirements

To meet the WACE requirements, a student must:

- complete at least 10 units in year 11 and 10 units in Year 12. (a year long course is equal to two units of study), or equivalent
- meet the literacy and numeracy standards (Band 8 or higher in Yr9 NAPLAN or meeting standard in OLNA)
- complete an English subject in both Year 11 and 12
- receive a total of 14Cs across Year 11 and 12 with a minimum of 6 Cs coming from Year 12
- one pair of Year 12 units from each of List A (arts/languages/social sciences) and List B (mathematics/science/technology)
- meet the achievement standards

St. Andrew's Grammar proposes to offer the following List A and List B subjects. Students will not be permitted to study a course that does not meet this requirement.

| List A<br>(Arts/Languages/Social Sciences) | List B<br>(Mathematics/Science/Technology) |
|---|---|
| English | Health Studies |
| English as an Additional Language/Dialect | Physical Education Studies |
| Modern Greek | Mathematics Specialist |
| Visual Art | Mathematics Methods |
| Modern History | Mathematics Applications |
| Geography | Chemistry |
| Economics | Human Biology |
| Visual Art | Physics |
| Design: Photography | Psychology |
| Children Family & the Community | Biology |
| Materials Design & Tech - Textiles | Health Studies |
| Drama | Physical Education Studies |
| Dance | Physical Education Studies |
| Music | Outdoor Education |
| English | Integrated Science |
| English as an Additional Language/Dialect | Mathematics Essentials |
| Ancient History | Food Science and Technology |
| Career and Enterprise | |
| Politics and Law | |

## Achievement Standard

The achievement standard can be meet through ATAR, General, and Foundation course, VET certificates or endorsed programs. Students must achieve 14 C grades in Year 11 and Year 12 units, including at least six C grades in Year 12 units.

## Units Equivalence

Students may use VET qualifications or Endorsed Programs to meet the 20 unit minimum required to achieve WACE. There are limits to the number of VET qualifications and Endorsed Programs that may contribute. Up to 4 Year 11 units and 4 Year 12 units may be used from completed VET or Endorsed Programs. However, Endorsed Programs may only replace up to two Year 11 course units and two Year 12 course units.

For VET qualifications:

- a Certificate I is equivalent to 2 Year 11 units
- a Certificate II is equivalent to 2 Year 11 and 2 Year 12 units
- a Certificate III or higher is equivalent to 2 Year 11 and 4 Year 12 units.

## Endorsed Programs

Endorsed programs address areas of learning not covered by WACE courses or VET Certificates. An Endorsed Program is a significant learning program that has been developed for students in Years 10, 11 and 12. Examples include training courses developed by the Australian Air Force Cadets, independently administered music exams conducted through Australian Music Examinations Board, speech, and drama courses. These programs can be delivered in a variety of settings by schools, community organisations, universities, training organisations and workplaces. Endorsed programs may replace up to two Year 11 course units and two Year 12 course units you need to achieve your WACE at a C grade level.

Students in the Perth Glory Academy will have the opportunity to complete work for submission as an Endorsed Program. If a student thinks they are participating in other activities that maybe classified as an Endorsed Programs, it is important that they inform the Head of Teaching and Learning.

All endorsed programs successfully completed and reported SCSA:

- are listed on the student's WASSA
- may contribute towards the-depth requirement of the WACE
- may contribute towards the C grade requirement of the WACE.

# Study Options

Year 11 gives you the opportunity to choose courses that reflect your strengths, interests and support your career aspirations. If you enjoy the courses you study, you are more likely to do well. Year 11 students must select 6 courses.

## WACE Courses

There are three types of WACE courses – ATAR, General, and VET (Vocation Education Training). Students may take a mixture of these courses.

## Australian Tertiary Admission Rank (ATAR) courses

ATAR courses are designed for students who are aiming to enrol in a university course directly from school. These courses are examined by SCSA and contribute to the achievement of an ATAR. The ATAR is used to determine eligibility for university entrance. Students seeking to achieve an ATAR will need to complete a minimum of 4 Year 12 ATAR courses, excluding unacceptable combinations.

Students enrolled in Year 12 ATAR courses pair of units are required to sit the external examination. Students who do not sit the examination will not:

- have a course mark or grade recorded on their WASSA
- receive an ATAR course report
- have the pair of units completed in that year contribute towards any of the WACE requirements

## General Courses

General courses are designed for students who are aiming to enter vocationally based training (TAFE) or join the workforce or seek alternative university entry programs once they have finished Year 12. These courses do not have an external examination. However, they each have an Externally Set Task (EST) which is set by SCSA.

Students who choose this pathway must complete 5 general courses or a combination of ATAR and general courses.

## Vocational Education and Training (VET) qualifications

St Andrew's supports a broad range of VET programs to cater for students who wish to gain hands-on experience and prepare themselves for entry into the workplace. As well as school-based Certificate programs, there are also many TAFE and industry-based training opportunities available.

There is a cost associated with enrolling in a Certificate course. Students will also need to make their own way to courses run at TAFE centres. Parents will cover the cost of all required resources and travel expenditure associated with this option.

# Pathways to Achieving WACE

All Year 11 students at St. Andrew's Grammar are expected to study six courses unless there are extenuating circumstances and an exemption is sought from the Principal. Courses can be selected from ATAR course, General courses, and the VET program. There are now four different pathways that students can use to achieve WACE. Before selecting subjects, the first decision that needs to be made is whether a student will follow an ATAR Pathway, General Pathway, or the VET Pathway.

The difference between these two pathways is outlined below:

| | VET | General | General with UniReady | ATAR Pathway |
|---|---|---|---|---|
| Year 11 | Certificate IV plus ATAR English | Five general courses or up to 3 ATAR courses | NA | Four or more ATAR course (Units 1and 2) |
| Year 12 | ATAR English plus other courses. | Five general courses or up to 3 ATAR courses | 4 general courses*plus 2 UniReady courses | Ideally five ATAR courses, four ATAR plus one General is possible. |
| Assessments | All units of competency must be completed to be awarded the qualification | Externally Set Tasks are compulsory for all students enrolled in General course in Year 12 | Externally Set Tasks are compulsory for all students enrolled in General courses in Year 12 plus a pass in the UniReady course | ATAR examinations are compulsory for students enrolled in year 12. |
| Post School Destinations | Equivalent ATAR 70 | ECU Preparation course<br>Notre Dame Foundation Year Program<br>CURTIN Enabling courses<br>Murdoch Enabling courses<br>TAFE Apprenticeships | Equivalent ATAR of 70 for entry into Curtin University only. Only certain programs will be available for enrolment. | ATAR entry to university |

# University Entry

There are different ways that a student may gain entry to university: ATAR, Portfolio Entry, Preparation Courses and through completion of VET courses.

## Australian Tertiary Admission Rank (ATAR)

An Australian Tertiary Admission Rank is calculated using the school assessment and ATAR course examination results combined. The ATAR is used to determine eligibility for university entrance. To be considered for university entry as a school leaver you are expected to:

- Meet the requirements for WACE.
- Study a minimum of 4 ATAR courses in Year 12 (Unit 3 and 4).
- Achieve competence in English as prescribed by the individual universities. UWA, Murdoch, ECU and Curtin require a scaled mark of at least 50 for any ATAR English course. For ECU only, English competency can also be achieved with a C grade or higher in any ATAR English course. Some universities do have concessions available.
- Obtain a sufficiently high ATAR for entry into a course.
- Satisfy any prerequisites as stated by the university, for specific courses.

## Calculating an ATAR

An ATAR ranges from 99.95 to zero and reports a student's rank position relative to all other students who are age appropriate to be in Year 12. It considers the number of students who sit the WACE examinations in any year and the number of people of Year 12 school leaving age in the total population. If you have an ATAR of 70.00, for example, it indicates that you have achieved as well as, or better than, 70% of the Year 12 school leaver age population in the state.

**An ATAR is not a percentage.**

The ATAR allows the results of any WA student applying for university admission interstate to be directly compared with results in other states. All states (except Queensland) report student rankings as an ATAR.

You need at least four scaled scores for an ATAR to be calculated. The ATAR is calculated from your Tertiary Entrance Aggregate (TEA). Your TEA (Tertiary Entrance Aggregate) is the sum of your best four scaled scores. If you have studied Language Other Than English (LOTE) scaled score, Mathematics: Methods ATAR or Mathematics: Specialist ATAR, your TEA will also be comprised of a bonus 10% of your final score for those subjects as well. You will receive this bonus even if the course/s are not in your best four.

## Alternative University Entry

It is possible to achieve entry to certain universities courses without doing a full ATAR program by completing a Portfolio Entry, enrolling in a University Preparation Course, or by completing a VET Certificate IV. Please see the individual universities' websites for up-to-date information.

If you are not committed to immediate university entry, then it is important to remember that State Training providers (TAFE):

- offer practical, vocational training and qualifications as alternative to university studies.
- are recognised by most universities and you may be able to qualify for university entry by this alternative route.

# Course Selection Process

Year 11 course selection at St. Andrew's Grammar is a collaborative process which involves the student, their parents/carers, and a variety of different staff members. Each student and their parents/carers will have the opportunity to meet with the Head of Teaching and Learning and/or the Careers/VET Coordinator, to discuss course selection. Each student's course selection will be reviewed by the Head of Teaching and Learning to ensure the best possible educational outcomes.

## What do I need to think about?

When selecting courses students need to consider the following questions:

- Which courses do they find interesting?
- Have they got the necessary academic background to be successful in their selections?
- Do the proposed course selections maximise the student's post schooling options?

## Where can I get help?

Students can seek information about different courses from the Subject Area Teachers, Heads of Learning Areas, Form Teachers, and Head of Teaching and Learning. It is also important for students to start looking at the various Universities websites and published University Guides (available from the universities websites), as well as State Training Providers (TAFE) websites to start developing ideas about what they would like to do after school. The Tertiary Institutions Service Centre (TISC) also has a very good presentation to help people understand the University entry process as well information on the ATAR required for different course entry at different universities plus information on prerequisite requirements (www.tisc.edu.au).

It is important to listen to the guidance provided by St. Andrew's Grammar staff when selecting courses to study in both year 11 and 12. They have the experience to predict how well students are likely to do in various subjects. 'Trying out' a course for a few weeks in Year 11 is strongly discouraged as it is extremely disruptive to a student's learning and may result in failing to meet the requirements for attaining a C Grade in the subject they are moving to and will leave the student with a lot of assessment to catch up on.

## Will all courses run?

A student's final choice maybe restricted by:

- Timetabling
- Student demand for a course.

It is important that every student understands that the work in Year 11 and 12 is more difficult and more complex than in Years 7 to 10. It is typical than student results will drop by 10-15% from Year 10 to Year 11 due to the increased difficulty of the course work and the adjustment to a different workload. Students will need good study habits, be well organized and take increased responsibility for their learning with the support of their parents and teachers.

Each ATAR course will require a minimum of 2 ½ - 3 hours per week of home study, giving a total time for all courses of at least 15-18 hours per week. General courses will require a minimum of 1-2 hour per course per week.

## Can I change my mind?

Yes, you can but there are restrictions. Each year SCSA sets dates after which students are no longer able to change courses. If a student changes a course before the dates set by SCSA they are expected to catch up on the work that has already been set and the assessment. Also, if a student wishes to change courses after the start of Year 11, the options will be limited to what is available in the timetable.

## How does course selection work at St. Andrew's Grammar?

The following table outlines the process involved in course selection and some important dates.

| Date | What will happen |
|---|---|
| Term 2<br>Week 9 | Parent Information Evening – provides an outline to Course Selection for Year 11 students in 2021. |
| Term 2<br>Week 10 (Mon) | Course selections will open. Student and parents/carers will have 4 weeks in which to select their courses |
| Term 3<br>Week 1 (Fri) | Course selections close |
| Term 2 Week 10 – Term 3 Week 3 | Interviews with parents/carers and students will take place |
| | Students who have selected ATAR EALD, will need to complete, and submit to SCSA Form 1: EALD Eligibility ATAR Student at school within Australia. Once approved, this will provide student with the opportunity to enrol in Year 12 ATAR EALD as well as apply for extra OLNA accommodations, such as time. |
| 16 September | Information provided as to which courses may not be running in 2020. Some students may need to select an alternative course. |
| 5th December | Final day to review of students' course selections based on Semester 2 achievement. Reselection of subjects if required (timetable permitting) |



# THE ARTS

## Head of Learning Area

## Samantha Hunt

# Children, Family and Community

## General

**Course Description**
The Children, Family and the Community course provides opportunities to develop in each student an understanding of the diversity of Australian Society and how individual, family, and societal factors influence the development, health status and wellbeing of infants and children. Christian values are emphasised as the development of children in the cognitive, physical, social, emotional, and spiritual domains are studied.
The course is designed to facilitate the achievement the following four outcomes: exploring human development, applying the technology process to meet human needs, applying self-management and interpersonal skills, understanding of society and support systems.

In order for students to achieve these outcomes, the course presents information and provides practical experiences that are of value for future parenting and/or childcare roles. It also provides a valuable foundation for further courses at both TAFE and university level in fields relating to the care and education of infants and children.

**Prerequisites**
Nil. Students need to have a genuine interest in learning about the development of young children and interacting with them in the various practical components contained within the units of study.

**Career Pathways**
Educations, nursing, community services, childcare and health.

**Year 11**

**Unit 1:** Families and relationships This unit focuses on family uniqueness. Students examine the role of families and the relationships between individuals, families, and their communities. Through an understanding of growth and development, students recognise the characteristics of individuals and families, and that development is affected by biological and environmental influences.

**Unit 2:** Our community This unit focuses on families, relationships and living in communities. The influence of biological and environmental factors, lifestyle behaviours and health status on growth and development is studied. Students explore the health of individuals and communities and the protective and preventative strategies that impact on growth and development.

**Year 12**

**Unit 3:** Building on relationships Students investigate the principles of development. Students examine and evaluate 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 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 and are introduced to a range of advocacy type



# Design: Photography

## General

**Course Description**
In the Design General course students develop skills and processes for current and future industry and employment markets. Students are equipped with the knowledge and skills to understand design principles and processes, analyse problems, and devise innovative strategies through projects. Students will focus on the design context of photography. The goals of the Design General course are to facilitate a deeper understanding of how design works; and how ideas, beliefs, values, attitudes, messages, and information are effectively communicated to specific audiences with specific intentions or purposes via visual media forms. This course aims to achieve these goals by exposing students to a variety of communication forms and a thorough exploration of design. Design projects allow students to demonstrate their skills, techniques and application of design principles and processes; to analyse problems and possibilities; and to devise innovative strategies within design contexts. There is potential for students to develop transferable skills and vocational competencies while devising innovative designs.

In this course, students develop a competitive edge for current and future industry and employment markets. This course also emphasises the scope of design in professional and trade-based industries allowing students to maximise vocational and/or university pathways.

**Prerequisites**
Nil. Whilst not compulsory, it is recommended that students have completed photography in either Year 9 or Year 10.

**Career Pathways**
Product design, Graphic design, Freelance photographer, photojournalist, Web design

**Year 11**
**Unit 1 – Design fundamentals**
The focus of this unit is to introduce design process and practice. Students learn that design can be used to provide solutions to design problems and communication needs.

**Unit 2 – Personal design**
The focus of this unit is personal design. Students learn that they visually communicate aspects of their personality, values and beliefs through their affiliations and their manipulation of personal surroundings and environments.

**Year 12**
**Unit 3 - Product Design**
The focus for this unit is product design. Students learn that the commercial world is comprised of companies, requiring consumer products, services, and brands for a particular audience.

**Unit 4 – Cultural Design**
The focus for this unit is cultural design. Students learn that society is made up of different groups of people who share diverse values, attitudes, beliefs, behaviours, and needs; and that different forms of visual communication transmit these values and beliefs.


**Course Description**
Drama contributes to the development of an understanding of the physical, emotional, intellectual, aesthetic, social, moral, and spiritual dimensions of human experience. The Drama General course engages students in drama processes, such as improvisation, play building, text interpretation, scenography, and dramaturgy. Students work independently and collaboratively, learning time management skills and interpersonal skills. The Drama General course requires them to develop and practise problem-solving through creative and analytical thinking processes. They develop their capacity to respond to, reflect on, and make informed judgements, using appropriate terminology and language to describe, analyse, interpret, and evaluate drama.

**Prerequisites**
Drama experience preferred but not essential, Audition may be required.

**Career Pathways**
The study of the Drama course can contribute to skills applicable in almost any field. It can also lead to employment in the performing arts and related areas.

**Year 11**
**Unit 1: Dramatic Storytelling**
The focus of this unit is dramatic storytelling. Students engage with the skills, techniques, processes, and conventions of dramatic storytelling. Students view, read and explore relevant drama works and texts using scripts and/or script excerpts from Australian and/or world sources.

**Unit 2: Drama Performance Events**
The focus for this unit is drama performance events for an audience other than their class members. In participating in a drama performance event, students work independently and in teams. They apply the creative process of devising and of interpreting Australian and/or world sources to produce drama that is collaborative and makes meaning.

**Year 12**
**Unit 3: Representational, realist drama**
The focus for this unit is representational, realist drama. Students explore techniques of characterisation through different approaches to group-based text interpretation, particularly those based on the work of Stanislavski and others. Students have the opportunity to research and collaboratively workshop, interpret, perform, and produce texts in forms and styles related to representational, realistic drama that educate and present perspectives.

**Unit 4: Presentational, non-realist drama**
The focus of this unit is presentational, non-realist drama. Students explore techniques of role and/or character through different approaches to group-based text interpretation, particularly those based on the work of Brecht and others. Students have the opportunity to research and collaboratively workshop, interpret and perform drama texts related to presentational, non-realistic drama that challenge and question perspectives.




**Course Description**
This is not a traditional sewing course but instead embraces a practical contemporary focus to meet the needs of students seeking to explore opportunities in textiles and fashion design. Students will develop their understanding of how design works within a textiles context and reflect on core design elements of fashion and textiles as a part of the course work. Students explore key design understandings, investigating a range of opportunities to use the design process in order to produce quality textile products. Students will be introduced to the fundamentals of design with a focus on principles and practices including the use of elements in design aesthetics, the influence of consumer markets on design and the consideration of the relationship between design, society, and culture. The awareness of historical design developments and current innovations in textile technology delivered through the course enables students to develop manipulative, organisational and manufacturing skills while building upon their current ability to create, problem-solve, analyse, and communicate.

**Prerequisites**
Prior textiles experience through Year 9 and 10 electives

**Career Pathways**
Fashion Production Assistant, Design Assistant, Pattern Cutter, Sample Machinist, Fashion Event Organiser, Visual Merchandiser, Fashion Illustrator, Retail Fashion Assistant

**Year 11**
**Unit 1: Design, production, and materials**
Students develop an understanding 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 a variety of materials, making appropriate materials selection for design needs. They develop skills and techniques appropriate to the materials and gain practice in planning and managing the production of design projects.

**Unit 2: Client, target audience and market**
Students learn about the nature of designing for a client, target audience or market. They learn about the environmental impacts and issues related to materials and production techniques. They consider environmental issues related to the sustainability and recycling of materials. Students extend their understanding of safe working practices and contemporary manufacturing techniques.

**Year 12**
**Unit 3: Design aesthetics**
Students extend their understanding of design aesthetics through the application of elements and principles of design and the use of creative and critical thinking strategies. They work with a self-directed design brief to design products to meet needs. Students investigate materials and analyse the molecular structure, material characteristics, and methods of processing appropriate to their application and use. They select and use methods for communicating ideas and design development.

**Unit 4: Historical and contemporary design**
Students analyse cultural and social factors which may have influenced historical and contemporary design. They critically examine current products and explore how emerging materials and technologies may affect, and be incorporated into, the design and development of future products. Students incorporate a wide range of design concepts and apply sophisticated conceptualisation skills and production processes to realising design ideas.


**Course Description**
The Visual Art course encourages students to express original ideas and feelings creatively through resolved artworks. Students are given a themed project brief each semester and work in a progressive and explorative manner to produce a highly resolved unique artwork. Each project has flexibility for student modification and encourages individuals to focus on a preferred media in order to achieve a level of mastery in technique. The ATAR course provides opportunities for applied learning but there is a focus on academic learning, suitable for students aspiring to university entry. Students gain knowledge, understanding and appreciation of art and culture, both in Australian and international contexts. They analyse and evaluate their own works and the works of others from a range of historical and cultural viewpoints and develop an appreciation of the role of art in the community and their daily lives. Through their art experiences, they come to an understanding of broader questions about the values and attitudes held by individuals and societies and gain an awareness of the role that art plays in reflecting, challenging, and shaping societal values.

**Prerequisites**
50% or above in Visual Art and 60% in English

**Career Pathways**
Careers in museums, galleries, art education, crafts related fields, graphic design, illustration, photography. Careers that require creative thinking and problem-solving skills.

**Year 11**
**Unit 1: Experiences**
Students develop artworks based on personal experiences. They participate in selected art experiences aimed at developing a sense of observation. Students discover ways to compile and record their experiences through art activities and projects that promote understanding of visual language. They use experiences to develop appreciation of the visual arts in their everyday lives and acquire art skills using processes of experimentation and discovery.

**Unit 2: Explorations**
Students explore ways to generate and develop ideas using stimulus materials and explorations from their local environment. They investigate the work of other artists, learn to identify stylistic features of art forms, and explore ways to manipulate art elements and principles to generate, develop and produce their own artwork. They manipulate media and materials in a range of art forms, recording and reflecting on their artistic achievements. In developing course matter for artworks, students explore ways to express personal beliefs, opinions, and feelings.

**Year 12**
**Unit 3: Differences**
Students explore approaches to drawing and understand that each artist has their particular way of making marks to convey personal vision. They examine how visual language and media choices convey function and meaning, and use media and technologies to explore, create, and communicate ideas. They recognise that visual artwork is subject to different interpretations and develop awareness of styles of representation, examining distinctly individualistic approaches of various artists.

**Unit 4: Identities**
Students use stimulus materials and investigative approaches as starting points to create artwork. They develop a personal approach to the development of ideas and concepts, making informed choices about the materials, skills, techniques, and processes used to resolve and present their artwork. They develop an awareness of how the visual arts may be both socially confirming and questioning, analyse their own cultural beliefs and values, and develop deeper understandings of their own personal visual arts heritage.




**Course Description**
Students express original ideas and feelings creatively through resolved artworks. They are given a themed project brief each semester and work in a progressive and explorative manner to produce a highly resolved unique artwork. Each project has flexibility for student modification and encourages individuals to focus on a preferred media in order to achieve a level of mastery in technique. Innovation is encouraged through a process of inquiry, exploration, and experimentation. They engage in art making processes in traditional and new media areas which involve exploring, selecting, and manipulating materials, techniques, processes, emerging technologies, and responses to life. This course allows students to engage in traditional, modern, and contemporary art forms and conventions, such as sculpture, painting, drawing, graphic design, printmaking, collage, ceramics, earth art, video art, installations, textiles, performance, photography, montage, multimedia, and time-based works and environments. Students gain knowledge, understanding and an appreciation of art and culture, both in Australian and international contexts. They research artists and movements from the history of art, and use the elements and principles of design to assist in making informed evaluations of art.

**Prerequisites**
Nil

**Career Pathways**
Careers in museums, galleries, art education, crafts related fields, graphic design, illustration, photography. Careers that require creative thinking and problem-solving skills.

**Year 11**
**Unit 1: Experiences**
Students develop artworks based on personal experiences. They participate in selected art experiences aimed at developing a sense of observation. Students discover ways to compile and record their experiences through art activities and projects that promote understanding of visual language. They use experiences to develop appreciation of the visual arts in their everyday lives and acquire art skills using processes of experimentation and discovery.

**Unit 2: Explorations**
Students explore ways to generate and develop ideas using stimulus materials and explorations from their local environment. They investigate the work of other artists, learn to identify stylistic features of art forms, and explore ways to manipulate art elements and principles to generate, develop and produce their own artwork. They manipulate media and materials in a range of art forms, recording and reflecting on their artistic achievements. In developing course matter for artworks, students explore ways to express personal beliefs, opinions, and feelings.

**Year 12**
**Unit 3: Differences**
Students explore approaches to drawing and understand that each artist has their particular way of making marks to convey personal vision. They examine how visual language and media choices convey function and meaning, and use media and technologies to explore, create, and communicate ideas. They recognise that visual artwork is subject to different interpretations and develop awareness of styles of representation, examining distinctly individualistic approaches of various artists.

**Unit 4: Identities**
Students use stimulus materials and investigative approaches as starting points to create artwork. They develop a personal approach to the development of ideas and concepts, making informed choices about the materials, skills, techniques, and processes used to resolve and present their artwork. They develop an awareness of how the visual arts may be both socially confirming and questioning, analyse their own cultural beliefs and values, and develop deeper understandings of their own personal visual arts heritage.

# ENGLISH

## Head of Learning Area

## Pauline Crisp


**Course Description**
The English ATAR course focuses on developing students' analytical, creative, and critical thinking and communication skills. In this course, students will engage with a range of texts in a variety of modes; they will read novels, short stories, memoirs, and poems; they will view documentaries, films, television episodes, advertisements, and photographs; they will listen to speeches, song lyrics and spoken-word poetry. Through close study and wide reading, viewing, and listening, students will develop the ability to analyse and evaluate the purpose, stylistic qualities, and conventions of the texts they encounter. Students will also enjoy creating their own imaginative, interpretive, persuasive, and analytical responses in a range of written, oral, multimodal, and digital forms. The English ATAR course is designed to foster an appreciation of the beauty and versatility of the English language, as students engage with texts from their contemporary world, with texts from the past, from Australia and from other cultures.

**Prerequisites**
60% or above in Year 10 English

**Career Pathways**
Students develop their oral and written communication skills and learn critical analysis - skills that are helpful in any career, but particularly in areas such as education, journalism, media, business, law and diplomacy, politics, travel, and tourism.

**Year 11**
**Unit 1: Language, text, purpose, context**
Students explore how meaning is communicated through the relationships between language, text, purpose, context, and audience. Through responding to and creating texts, students consider how language, structure and conventions operate in a variety of imaginative, interpretive, and persuasive texts. Study in this unit focuses on the similarities and differences between texts and how visual, spoken, and written elements combine to create meaning.

**Unit 2: Language and structural choices**
Students analyse ideas, attitudes, and voices in texts to consider how texts represent the world and human experience. They study the interplay of imaginative, interpretive, persuasive, and analytical elements in texts and present their own analyses. They critically examine the effect of stylistic choices and how they position audiences for particular purposes, revealing and/or shaping attitudes, values, and perspectives. Students are encouraged to reflect on their language choices and consider why they have represented ideas in particular ways in their own texts.
.

**Year 12**
**Unit 3**: Language, genre, and context
Students explore representations of themes, issues, ideas, and concepts in diverse 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.

**Unit 4: Interpretations and perspectives**
Students examine different interpretations and perspectives to extend their knowledge of purpose and style. They challenge perspectives, values, and attitudes in texts, developing and testing their own interpretations through debate and argument. Students explore relationships between content and structure, voice and perspectives, and the text and context. Students demonstrate understanding of the texts studied through creation of imaginative, interpretive, persuasive, and analytical responses


**Course Description**
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, education, training, and workplace contexts. This course is designed to empower students to succeed in a wide range of post-secondary pathways. The course develops students' language, literacy, and literary skills to enable them to communicate successfully both orally and in writing, and to enjoy and value using language for both imaginative and practical purposes. Students comprehend, analyse, interpret, and evaluate the content, structure, and style of a wide variety of oral, written, multimodal, digital and media texts. Students learn how the interaction of structure, language, audience, and context helps to shape how the audience makes meaning. Both independently and collaboratively, they apply their knowledge to create analytical, imaginative, interpretive, and persuasive texts in different modes and media.

**Prerequisites**
Nil

**Career Pathways**
Students develop their skills in oral and written communication, needed for all careers to some extent.

**Year 11**
**Unit 1: Comprehending and responding**
Students employ strategies to assist comprehension, and read, view, and listen to texts to connect, interpret, and visualise ideas. They learn how to respond personally and logically to texts by questioning, using inferential reasoning and determining the importance of content and structure. Students consider how organisational features of texts help the audience to understand the text and communicate ideas and information clearly and correctly in a range of contexts. They apply their understanding of language through the creation of texts for different purposes.

**Unit 2: Interpreting ideas and arguments**
Students analyse text structures and language features and identify the ideas, arguments and values expressed. They consider the purposes and possible audiences of texts and examine the connections between purpose, structure, and context. Students integrate relevant information and ideas from texts to develop their own interpretations. They create texts using persuasive, visual and literary techniques to engage audiences in a range of modes and media.

**Year 12**
**Unit 3: Exploring different perspectives**
Students explore attitudes, text structures and language features to understand a text's meaning and purpose. They examine relationships between context, purpose and audience in different language modes and texts. Students consider how perspectives and values are presented in texts to influence audiences and develop their own interpretations when responding to texts. They learn how to communicate logically, persuasively, and imaginatively in different contexts, using a variety of types of texts.

**Unit 4: Community, local and global issues**
Students explore how ideas, attitudes and values are presented by synthesising information from sources to develop independent perspectives. They analyse how authors influence and position audiences and develop reasoned responses to these in text forms for a variety of audiences. Students construct and clearly express coherent, logical, and sustained arguments. They consider purpose and audience response when creating their own persuasive, analytical, imaginative, and interpretive texts.




**Course Description**
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. The English as an Additional Language or Dialect ATAR course provides opportunities for students to engage reflectively and critically with a broad range of spoken, written and multimodal texts, including literary and non-literary texts, for example, academic, every day and workplace texts. Students learn to create, individually and collaboratively, increasingly complex texts for different purposes and audiences in different forms, modes, and media.

**Prerequisites**
Entry to this course must be approved by the teacher and the Principal, based on detailed guidelines provided by SCSA.

**Year 11**
**Unit 1** focuses on investigating how language and culture are interrelated and expressed in a range of contexts. Students develop an understanding of text structures and language features and the relationship between these structures and features and the context, purpose and audience is explored. The unit will enhance students' confidence in creating texts and broaden their understanding of the sociocultural and sociolinguistic elements of SAE and develop skills for research and further academic study.

**Unit 2** focuses on analysing and evaluating perspectives and attitudes presented in texts and creating extended texts for a range of contexts. SAE language skills for effective communication in an expanding range of contexts are consolidated. The use of cohesive text structures and language features is developed. The unit focuses on developing planning and editing skills to create extended oral, written, and multimodal texts. Attitudes, values, and culturally based assumptions within texts are identified, analysed, and compared. Strategies for collecting, analysing, organising, and presenting ideas and information are refined.

**Year 12**
**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 and the ways in which language choices shape meaning and influence audiences are explored. 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.

**Unit 4** focuses on analysing, evaluating, and using language to represent and respond to issues, ideas, and attitudes in a range of contexts. 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.

# English as an Additional Language/Dialect

## General

**Course Description**

The English as an Additional Language or Dialect (EAL/D) General 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 the English as an Additional Language or Dialect General course 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 General 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. The English as an Additional Language or Dialect General course provides opportunities for students to engage reflectively and critically with a broad range of spoken, written and multimodal texts, including literary and non-literary texts, for example, academic, everyday and workplace texts. Students learn to create, individually and collaboratively, increasingly complex texts for different purposes and audiences in different forms, modes, and media.

**Prerequisites**

Entry to this course must be approved by the teacher and the Principal, based on detailed guidelines provided by SCSA.

**Year 11**

**Unit 1** focuses on investigating how language and culture are interrelated and expressed in a range of contexts. Students develop an understanding of text structures and language features and the relationship between these structures and features and the context, purpose and audience is explored. The unit will enhance students' confidence in creating texts and broaden their understanding of the sociocultural and sociolinguistic elements of SAE and develop skills for research and further academic study.

**Unit 2** focuses on responding to and creating connected extended texts in personal, social, community and workplace contexts in SAE. The ability to use SAE language skills to communicate for a range of purposes is evident in the creation of oral, written, and multimodal texts required in the workplace and some academic contexts. Some cultural assumptions are explored and explained through the study of a variety of texts, including popular and literary texts. Strategies for collecting, organising, and presenting ideas and information are consolidated.

**Year 12**

**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. Language choices shape meaning and influence audiences are explored. 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.

**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



# HEALTH AND PHYSICAL EDUCATION

## Head of Learning Area

## Pat Squire


**Course Description**
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. Using an inquiry process, students draw on their knowledge and understandings of health concepts and investigate health issues of interest. 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.

**Prerequisites**
70% or above in Health Education and 60% or above in English

**Career Pathways**
Health Science, Nursing, Age Care, Midwifery, Mental health, Health Support Services and Occupational Safety and Health consultancy.

**Year 11**
**Unit 1**
This unit focuses on the health of individuals and communities. Students learn about health determinants and their impact on health. Health promotion is explored and used as a framework for designing approaches to improve health. Students examine attitudes, beliefs and norms and their impact on decision-making, and develop a range of key health skills.

**Unit 2**
This unit focuses on the impact of factors influencing the health of communities. Students learn about community development and how community participation can improve health outcomes. Students examine the influence of attitudes, beliefs, and norms on community health behaviours; apply investigative and inquiry processes to analyse issues influencing the health of communities; and develop appropriate responses.

**Year 12**
**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.




**Course Description**
This course aims to develop an understanding of our relationships with the environment, others, and ourselves. The ultimate goal of the course is to contribute towards a sustainable world. The Outdoor Education General course is based on the experiential learning cycle which is made up of three stages: plan, do and review. Students plan for outdoor experiences, participate in these experiences, and reflect on their involvement. Students develop self-awareness by engaging in a range of challenging outdoor activities. They enhance personal and group skills, and build confidence, empathy, self-understanding, leadership skills and decision-making abilities, while showing respect for self, others, and the environment. The opportunity to explore environmental management strategies related to activities in the outdoors is provided. Students learn skills that encourage them to minimise their impact on the environment and understand why this is important.

**Prerequisites**
Swimming competency

**Career Pathways**
Outdoor leadership, environmental interpretation, environmental planning, facilities management, eco- tourism, military service, outdoor education, and many unforeseen areas evolving in the outdoor industry.

**Year 11**
**Unit 1: Experiencing the Outdoors**
Students are introduced to outdoor activities to develop technical skills and apply safe practices. They understand basic planning and organisational requirements to participate in safe, short adventure expeditions and develop skills in roping and navigation. Students are introduced to self-awareness, communication, and leadership skills. Examples of environmental management and 'Leave No Trace' principles are introduced.

**Unit 2: Facing Challenges in the Outdoors**
Students are encouraged to step out of their comfort zone in a range of challenging outdoors activities. They consider planning and resource requirements for extended expeditions, and are introduced to simple risk assessment models to assist decision making and apply safe practices to challenging situations and environments. They develop time management, goal setting, and leadership skills and learn strategies to promote effective groups. Features of natural environments, weather, conservation, biodiversity, and environmental management plans are introduced.

Areas of specialist focus: kayak, canoe, orienteering, bushwalking

**Year 12**
**Unit 3: Building confidence in the outdoors**
Students participate in outdoor adventure activities, improve their technical skills, apply appropriate practices to ensure safe participation and develop survival skills. Students develop personal skills related to coping and adapting to change. Features and relationships in natural environments are examined. Weather, patterns, and forecasting are introduced. Students develop a greater understanding of human interactions with nature, past and present. Sustainability and local issues are examined.

**Unit 4: Outdoor leadership**
Students consider planning and organisational requirements to participate in positive and safe, short expeditions. They continue to develop navigational skills and respond to an emergency in the outdoors. Students develop commitment, tolerance, resilience, and conflict resolution skills. They lead briefing and debriefing sessions and appraise their own and others' leadership skills. Students apply strategies to minimise human impact on natural environments. They explore sustainability projects and understand environmental responsibility.

Areas of specialist focus: snorkelling, SUP, mountain bike, bronze medallion, campcraft

# Physical Education Studies

## ATAR

**Course Description**
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. This course focuses on the complex interrelationships between motor learning and psychological, biomechanical, anatomical, 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 this 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. In each unit of this course, students will further their understanding and skills in the areas: Motor Learning and Coaching, Functional Anatomy, Biomechanics, Exercise Physiology and Sport Psychology. The course appeals to students with varying backgrounds, physical activity knowledge and dispositions. This course is 70% theoretical and 30% practical with the teaching and assessments reflecting this.

**Prerequisites**
65% or above in Physical Education and 50% or above in English

**Career Pathways**
Sports science, physiotherapy, nutrition, exercise physiology and rehabilitation, personal training, Physical Education teaching, occupational therapy, coaching and psychology.

**Year 11**
**Unit 1: Anatomical and biomechanical concepts**
The focus of this unit is to explore anatomical and biomechanical concepts, the body's responses to physical activity, and stress management processes, to improve the performance of themselves and others in physical activity.

**Unit 2: Skills, strategy, and body**
The focus of this unit is to identify the relationship between skill, strategy, and the body in order to improve the effectiveness and efficiency of performance.

**Year 12**
**Unit 3: Performance improvement**
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: Extending understanding**
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.



# Physical Education Studies

## General

**Course Description**
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. This course focuses on the complex interrelationships between motor learning and psychological, biomechanical, anatomical, 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 this 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. In each unit of this course, students will further their understanding and skills in the areas: Motor Learning and Coaching, Functional Anatomy, Biomechanics, Exercise Physiology and Sport Psychology. The course appeals to students with varying backgrounds, physical activity knowledge and dispositions. This course is 50% practical and 50% theoretical with the teaching and assessments reflecting this.

**Prerequisites**
Good standing in PE department

**Career Pathways**
Sport, leisure and recreation industries, education, sport development, youth work, and health and medical fields linked to physical activity and sport. Volunteer and leadership roles in community activities.

**Year 11**
**Unit 1: Physical skills and tactics**
The focus of this unit is the development of knowledge, understanding and application of anatomical, physiological, and practical factors associated with performing in physical activities. The unit will focus on developing physical skills and tactics. Students will learn about related principles, including the major functions of bones, the role of biomechanics, components of performance related fitness, and mental preparation for physical activity.

**Unit 2: Anatomical and physiological systems**
Students study the impact of physical activity on the body's anatomical and physiological systems. They are introduced to concepts that support performance as team members and individuals, including the basic elements of a training session, the function of the circulatory system, biomechanical principles relating to motion, the response of the respiratory system to exercise and mind sets to improve performance.

**Year 12**
**Unit 3: Movement, anatomy, and motor learning**
The focus of this unit is simple movement, biomechanical, physiological, psychological, functional anatomy, and motor learning concepts. The understanding of the relationship between skill, movement production and fitness will be further enhanced as students develop and improve.

**Unit 4: Movement competency**
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.

# HUMANITIES AND SOCIAL SCIENCES

## Head of Learning Area

## Louisa Abelha



## Ancient History

### General

**Course Description**
The Ancient History General course allows students to gain insights into their own society and its values through the study of societies and cultures of the more distant past. These societies vary in size from small city states to vast empires and, in significant cases, are the ancient foundations of modern political, legal, cultural, and religious institutions. It helps students to understand why societies and peoples hold certain values, and why values and belief systems vary from one group to another. Students are introduced to the process of reconstructing the past using often fragmentary evidence from a range of written and archaeological sources, and the skills associated with the analysis of historical sources.

**Prerequisites**
Nil

**Career Pathways**
The study of Ancient History is as powerful as it is fascinating. Ancient historians develop skills of research and reflection, which are useful in careers such as (but not limited to): Law, Journalism, Politics, History, Teaching, Social Work, Anthropology, Archaeology, Museum Curating, Librarianship, Authorship, Government Policy Analysis

**Year 11**

**Unit 1: Ancient Civilizations and Cultures**
New Kingdom Egypt, Dynasty 18–20 c. 1550–c. 1069 BC plus Pompeii and Herculaneum and the Roman World, 80 BC – AD 79. This unit considers the key social structure of an ancient civilisation and the key political and military structures of the ancient civilisation. Students explore key economic activities, key values, features, events, and people within an ancient civilisation.

**Unit 2: Power in the Ancient World**
Term 3: Hatshepsut, Egypt, regnal years c. 1473 – c. 1458 BC. Term 4: Alexander the Great, Macedonia 356 – 323 BC, Pericles, Athens 495-429 BC. Students explore the background of a selected individual, consider the individual's career, challenges, motivation, actions, and legacy. Analysis of this individual's depiction during their lifetime and after their death and the indicators of continuity and change in the period being studied.

**Year 12**

**Unit 3: Societies and Change**
The Establishment of Rome from the beginning of the Republic to the end of the Punic Wars c.509-146 BC. Students study the key people, ideas and events and their influence on society. They learn about methods and strategies used by leaders, individuals and/or groups seeking change and their reasons for this.

**Unit 4: Confrontation and Resolution**
The conflict between the Greeks and the Persian Empire to the Battles of Plataea and Mycale, from 512/11 – 479/78 BC. Students consider and explore the causes of confrontation in the period, people, ideas, and events that contributed to the confrontation in the period and their resolutions.


**Course Description**
Career education involves learning to manage and take responsibility for personal career development. The Career and Enterprise General course develops a student's ability to recognise their individual skills, talents, and uses this understanding to assist in gaining and keeping work. The course develops a range of work skills and an understanding of the nature of work. Key components of the course include: the development of an understanding of different personality types and their link to career choices; entrepreneurial behaviours; learning to learn; and the exploration of social, cultural, and environmental issues that affect work, workplaces, and careers. The world of work is complex and constantly changing. The course recognises that work both reflects and shapes the culture and values of our society. Work, including unpaid voluntary work, is fundamentally important in defining the way we live, relate to others and in determining the opportunities we have throughout life.

**Prerequisites**
Nil

**Career Pathways**
The study of Careers and Enterprise is geared to help students transition into the world of work more easily and with greater success.

**Year 11**
**Unit 1: Career and Enterprise Concepts**
Students develop an understanding of the factors underpinning career development, such as personal development, workplace practices and career development.

**Unit 2: Career and Enterprise Investigations**
Students investigate career development opportunities through collecting and organizing information regarding career development opportunities, analysing data, and communicating solutions to career development opportunities.

**Year 12**
**Unit 3: Learning to learn, Work skills and Enterprising behaviours**
This unit assists students to adopt a proactive approach to securing and maintaining work and involves self-management, using work search tools and techniques. Students develop career competencies and learn how to access learning opportunities.

**Unit 4: Career Development and Management, the Nature of Work and Gaining & Keeping Work**
This unit explores issues associated with career management, workplaces, and trends in times of change. Work, training and learning experiences provide opportunities to extend students' knowledge and skills in response to change and how to maintain an edge. These experiences are documented in career portfolios, using a range of information technology skills.




**Course Description**
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.

**Prerequisites**
60% or higher in Year 10 H.A.S.S and 50% or higher in English

**Career Pathways**
Economics teaches students a wide range of useful and analytical skills which are useful for business and public organisations. These include, and are not limited to: Economist, Financial Planner, Accountant, Data Consultant, Lawyer, Developmental Economist (United Nations, Human Rights), Banker, Teacher, Businessman/women, Environmentalist, Health and Welfare Economist, Marketing and Management Planner, Politician.

**Year 11**
**Unit 1: Microeconomics**
This unit is an introduction to microeconomics and explores the role of the market in determining the wellbeing of individuals and society. Students explore the workings of real world markets with an emphasis on the Australian economy. We look at the concept of scarcity, supply, and demand, maximizing consumer welfare and the role of government policy in market failure.

**Unit 2: Macroeconomics**
This unit is an introduction to macroeconomics and explores the business cycle, the circular flow of income model, economic growth, inflation, and unemployment with an emphasis on the Australian economy.

**Year 12**
**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 low inflation, low unemployment, productivity, economic growth, and a stable economy.


**Course Description**
The study of the Geography ATAR course draws on students' curiosity about the diversity of the world's places and their peoples, cultures, and environments. It provides students with the knowledge and understanding of the nature, causes and consequences of natural and ecological hazards, international integration in a range of spatial contexts, land cover transformations, and the challenges affecting the sustainability of places. In the ATAR course, students learn how to collect information from primary and secondary sources, such as field observation and data collection, mapping, monitoring, remote sensing, case studies and reports.

**Prerequisites**
60% or higher in Year 10 H.A.S.S and 50% or higher in English

Career Pathways
Geography teaches young people a wide range of useful skills for the marketplace, including research and analytical talents that translate well to the workforce. These jobs include (but are not limited to): Urban planner, Community Developer, Cartographer, GIS Specialist, Climatologist, Transportation and Shipping Manager, Environmental Manager, Writer/Researcher, Teacher, Emergency Manager, Demographer, Marketer, Foreign Service, Librarian, National Park Ranger, Real Estate Appraiser

**Year 11**
**Unit 1: Natural and ecological hazards**.
In this unit, students explore the management of hazards and the risk they pose to people and environments. Risk management is defined in terms of preparedness, mitigation and/or prevention.

**Unit 2:**
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.

**Year 12**
**Unit 3:**
This unit focuses on the changing biophysical cover of the Earth's surface, the creation of anthropogenic biomes and the resulting impacts on either global climate or biodiversity. Through applying the concept of sustainability, students are given the opportunity to examine and evaluate a program designed to address the negative effect of land cover change.

**Unit 4:**
Students examine how governments, planners, communities, interest groups and individuals attempt to address the challenge of designing urban places to render them more productive, vibrant, and sustainable. The unit begins with a global scale overview of the process of urbanisation and its consequences.




**Course Description**
This course enables students to become critical thinkers and helps inform their judgements and actions in a rapidly changing world. Students are exposed to a variety of historical sources to determine cause and effect and the forces influencing people and events. The focus is on the 20th century with reference to formative changes from the late 18th century onwards. Modern History enhances students' curiosity, imagination and their appreciation of larger themes, movements, events, and ideas that have shaped the contemporary world. The year 11 course is comprised of 2 units: Understanding the modern world and Movements for change in the 20th century. There is a choice of electives and for Unit 1, St Andrew's Grammar studies Elective 7 – Capitalism – the American experience (1907-1941) and in Unit 2, we study Elective 6: Nazism in Germany.

**Prerequisites**
60% or higher in Year 10 H.A.S.S and 50% or higher in English

**Career Pathways**
History teaches young people a wide range of useful skills for the marketplace, including critical thinking, research and analytical skills and the ability to structure arguments well. These skills lend themselves to jobs which include (but are not limited to): politician, historian, museum and art curators, law, the media, civil service, archaeology, conservation, researcher, librarian, archivist, advertising, and commerce.

**Year 11**
**Unit 1 – Elective 7 – the American experience (1907-1941).**
In this unit, students explore the rise of capitalism and the impact of WW1, the 1920's and WW11 until 1941, the growth of consumerism and the shaping of American values. Students look at the causes of the Great Depression and the impact of capitalism on different groups within American society, for example, African Americans, urban workers, rural workers, immigrants, industrialists, and members of the Indian nations.

**Unit 2 – Elective 6 – Nazism in Germany.**
In this unit, students explore the reasons behind the Nazi party's rise to power, the policies resulting in efforts to exterminate minority groups, the role and impact of significant individuals and the legacy of Nazism after WW11.

**Year 12**
**Unit 3: Elective 2: Russia and the Soviet Union 1914-1945 (World War I to the end of World War II).**
Students will explore the significant ideas of the period such as Marxism, communism, and Leninism, look at the internal divisions and crises within Russian society and how changes transformed Russia.

**Unit 4:**
**Elective 3: The struggle for peace in the Middle East .** Students will learn about the significant ideas of the period, including imperialism, Arab nationalism, Zionism, and fundamentalism within the context of key conflicts. Students look at the reasons for, and the consequences of, other conflicts in the Middle East and the attempts to settle these conflicts.

# Politics and Law

## General


**Course Description**
This Politics and Law General course is an analysis of the processes of decision-making concerning society's collective future. It challenges students to examine the effectiveness of our political systems and come to an understanding of the complexities of governing nations. The course promotes research and analysis as students engage with investigations and critical thinking as they examine opinions and viewpoints relevant to political and legal systems. Students gain insights into the social and political decision making in Australia and around the world, to provide the basis for engaging in effective and informed political and legal discussions.

**Prerequisites**
Nil

**Career Pathways**
The study of Politics and Law enables students to think critically about the important political and legal aspects of everyday life. Students learn how to become informed and active citizens and the implications this has on the policies and laws that govern our world. The study of Politics and Law is useful but not limited to careers such as: Law, Journalism, Politics and Public Relations, Teaching, Social Work, Human resource management, Law enforcement, Authorship, Government Policy Analysis, Diplomatic core, Human rights, and Charities.

**Year 11**
**Unit 1: Political and legal decision making**
This unit examines Australia's democratic political and legal system, the participation of individuals and groups within it, and makes comparison with political and legal decision making in non-democratic political and legal systems. Students examine the similarities and differences between democratic and non-democratic systems of government, how laws are made and enforced and the means of participation by individuals and groups in Australia and an alternative political system.

**Unit 2: Civil and Political rights**
This unit examines the nature of legal disputes in society and the avenues to resolve them, along with the development of rights and the protection of civil and political rights in Australia and one other political and legal system. Students examine the mechanism for dispute resolution in Western Australia; the development of rights over time; the protection of rights in Australia and one other country and how individuals and groups can create change to policies and legal decisions.

**Year 12**
**Unit 3 – Democracy and the rule of law**
This unit examines the principles of a liberal democracy and the processes of Australia's political and legal system, the functioning of a non-democratic political system and a non-common law legal system.

**Unit 4 – Representation and justice**
This unit examines the principles of fair elections, the voting systems in Australia since Federation and an analysis of the civil and criminal law process in Western Australia. Students will examine a recent election in Australia and make reference to the campaign, the policies, personalities, media and voting systems. Students explore the strengths and weaknesses of the trial process in Western Australia



# LANGUAGES

## Head of Learning Area

## Apostolos Vassiliadis

# Modern Greek

## ATAR

**Course Description**
The School Curriculum and Standards Authority accesses the Modern Greek ATAR syllabus and external examination from South Australia. The syllabus content is the equivalent of two years of study, one typically at Year 11 and the other typically at Year 12. Each year of this course is equivalent to two units for Western Australian Certificate of Education (WACE) requirements. The notional time for the pair of units are 110 class contact hours. The language to be studied and assessed is the standard version of Modern Greek – the demotic form of the written and spoken language. Students will be required to use both formal and informal registers, current language use incorporating spelling reforms, and the monotonic system of accentuation. The Greek alphabet is the only script to be used in the written form. The study of Modern Greek develops students' ability to understand and use a language which has both economic and political significance and which is associated with major intellectual, artistic, and scientific achievements.

**Prerequisites**
Studied Modern Greek in Years 7-10. Demonstrated competency in Year 10

**Career Pathways**
The ability to communicate in Modern Greek, in conjunction with other skills, may provide opportunities for employment in the fields of translation, interpreting, banking and social services, ethnic affairs, the tourism and hospitality industries, international relations, the arts and education.

**Year 11**
**The individual**: Enables students to explore aspects of their personal world; for example, sense of self, aspirations, personal values, opinions, ideas, and relationships with others. The theme also enables students to study topics from the perspective of other people. Topics are Personal Identity, Relationships, and School Experience.

**The Modern Greek-speaking Communities:** Explores topics from the perspective of groups within those communities or the communities as a whole and encourages students to reflect on their own culture and other cultures The topics are Lifestyles, Special Traditions and Contemporary People and Events.

**Year 12**
**The Modern Greek-speaking Communities:** Explores topics from the perspective of groups within those communities or the communities as a whole and encourages students to reflect on their own culture and other cultures The topic is The Legacy of Greece.

**The Changing World:** This theme enables students to explore change as it affects aspects of work, social issues, and world issues. Topics are Youth Issues, The World of Work and Environmental Issues



# MATHEMATICS

## Head of Learning Area

## Chris Zander

# Mathematics Essentials

**General**

**Course Description**
Mathematics Essentials is a general all-round revision and development of previously encountered mathematical concepts that particularly relate to real contexts for a range of workplace, personal, further learning, and community settings. It presents a body of useful mathematical knowledge and provides students with the skills and understanding necessary to apply this knowledge. It is a non-ATAR course for students who may have sometimes struggled with mathematics but desire a course that does not require the completion of a 'state' examination. All assessment types involve the application of the Mathematical Thinking Process or Statistical Investigative Process. A sound level of literacy is required to successfully complete these assessments.

**Prerequisites**
Nil

**Career Pathways**
The Mathematics Essentials course gives students a broad mathematical preparation for post-school options of employment and further training.

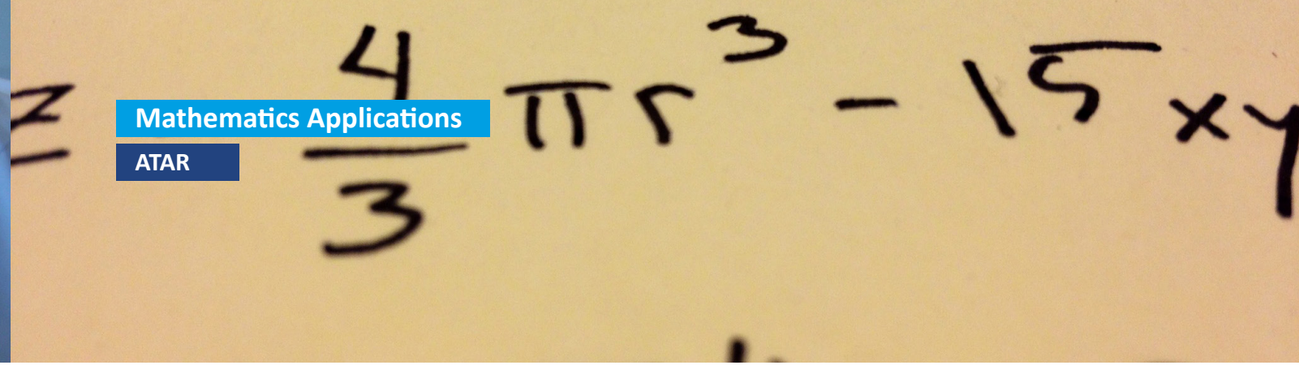
**Year 11**
**Unit 1**
This unit provides students with the mathematical skills and understanding to solve problems relating to calculations, the use of formulas to find an unknown
quantity, applications of measurement and the use and interpretation of graphs. Possible contexts for this unit are earning and managing money and nutrition and health.

**Unit 2**
This unit provides students with the mathematical skills and understanding to solve problems related to representing and comparing data, percentages, rates and ratios, and time and motion. Possible contexts for this unit to achieve this goal are transport and independent living.

**Year 12**
**Unit 3**
This unit provides students with the mathematical skills and understanding to solve problems related to measurement, scales, plans and models, drawing and interpreting graphs and data collection.
Students use the mathematical thinking process and apply the statistical investigation process.

**Unit 4**
This unit provides students with the mathematical skills and understanding to solve problems related to probability, earth geometry and time zones, loans, and compound interest.
Students use the mathematical thinking process and apply the statistical investigation process to solve problems involving probability.





# Mathematics Applications

**ATAR**

**Course Description**
Mathematics Applications presents Mathematics as an organised body of useful knowledge and provides students with the skills and confidence necessary to apply this knowledge in many practical real-life situations. The course provides students with useful applied mathematical tools and fosters an ability to solve problems and to carry out mathematical investigations. This is a more rigorous academic overall pathway than Mathematics Essentials. A sound level of literacy is required to successfully complete these assessments.

**Prerequisites**
C Grade in Mathematics in Year 10

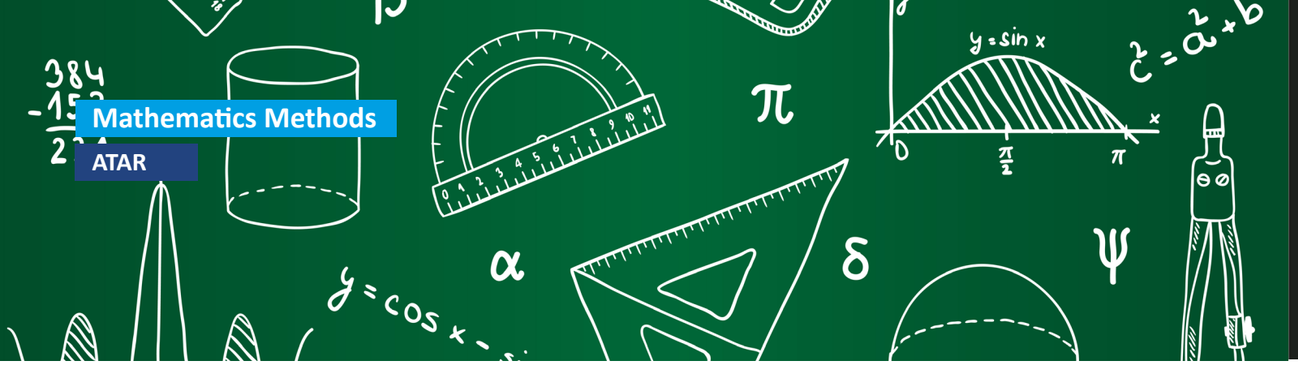
**Career Pathways**
The Mathematics Applications course gives students an excellent preparation for many TAFE courses and non-mathematical and non-scientific university studies.

**Year 11**
**Unit 1**
The content includes the study of the use of formulae, percentages, simple and compound interest, other financial considerations, matrices, the theorem of Pythagoras, perimeter and area, surface area and volume and similarity.

**Unit 2**
The content includes the study of univariate data, summarizing data and describing distributions, measures of dispersion or spread, boxplots, histograms, the statistical investigation process, solving equations, using equations
to solve problems, linear relationships, piecewise defined relationships, trigonometry for right and non-right triangles.

**Year 12**
**Unit 3**
The content includes the study of bivariate data and further analysis, sequences by recursion and some specific types, networks, and shortest path.

**Unit 4**
The content includes the study of time series data, moving averages and seasonal effects, finances – saving, borrowing, and drawing down investments, minimum spanning trees, maximum flow, project networks and assignment problems.




## Mathematics Methods ATAR

**Course Description**
Mathematics Methods presents Mathematics as an organised body of useful knowledge and provides students with the skills and confidence necessary to apply this knowledge in practical situations. These demands are met by offering studies in a range of topics that have the potential for useful mathematical and scientific application and are within the capabilities of the more mathematically inclined students. Mathematics Methods provides an excellent insight into the fundamental applications of Mathematics in practically every area of Science, Commence and Industry. A large part of the course context is the use of Calculus and without Calculus, much of our present technology would not exist. Please take into account, when looking at future career paths, that the Mathematics Methods course is a prerequisite for many tertiary courses involving further Mathematics. Mathematics Methods is a compulsory requirement if you choose to study Mathematics Specialist.

**Prerequisites**
B Grade in Mathematics in Year 10

**Career Pathways**
This course is essential for tertiary courses in Mathematics, Engineering, Aviation and Physical Science and is helpful as a prerequisite for courses involving strong mathematical analysis.

**Year 11**
**Unit 1**
The content includes the study of trigonometry, radian measure, linear and quadratic functions and equations, polynomials, trigonometric and other functions, sets and probability.

**Unit 2**
The content includes the study of indices, exponential functions, sequences and series, rates of change and differentiation, applications of differentiation, anti- differentiation, and rectilinear motion.

**Year 12**
**Unit 3**
The content includes the study of differentiation and applications, anti-differentiation, area under a curve, the fundamental theorem of calculus, the exponential function, calculus of trigonometric functions, discrete random variables, Bernoulli, and binomial distributions.

**Unit 4**
The content includes the study of logarithmic functions and their calculus, continuous random variables, the normal distribution, random sampling, and sample proportions.

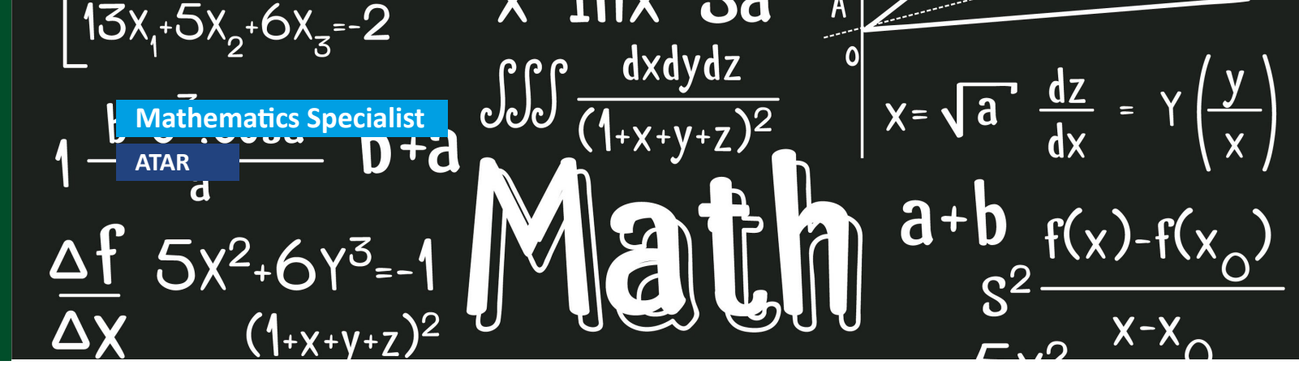
**Mathematics ATAR Courses – TEA Bonus**

Mathematics Methods and Mathematics Specialist attract a bonus for the Tertiary Entrance Aggregate to encourage students to undertake the more challenging Mathematics ATAR course options.

The bonus will apply to the calculation of the Tertiary Entrance Aggregate (TEA) where 10% of the final scaled score/s in Mathematics Methods ATAR and Mathematics Specialist ATAR will be added to the TEA, from which the ATAR is derived. Bonuses from both courses may be counted and will apply even if the scaled scores from the courses are not one of the student's best four scores.

**Please note: The Bonus mark is applied to your TEA aggregate. This is quite different from your final ATAR score.**






## Mathematics Specialist ATAR

**Course Description**
This course presents Mathematics as an organised body of knowledge that will provide students with the highest foundation for tertiary studies in Mathematics and related areas. Mathematics Specialist extends the algebraic, geometric, and trigonometric skills studied in previous years and introduces vector methods in the study of geometry, complex numbers, polar coordinates, and functions. This course is studied in conjunction with Mathematics Methods.

**Prerequisites**
High B grade in Mathematics in Year 10

**Career Pathways**
This course is essential and/or desirable for tertiary courses in Mathematics, Engineering, Aviation and Physical Science and is helpful as a prerequisite for courses involving strong mathematical analysis.

**Year 11**
**Unit 1**
The content includes the study of counting techniques, vectors including component form scalar products and proofs, and geometric proofs.

**Unit 2**
The content includes the study of trigonometric identities and equations, basic matrix algorithms and transformations, proofs, and complex numbers.

**Unit 3**
The content includes the study of complex numbers, polar form of a complex number, functions, vector equation of a line, vectors in three dimensions, systems of linear equations and vector calculus.

**Unit 4**
The content includes the study of differentiation and integration techniques and applications, differential equations, simple harmonic motion, and sample means.

**Year 12**

**Mathematics ATAR Courses – TEA Bonus**

Mathematics Methods and Mathematics Specialist attract a bonus for the Tertiary Entrance Aggregate to encourage students to undertake the more challenging Mathematics ATAR course options.

The bonus will apply to the calculation of the Tertiary Entrance Aggregate (TEA) where 10% of the final scaled score/s in Mathematics Methods ATAR and Mathematics Specialist ATAR will be added to the TEA, from which the ATAR is derived. Bonuses from both courses may be counted and will apply even if the scaled scores from the courses are not one of the student's best four scores.

**Please note: The Bonus mark is applied to your TEA aggregate. This is quite different from your final ATAR score.**

# SCIENCE

## Head of Learning Area

## Chris Naunton Morgan


**Course Description**
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. The Chemistry ATAR course 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. They learn how to apply concepts to everyday situations, biochemistry, and industrial processes. They will understand the fundamental chemistry behind protein synthesis, polymers, production of biofuel and ethanol, industrial process such as the Haber and Contact process, analytical techniques, and acid chemistry, such as buffers, implications of changes to pH and the effect this has on our environment. Students will also develop skills that will allow them to quantitatively analyse different chemical processes.

**Prerequisites**
65% or above in Science and 50% or above in Mathematics.

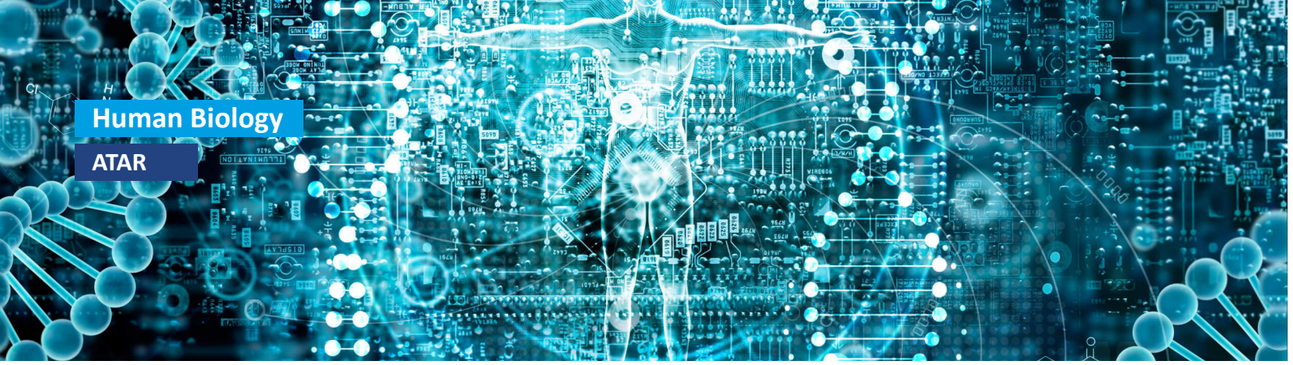
**Career Pathways**
Forensic science, environmental science, engineering, medicine, dentistry, pharmacy, sports science, art, wine making, agriculture and food technology.

**Year 11**
**Unit 1: Chemical Fundamentals**
Students use models of atomic structure and bonding to explain the macroscopic properties of materials. They develop understanding of energy changes in chemical reactions and the use of chemical equations to calculate masses of substances involved in chemical reactions.

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

**Year 12**
**Unit 3: Equilibrium, acids and bases, and redox reactions**
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**
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.




**Course Description**
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 long-term changes leading to natural selection and evolution of our species. As a science, the course matter of this course is founded on knowledge and understanding that has been gained through systematic inquiry and scientific research. However, this knowledge is far from complete and is being modified and expanded as new discoveries and advancements are made. Students develop their understanding of the cumulative and evolving nature of scientific knowledge and the ways in which such knowledge is obtained through scientific investigations. They learn to think critically, to evaluate evidence, to solve problems and to communicate understandings in scientific ways.

**Prerequisites**
60% or above in Science and 50% or above in English.

**Career Pathways**
Science education, medical and paramedical fields, food and hospitality, childcare, sport, and social work.

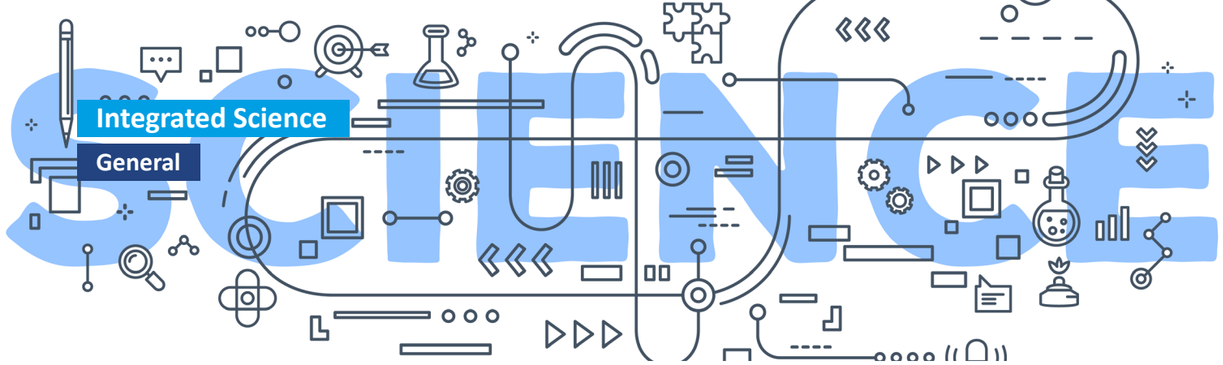
**Year 11**
**Unit 1: The Functioning Human Body**
In this unit, students analyse how the structure and function of body systems, and the interrelationships between systems, support metabolism and body functioning.

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

**Year 12**
**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.






**Course Description**
Understand natural phenomena. Science is based on people's aspirations and motivations to follow their curiosity and wonder about the physical, biological, and technological world. Scientific knowledge represents the constructions made by people endeavouring to explain their observations of the world around them. Scientific explanations are built in different ways as people pursue intuitive and imaginative ideas, respond in a rational way to hunches, guesses and chance events, challenge attitudes of the time, and generate a range of solutions to problems, building on existing scientific knowledge. As a result of these endeavours, people can use their scientific understandings with confidence in their daily lives. Because scientific explanations are open to scrutiny, scientific knowledge may be tentative and is continually refined in the light of new evidence. 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.

**Prerequisites**
Nil

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

**Year 11**
**Unit 1: Biological and Earth systems**
The emphasis of this unit is on biological and Earth systems, focusing on the following topics: interrelationships between Earth systems, structure and function of biological systems, ecosystems and sustainability, species continuity and change.

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

**Year 12**
**Unit 3: Water**
Through an integrated, scientific approach, this unit focuses on water as a resource and its importance to life on Earth.

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

# Physics

ATAR

**Course Description**
Physics is concerned with the study of matter, energy, and their interactions. From ancient times people have marvelled at the world that God has created for our enjoyment; at the sunsets and rainbows, waterfalls and birds in flight, lightning, and auroras, to mention but a few. Physics is a subject that enables us to investigate and understand these phenomena. It allows us to be better stewards of our planet and therefore honour our Biblical mandate as the custodians of planet Earth. Students investigate how the unifying concept of energy explains diverse phenomena and provides a powerful tool for analysing how systems interact throughout the universe on multiple scales. Students learn how more sophisticated theories, including quantum theory, the theory of relativity and the Standard Model, are needed to explain more complex phenomena, and how new observations can lead to models and theories being refined and developed. Students learn how an understanding of physics is central to the identification of, and solutions to, some of the key issues facing an increasingly globalised society. They consider how physics contributes to diverse areas in contemporary life, such as engineering, renewable energy generation, communication, development of new materials, transport and vehicle safety, medical science, an understanding of climate change, and the exploration of the universe. Studying senior secondary science provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. Studying physics 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.

**Prerequisites**
65% or above in Science and 50% or above in Mathematics.

**Career Pathways**
Engineering, forensics, radiology, technological development and aviation, sciences, medicine, as well as economics, finance, management, law, and public policy.

**Year 11**
**Unit 1: Thermal, nuclear, and electrical physics**
Students investigate energy production by considering heating processes, radioactivity, and nuclear reactions, and investigate energy transfer and transformation in electrical circuits.

**Unit 2: Linear motion and waves**
Students describe, explain, and predict linear motion, and investigate the application of wave models to sound phenomena.

**Year 12**
**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.



# Psychology

ATAR

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

**Prerequisites**
60% or above in Science and 50% or above in English.

**Career Pathways**
Education, human resources, social sciences, sales, media and marketing and management.

**Year 11**
**Unit 1: The human brain and behaviour**
Students learn about the human brain and explore the impact of external factors on behaviour, such as physical activity and psychoactive drugs. Cognitive processes, such as sensation and perception, and selective and divided attention are investigated. Students examine different types of relationships and the role of verbal and nonverbal communication in initiating, maintaining, and regulating these. Students are introduced to ethics in psychological research and carry out investigations.

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

**Year 12**
**Unit 3: Understanding human behaviour**
Students will examine how messages are sent to the brain and investigate how behaviour is influenced or not influenced by learnings. Students learn about the impact of others on individual behaviour and examine the socialisation processes observed within families as well as how social background and gender can shape communication styles. They expand on their knowledge of ethics in psychological research by considering the role of the experimenter and participants' rights such as privacy and anonymity.

**Unit 4: Theories of Development**
Students will review contemporary personality theories and their limitations and analyse famous experiments conducted by Asch, Milgram, and Zimbardo. They also gain an understanding into factors that shape a sense of community and explore the varied responses individuals have to significant events.

# TECHNOLOGIES

## Head of Learning Area

## Samantha Hunt



## Food Sciences and Technology

### General

**Course Description**
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.

**Prerequisites**
Nil. Whilst not compulsory, it is recommended that students have completed Food classes in Years 9 or 10

**Career Pathways**
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.

**Year 11**
**Unit 1 – Food Choices and Health**
This unit focuses on the sensory and physical properties of food that affect the consumption of raw and processed foods. Students investigate balanced diets, the function of nutrients in the body and apply nutrition concepts that promote healthy eating. They study health and environmental issues that arise from lifestyle choices and investigate factors which influence the purchase of locally produced commodities.

**Unit 2 – Food for commodities**
This unit focuses on the supply of staple foods and the factors that influence adolescent food choices and ethical considerations. Students recognise factors, including processing systems, that affect the sensory and physical properties of staple foods. They explore food sources and the role of macronutrients and water for health, and nutrition-related health conditions, such as coeliac and lactose intolerance, which often require specialised diets.

**Year 12**
**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 and preparation of food products and processing systems.

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

# VET Program

Certificate courses are available to students and can provide them for qualifications they can use post-school. There are a number of options available with courses run both in school and at external TAFE centres around Perth.

**In school options**

- Cert II in Workplace Skills
- Cert III in Workplace Skills
- Cert II in Sports Coaching
- Cert II in Sports and Reaction

**Out of School options**

South Metropolitan TAFE and North Metropolitan TAFE offer courses at different locations around Perth. Typically, students who opt for one of these courses will spend a day away from school at one of the TAFE locations. Students who take up this option are expected to keep up with work missed from school. It is the student's responsibility to make their way to and from the different TAFE locations.

Possible areas of study include

- Aerospace, Maritime and Logistics
- Agriculture, Animals, Science, and the Environment
- Automotive
- Building and Construction
- Creative Industries
- Education and Community Services
- Engineering and Mining
- Health, Beauty, and Fitness
- Hospitality, Tourism and Events
- Information Technology, Library and Digital
- Business and Finance
- Electrical and Electrotechnology
- Horticulture and Conservation
- Laboratory Operations
- Networking and Security
- Residential Building Drafting



# Careers and Education Resources

The information gained from the following list of websites may help students determine their post-school options.

**Universities**

Curtin University
Future Students Office: 1300 222 888
https://www.curtin.edu.au/study/

Edith Cowan University
Future Students Office: 134 328
https://www.ecu.edu.au/

Murdoch University
Prospective Student Centre: 1300 687 3624
https://www.murdoch.edu.au/contact-us#future-students

University of WA
Future Student Advisors: 08 6488 2477
https://www.uwa.edu.au/study

University of Notre Dame
Prospective Student Advisors: 08 9433 0533
Free call: 1800 640 500
https://www.notredame.edu.au/study/programs

**TAFE**

Officers are available at the following TAFE colleges to provide assistance to students:

North Metropolitan TAFE
1300 300 822
(East Perth, Leederville, Mt Lawley & Northbridge)
https://www.northmetrotafe.wa.edu.au/

South Metropolitan TAFE
Course Information Centre: 08 9267 7500
(Covers Thornlie, Carlisle, Balga, Armadale, Midland & Bentley)
https://www.southmetrotafe.wa.edu.au/

South Metropolitan TAFE
Course Information Centre: 08 9239 8189
(Beaconsfield, Murdoch, Maritime Centre, Rockingham & Peel)
https://www.southmetrotafe.wa.edu.au/

North Metropolitan TAFE
Joondalup: 1300 134 881
https://www.northmetrotafe.wa.edu.au/

TAFE Handbook
Online www.training.wa.gov.au, www.tasonline.tafe.wa.edu.au, (go to skills calculator)

**Careers**
Job search and career related sites:

**Career Information Centre**
2nd Floor, City Central Building, 166 Murray Street Mall, Perth (rear Myers)
Telephone: 132 398
Email: career.centre@dtwd.wa.gov.au
Open: Monday to Friday 9.00 am to 4.30 pm

The centre provides detailed information about careers and courses including booklets, leaflets, folders, videos, CDs, and cassettes. Students can also complete a Career Choice Program called Jigcal but must make a booking for this service. It is available 9.00am to 3.00pm Monday to Friday.
www.myfuture.edu.au
www.jobsearch.gov.au

For further information on what is available, please see
www.youth.gov.au (Information for school leavers includes links to many good sites)
www.getaccess.wa.gov.au (Career information service)
www.workplace.gov.au
www.fairwork.gov.au
www.centrelink.gov.au (Range of services /payments to students/job opportunities)
www.graduatecareers.com.au Employment opportunities for graduates
www.thegoodguides.com.au A site that rates Australian Universities and outlines their facilities/courses)

**The Job Guide online**
(Includes links to other careers sites)
www.jobsguide.deewr.gov.au

**WA Department of Training & Workforce Development**
**Training opportunities in WA**
www.det.wa.edu.au/training

**Education**
School Curriculum & Standards Authority
www.scsa.wa.edu.au
info@scsa.wa.edu.au

**Tertiary Institutions Service Centre**
This site also provides links to the Tertiary Institution Service Centres and universities in the other states of Australia.)
www.tisc.edu.au

**Defence Force Recruiting Centre**
Careers Information 131 901
www.defencejobs.gov.au

**Australian Apprenticeships**
133 873
www.australianapprenticeships.gov.au


ST. ANDREW'S GRAMMAR

2 Hellenic Drive, Dianella WA 6059

Tel: (08) 9303 3840

Email: reception@sag.wa.edu.au

www.sag.wa.edu.au