

# **IMMACULATE HEART COLLEGE**

Through Mary to Jesus: "The Way, the Truth and the Life"

John 14:6



Senior Secondary Course Information Handbook – For Selecting Course Preferences in Years 11 & 12 (2022 & 2023)

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The information in this handbook is current at time of publication but is subject to change due to prescribed changes made by state authorities.

# 1 Key Terms

### ATAR (Australian Tertiary Admission Rank)

An ATAR is calculated using the school assessment and the student's best four scaled course scores, plus bonuses where applicable. The ATAR is used to determine eligibility for university entrance. (Australia wide)

### ATAR course (subject)

An ATAR course is offered in Years 11 and 12. The Year 11 course consists of Units 1 and 2 and the Year 12 course consists of Units 3 and 4. Year 12 ATAR courses are examined by the School Curriculum and Standards Authority (SCSA) at the completion of Year 12.

#### Course (often referred to as a subject)

A course is a program of study in a particular subject offered at two year levels. It consists of a Year 11 syllabus, comprising of Units 1 and 2 and a Year 12 syllabus, comprising Units 3 and 4.

#### **Endorsed Programs**

Endorsed programs provide access to areas of learning not covered by WACE courses or vocational education and training (VET) programs. They are delivered in a variety of settings by schools, workplaces, universities and community organisations. These programs contribute to the WACE.

### Externally Set Task (EST)

An externally set task (EST) is conducted for each General course in Year 12. The EST is compulsory for all students enrolled in Units 3 and 4. All ESTs are set by SCSA. An EST is conducted under exam conditions generally in Semester 1 exams.

#### General Course (subject)

A General course is offered at two year levels, each with its own syllabus. The Year 11 syllabus comprises Units 1 and 2, and Year 12 syllabus comprises Units 3 and 4. General courses are designed for students who are typically aiming to enter further vocationally based training or the workforce directly from school.

### Grades

Grades indicate the level of the student's performance: A (highest), B, C, D and E.

#### National Assessment Program - Literacy and Numeracy (NAPLAN)

NAPLAN is an assessment of literacy and numeracy and is undertaken annually by all Year 3, 5, 7 and 9 students throughout Australia. In Western Australia, students who achieve Band 8 or higher in the associated components of the Year 9 NAPLAN are deemed to have demonstrated the literacy and numeracy standard for the WACE.

#### Online Literacy and Numeracy Assessment (OLNA)

The OLNA assesses skills described in Levels 1–4 of the Australian Core Skills Framework. The skills described are those regarded as essential for individuals to meet the demands of everyday life and work. Demonstrating the literacy and numeracy standard is one requirement for achieving a WACE.

The OLNA is sat by students in the first semester of Year 10. Students who do not demonstrate the standard at their first attempt of the OLNA have the opportunity to sit it again in September of Year 10 and thereafter on two occasions in Year 11 and two occasions in Year 12. They may also sit the OLNA subsequently in any year after compulsory schooling if they have not yet met the standard. NOTE: Students who achieve Band 8 or higher in Year 9 NAPLAN Reading, Writing or Numeracy assessments will be prequalified for that component and will not be required to sit the corresponding OLNA component. For example, if a student achieves Band 8 for Reading and Numeracy but not for Writing, they will only be required to sit the OLNA Writing component.

#### Registered Training Organisation (RTO)

An RTO is an organisation that delivers, assesses, certifies and quality assures a nationally recognised VET qualification. An RTO may be a school, a private training provider, or a TAFE. All RTOs operate under the various elements of the national training system. We expect all courses that students select to meet the Australian Qualifications Framework (AQF).

#### Subject

A subject is a discrete area of study within a particular learning area. A subject is delivered in the form of ATAR and General courses. The different courses fulfil different purposes and emphasise different aspects of the subject.

#### VET (Vocational Education and Training)

Vocational education and training enables students to acquire workplace skills through nationally recognised training described within an industry developed training package or accredited course.

#### **VETDSS** (VET courses Delivered to Secondary Students)

VETDSS is run during the College Workplace Learning program. Students who have chosen a VETDSS school-based training program generally attend the College three days per week, the training provider (usually TAFE) one day and the workplace one day per week. The program is intended as a transition from school to an apprenticeship. It provides an introduction into the apprenticeship opportunities within various trades.

#### Western Australian Certificate of Education

The Western Australian Certificate of Education (WACE) is awarded by the School Curriculum and Standards Authority to students in Western Australia on successful completion of their senior secondary education. WACE requirements may change over time and students studying towards the achievement of the WACE after they leave school will be required to meet the WACE requirements current at the time of the completion of their studies.

#### Western Australian Statement of Student Achievement

A Western Australian Statement of Student Achievement (WASSA) is issued to all Year 12 students at the completion of their secondary schooling. The WASSA lists all courses and programs that a student has completed.

### 2 Enrolling in Year 11 and 12

The courses chosen for Year 11 and 12, need to consider the following:

- requirements for achievement of the Western Australian Certificate of Education (WACE);
- pre-requisites required for university entrance, TAFE, or other registered provider;
- academic ability, skills and interests;
- courses that the student finds enjoyable to study; and
- post-secondary options in education and training.

Above all, despite recommendations provided by our fabulous teachers, the choice is yours. Discuss your options with your parents/carers and make a career/course counselling appointment if required.

#### 2.1 Western Australian Statement of Student Achievement

The WASSA is issued to each Year 12 student at the completion of their senior secondary schooling, which typically takes two years. The WASSA lists all courses and programs that a student has completed and the grades and marks achieved.

The WASSA formally records, as relevant:

- achievement of WACE requirements;
- achievement of the literacy (reading and writing) standard;
- achievement of the numeracy standard;
- achievement of any exhibitions and awards;
- College grades, marks and combined scores in ATAR courses;
- College grades and marks in General and Foundation courses;
- completed Preliminary units;
- completed VET industry specific courses;
- successfully completed VET qualifications and VET units of competency;
- completed endorsed programs;
- number of community service hours undertaken (if reported by the school).

You will receive a WASSA if you have completed any of the listed units, courses, programs or achievements.

### 2.2 Western Australian Certificate of Education

Students must meet the following to achieve a WACE:

Literacy and Numeracy Requirements	Meet the Literacy and Numeracy standards through NAPLAN or OLNA as well as complete 4 units of English, two in Year 12.
Course / Endorsed Program Achievement	Complete a minimum of 20 units (or equivalents) including a minimum of 10 Year 12 units or equivalent.
Achievement Standard	Achieve a minimum of 14 C grades in Year 11 and Year 12 units (or equivalents), including at least 6 C grades in Year 12 units (or equivalents).
Courses	Complete at least four Year 12 ATAR courses  OR at least five general courses and/or ATAR courses or equivalent* OR a Certificate II (or higher) VET qualification in combination with ATAR, General or Foundation courses.
Breadth and Depth	Choose at least 1 course from List A and List B courses in Year 12
Examination	WACE courses: all students in their final year who are enrolled in ATAR courses will sit compulsory exams.

#### 2.3 Unique Student Identifier (USI)

It is now compulsory for all students who undertake a Vocational Education and Training (VET) certificate course to create a Unique Student Identifier (USI) as a reference number. The USI will make it easier for students to record their VET achievements and ensure that students' VET records are not lost. The USI is available online and at no cost to the student. This USI will stay with the student for life and be recorded with any nationally recognised VET course that is completed from when the USI legislation came into effect on 1 January 2015.

The USI is required by the School Curriculum and Standards Authority (SCSA, The Authority) to allow VET certificate results to be counted towards the achievement of WACE.

We are taking a whole school approach to ensure that the USI is recorded on all Year 10 students' records and NO Year 11 Course Selection will be processed without the USI.

To obtain further information about USIs please contact:

Mrs Kim Knight | Careers & VET Coordinator

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(08) 0571 8135

### 3 Pathways

Students explore and develop their ideas that relate to career choices in Year 10. Students and parents/carers will be provided career counselling opportunities, which link into course selections leading to aspiring career paths.

Almost all of our courses contribute to meeting WACE requirements and pathways to either university, a trade training centre, registered training provider, traineeship or an apprenticeship.

Students are offered three study options which they can mix and match. Options available at Immaculate Heart College include:

- WACE courses ATAR and General
- VET programs
- Endorsed programs (Authority Developed)

All students are required to choose an English and Religion and Life course, in either the ATAR or General.

<u>ATAR courses</u>: ATAR courses are designed for students who are aiming to enrol in a university course direct from school. These courses will be examined by the Authority and contribute to the achievement of an ATAR. You must sit the final examination to complete the course.

Students should select at least 4 ATAR courses in both Year 11 and 12. One of the courses must be ATAR English/Literature or EALD, and either ATAR or General Religion & Life. Studying four ATAR courses allows students to sit exit exams at the end of Year 12, which will contribute to a Tertiary Entrance Aggregate (TEA) for entry to further study at university.

University requirements can be found in the various university handbooks available online or at school. Additionally, to assist students in determining specific ATAR units that are required or preferred for their aspiring course, TSIC has provided the following document <a href="https://www.tisc.edu.au/static-fixed/guide/slar-2023.pdf">https://www.tisc.edu.au/static-fixed/guide/slar-2023.pdf</a>

<u>General courses</u>: General courses are designed for students who are aiming to enter vocationally based training or the workforce straight from school. These courses are a flexible alternative to achieve a WACE. At Immaculate Heart College the General course pathway is associated with the Authority Developed Workplace Learning Program (ADWPL), or a VET Delivered to Secondary Schools (VETDSS) program, providing students industry-based experience while completing the requirements of a WACE.

All General courses have an externally set task (EST) in Year 12 which is set by the Authority.

<u>Vocational Education and Training (VET)</u> program: For students who would like to combine their general program with a Certificate II, or higher. Certificates are always through a registered training organisation (RTO) such as TAFE and are nationally recognised courses that meet the Australian Qualifications Framework (AQF).

A student who undertakes this pathway would select a minimum of three general units, with English considered by the College a requirement. Vet Delivered to Secondary Schools (VETDSS) is a program facilitate by TAFE WA. It allows students to attend the College three days per week, one day on work placement and one day allocated to TAFE studies towards a Certificate II or higher.

### **Endorsed programs**

### These programs:

- provide access to areas of learning not covered by WACE courses or VET programs and contribute to the WACE as unit equivalents.
- are for students wishing to participate in programs that are delivered in a variety of settings by schools, workplaces, universities and community organisations.

### 4 Immaculate Heart College Course Offerings 2021

The College is progressively expanding course offerings to our students. Although we try our best to provide what is needed by the community, IHC acknowledges that we cannot always provide every student their preferred subjects. In this regard, IHC has formulated several Memorandums of Understandings (MOUs) with other providers to assist our students to gain the best learning outcomes possible, enabling students to remain enrolled at the College, while studying in a caring pastoral environment. These external providers include:

- Swanonline
- TAFE
- Apprentice Support Australia

#### 4.1 ATAR and Swanonline

Swanonline is our partner school for ATAR subjects that complement an array of subjects that IHC currently offers. IHC acknowledges that we cannot always provide every student their preferred subjects, therefore our arrangement with Swanonline allows for students to broaden their subject selections.

Online learning is of particular benefit in transitioning to further study, especially university where more and more courses are now being delivered online, and higher education courses require students to have acquired skills of autonomy. A *Swanonline* course may be suitable for a student with a timetable clash; where there are not enough numbers to facilitate a class at Immaculate Heart College; or a student who is frequently away due to sporting competitions etc.

IHC carefully plans the Senior Secondary timetable, ensuring Swanonline students have been given the same number of study periods as a student attending an IHC ATAR course.

Benefits of Swanonline courses include:

- Timetabled 6 lesson slots per week
- Carefully considered teacher selection for Swanonline supervision sessions (supervising teacher can assist where required); and
- FREE after school tutoring sessions.

# 5 The College List A and List B Courses

The below courses are on offer for Year 11 students in 2022. Students must choose at least one course from each list, including ATAR or General English and Religion & Life courses.

# 5.1 ATAR course offerings

List A Humanities (The arts, languages and social sciences)	Year 11 Unit 1 &2	Year 12 Unit 3 & 4
English	AEENG	ATENG
English Literature	AELIT	ATLIT
Modern History	AEHIM	ATHIM
Ancient History	AEHIA	ATHIA
Religion and Life	AEREL	ATREL
Politics and Law	AEPAL	ATPAL
Philosophy and Ethics	AEPAE	ATPAE
Visual Arts	AEVAR	ATVAR
Materials Design and Technology	AEMDT	ATMDT
List B STEM (science, technologies, engineering and mathematics)	Year 11 Unit 1 &2	Year 12 Unit 3 & 4
Mathematics Specialist	AEMAS	ATMAS
Mathematics Methods	AEMAM	ATMAM
Mathematics Applications	AEMAA	ATMAA
Chemistry	AECHE	ATCHE
Earth and Environmental Science	AEEES	ATEES
Human Biology	AEHBY	ATHBY
Psychology	AEPSY	ATPSY
Outdoor Education	AEOED	ATOED
Health Studies	AEHEA	ATHEA
Physical Education Studies	AEPES	ATPES
Visual Arts	GEVAR	GTVAR

# 5.2 General course offerings

List A Humanities (The arts, languages and social sciences)	Year 11 Unit 1 &2	Year 12 Unit 3 & 4
English	GEENG	GTENG
Religion and Life	GEREL	GTREL
Modern History	GEHIM	GTHIM
Ancient History	GEHIA	GTHIA
<b>List B STEM</b> (science, technologies, engineering and mathematics)		
Mathematics Essential	GEMAE	GTMAE
Integrated Science	GEISC	GTISC
Building and Construction	GEBCN	GTBCN
Materials Design and Technology	GEMDT	GTMDT
Health and Physical Education Studies (non-assessed)	PES-non- assessed	PES – non assessed

Endorsed Programs	
Authority Developed Workplace Learning	ADWPL
Authority Developed Community Service	ADCS
Provider Developed Programs	
Bronze Medallion	PRLBM
ASDAN – Vocational Taster	PASDV

### 6 Course Information

Course information has been sourced from SCSA as follows:

#### 6.1 **Arts**

# **VISUAL ART- ATAR**

### **Year 11 Overview**

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

Unit content includes:

#### Art Making

- Inquiry
- Visual language and visual influence
- Art forms, media and techniques
- Art Practice
- Presentation
- Reflection

### Art Interpretation

- Visual analysis
- Personal Response
- Meaning and purpose
- Social, cultural and historical contexts

#### Year 11 AEVAR

#### **Unit 1 - DIFFERENCES**

The focus for this unit is differences. Students may, for example, consider differences arising from cultural diversity, place, gender, class and historical period. Differences relating to art forms, media and conventions may also provide a stimulus for exploration and expression.

Focuses on difference in art making and interpretation including:

- Cultural diversity
- Place
- Gender
- Class and historical period

#### **Unit 2 - IDENTITIES**

The focus for this unit is identities. In working with this focus, students explore concepts or issues related to personal, social, or cultural identity.

Focuses on identities in art making and interpretation including:

- Personal
- Social
- Cultural

#### Year 12 ATVAR

This course places value on divergence, uniqueness and individuality. It assists students to value and develop confidence in their own creative abilities and to develop a greater understanding of their environment, community and culture.

The Visual Art ATAR course encourages students to develop problem-solving skills together with creative and analytical ways of thinking. Innovation is encouraged through a process of inquiry, exploration and experimentation. It aims to enable students to make connections to relevant fields of study, prepare them for creative thinking and problem-solving in future work and life. Participation in this course may contribute to a sense of enjoyment, engagement and fulfilment in their everyday lives, as well as to promote an appreciation for the environment and ecological sustainability.

#### **Unit 3 - COMMENTARIES**

In this unit, students engage with the social and cultural purposes of art making and interpretation. The focus is on commentaries. Students transform ideas and develop concepts using innovative approaches to art making and presentation. They document their thinking and working practices, having the flexibility to work across media and art forms.

#### Unit 4 - POINTS OF VIEW

In this unit, students identify and explore concepts or issues of personal significance in art making and interpretation. Students investigate a range of solutions using visual language and document the progressive resolution of thinking and working practices. They research and analyse factors affecting points of view such as time, place, culture, religion and politics, synthesising this knowledge to express a personal viewpoint or position. In the analysis of their own and others' artwork, students reflect on the relationship between artwork, audiences and contextual factors, and consider how these contribute to the development of different perspectives.

# **VISUAL ART - GENERAL**

#### Year 11 GEVAR

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

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. It aims to contribute to a sense of enjoyment, engagement and fulfilment in their everyday lives, as well as to promote an appreciation for the environment and ecological sustainability.

#### Unit content includes:

### Art Making

- Inquiry
- Visual language and visual influence
- Art forms, media and techniques
- Art Practice
- Presentation
- Reflection

#### Art Interpretation

- Visual analysis
- Personal Response
- Meaning and purpose
- Social, cultural and historical contexts.

### **Unit 1 - EXPERIENCES**

Students base art making and interpretation on:

- their lives and personal experiences
- observations of the immediate environment
- events and/or special occasions.

Students use experiences to develop appreciation of the visual arts in their everyday lives.

#### **Unit 2 – EXPLORATIONS**

Students explore ways to generate and develop ideas using a variety of stimulus materials and explorations from their local environment in their art making and interpretation.

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

#### Year 12 GTVAR

The Visual Art General course encompasses the practice and theory of the broad areas of art, craft and design. This course places value on divergence, uniqueness and individuality. It assists students to value and develop confidence in their own creative abilities and to develop a greater understanding of their environment, community and culture.

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.

#### **Unit 3 - INSPIRATIONS**

Students become aware that artists gain inspiration and generate ideas from diverse sources, including what is experienced, learned about, believed in, valued, imagined or invented.

Students, through research and/or first-hand experience of artworks and art making, actively engage in perception, research, reflection and response and consider the ways in which artists, past and present, have been inspired to develop artworks.

#### **Unit 4 - INVESTIGATIONS**

Students explore and develop ideas for art making and interpretation through the investigation of:

- different artists
- art forms
- processes and technologies.

In particular, students explore the expressive potential of media techniques and processes, considering their inherent qualities in the development and presentation of their artworks.

#### 6.2 Enalish

# **ENGLISH – ATAR COURSE**

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

Through close study and wide reading, viewing and listening, students develop the ability to analyse and evaluate the purpose, stylistic qualities and conventions of texts and enjoy creating their own imaginative, interpretive, persuasive and analytical responses. The English ATAR course is designed to develop students' facility with all types of texts and language modes and to foster an appreciation of the value of English for lifelong learning.

Students refine their skills across all language modes by engaging critically and creatively with texts. They learn to speak and write fluently in a range of contexts and to create a range of text forms. They hone their oral communication skills through discussion, debate and argument, in a range of formal and informal situations.

Prerequisites: Year 10 course mark - 60% or higher

### Year 11 AEENG

#### UNIT 1

Students explore how meaning is communicated through the relationships between language, text, purpose, context and audience. This includes how language and texts are shaped by their purpose, the audiences for whom they are intended and the contexts in which they are created and received. 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 elements combine with spoken and written elements to create meaning.

Students develop an understanding of stylistic features and apply skills of analysis and creativity. They are able to respond to texts in a variety of ways, creating their own texts and reflecting on their own learning.

#### UNIT 2

Students analyse the representation of ideas, attitudes and voices in texts to consider how texts represent the world and human experience. Analysis of how language and structural choices shape perspectives in and for a range of contexts is central to this unit. By responding to and creating texts in different modes and media, students consider the interplay of imaginative, interpretive and persuasive elements in a range of texts and present their own analyses. Students critically examine the effect of stylistic choices and the ways in which these choices position audiences for particular purposes, revealing and/or shaping attitudes, values and perspectives. Through the creation of their own texts, students are encouraged to reflect on their language choices and consider why they have represented ideas in particular ways.

#### Year 12 ATENG

#### UNIT 3

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

### **UNIT 4**

Students examine different interpretations and perspectives to develop further their knowledge and analysis of purpose and style. They challenge perspectives, values and attitudes in texts, developing and testing their own interpretations though debate and argument. Through close study of texts, students explore relationships between content and structure, voice and perspectives and the text and context.

**ENGLISH – GENERAL COURSE** 

The English General course focuses on consolidating and refining the skills and knowledge

needed by students to become competent, confident and engaged users of English in

everyday, community, social, further education, training and workplace contexts.

The English General course is designed to provide students with the skills that will empower

them to succeed in a wide range of post-secondary pathways. 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

Year 11 GEENG

UNIT 1

Focuses on students comprehending and responding to the ideas and information presented

in texts.

Students:

employ a variety of strategies to assist comprehension;

• read, view and listen to texts to connect, interpret and visualise ideas;

learn how to respond personally and logically to texts by questioning, using inferential

reasoning and determining the importance of content and structure;

consider how organisational features of texts help the audience to understand the text;

learn to interact with others in a range of contexts, including everyday, community,

social, further education, training and workplace contexts;

communicate ideas and information clearly and correctly in a range of contexts; and

 apply their understanding of language through the creation of texts for different purposes.

#### UNIT 2

Focuses on interpreting ideas and arguments in a range of texts and contexts.

#### Students:

- analyse text structures and language features and identify the ideas, arguments and values expressed;
- consider the purposes and possible audiences of texts;
- examine the connections between purpose and structure and how a text's meaning
  is influenced by the context in which it is created and received;
- integrate relevant information and ideas from texts to develop their own interpretations;
- learn to interact effectively in a range of contexts; and
- create texts using persuasive, visual and literary techniques to engage audiences in a range of modes and media.

#### Year 12 GTENG

#### **UNIT 3**

Focuses on exploring different viewpoints presented in a range of texts and contexts.

#### Students:

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

#### UNIT 4

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

#### Students:

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

#### 6.3 Health and Physical Education

# **HEALTH STUDIES – ATAR COURSE**

The Health Studies ATAR course focuses on the study of health as a dynamic quality of human life, with key influences of social, environmental, economic and biomedical determinants of health. Other course content includes the influence of beliefs, attitudes and values on health behaviour, and the importance of self-management and interpersonal skills in making healthy decisions.

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.

Prerequisites: NIL

#### Yr 11 AEHEA

#### 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. Students extend their understandings of factors influencing health, and actions and strategies to protect and promote health through inquiry processes.

#### 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. The impact of technology on interpersonal skills and strategies for managing such influences are also a focus.

### Yr 12 ATHEA

The Health Studies ATAR course focuses on the study of health as a dynamic quality of human life. Key focuses of the course include:

- Social:
- Environmental;
- Economic; and
- Biomedical determinants.

Other course content includes the influence of beliefs, attitudes and values on health behaviour, and the importance of self-management and interpersonal skills in making healthy decisions. This course will prepare students for career and employment pathways in a range of health and community service industries. Students will have the opportunity to develop key employability and life skills, including communication, leadership, initiative and enterprise. Inquiry skills will equip students to adapt to current and future studies and work environments.

#### UNIT 3

The focus of this unit is the health of specific populations. Within Australia and across the globe, there are groups who 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 through priority health approaches. They examine models and social justice principles which can be applied to address health inequity, and review actions and strategies focusing on reducing inequities. The impact of attitudinal and environmental influences on the health of specific groups is explored. Students examine and interpret relationships in data which explain disparities in health through the application of critical inquiry skills.

### **UNIT 4**

The focus of this unit is local, regional and global challenges to health. Despite incredible improvements to health over many years, life expectancy rates within and across populations vary considerably. Students learn about the impact of social determinants on global inequities and other challenges to health, and approaches to address barriers which prevent groups from experiencing better health outcomes. Students examine international health agencies and global and local initiatives designed to improve health. Students further refine and apply investigative skills to analyse health issues, develop well-constructed arguments, and draw evidence-based conclusions.

# **OUTDOOR EDUCATION – ATAR COURSE**

The Outdoor Education ATAR 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 ATAR course is based on the experiential learning cycle including:

- Planning for outdoor experiences;
- Participating in these experiences; and
- Reflecting on their involvement.

The course facilitates the development of a sense of place as a result of a greater understanding and appreciation of the local natural environment. It assists students to develop a relationship with nature and encourages them to work toward achieving an ecologically sustainable world.

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 so important.

The course will prepare students for career and employment pathways in areas such as outdoor leadership, environmental interpretation, environmental planning, facilities management, eco-tourism, military service, outdoor education, and the many unforeseen areas evolving in the outdoors industry.

Prerequisites: Students are required to pass a physical fitness test prior to acceptance into this course.

#### Yr 11 AFOFD

### UNIT 1

The focus of this unit is being responsible in the outdoors. Students are exposed to a broad range of responsibilities involved in undertaking short-duration expeditions. Through regular practical experiences and group activities, students develop flexibility, monitoring and commitment. They further develop problem solving, decision making and outdoor leadership skills and strategies for building effective group relationships. Students become more aware of the natural environment and develop interpretational skills. They are introduced to sustainability and local environmental management strategies, and consider the role of technology in mediating human relationships with nature.

#### UNIT 2

The focus for this unit is attaining independence in the outdoors. Students develop their performance and competence at increasing levels of self-sufficiency, technical understanding and physical fitness to deal with a range of challenges. They are involved in planning for participation in extended expeditions, and become more proficient in outdoor activity, roping and navigational skills. They are able to conduct emergency response processes. Opportunities for self-discovery and strategies to enhance personal and interpersonal skills are provided. They deliver briefings, participate in debriefing, and experience shared leadership opportunities. Students extend their understanding about the environment and develop weather forecasting skills. They are introduced to historical, cultural and Indigenous heritage. They explore current controversial environmental issues related to outdoor experiences and examples of management strategies for environments at risk in Western Australia (WA).

#### Yr 12 ATOED

#### UNIT 3

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

### **UNIT 4**

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

PHYSICAL EDUCATION STUDIES – ATAR COURSE

In the Physical Education Studies ATAR course students learn about physiological,

psychological and biomechanical principles, and apply these to analyse and improve

personal and group performances in physical activities. Throughout the course, students learn

through integrated written, oral and active learning experiences. The course also provides

students with opportunities to develop skills that will enable them to pursue personal interests

and potential in physical activity as athletes, coaches, officials, administrators and/or

volunteers.

Prerequisites: High C grade in Yr 10 Physical Education.

Yr 11 AEPES

UNIT 1

The focus of this unit is to explore anatomical and biomechanical concepts, the body's

responses to physical activity and stress management processes to improve their own

performance and that of others in physical activity.

The unit includes the knowledge, understandings and skills of the following content:

Developing physical skills and tactics

Motor learning and coaching

• Functional anatomy

**Biomechanics** 

Exercise physiology; and

• Sport psychology.

UNIT 2

The focus of this unit is to identify the relationship between skill, strategy and the body in order

to improve the effectiveness and efficiency of performance. This unit builds on all content

identified in Unit 1.

Examination:

Yr 12 ATPES

UNIT 3

The focus of this unit is to provide opportunities for students to build upon their acquired

physical skills and biomechanical, physiological and psychological understandings to improve

the performance of themselves and others in physical activity.

### Unit 4

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

Each unit includes:

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

This course includes a practical (performance) and written examination.

# PHYSICAL EDUCATION— NON-ASSESSED COURSE

Students selecting Physical Education – NON ASSESSED course can expect a focus on mind and body fitness, challenging students to be their best in every situation. It has been developed to provide students active learning experiences through various sports including (but not limited to):

imited to):
Volleyball;
Basketball;
Netball;
Soccer;
Tennis;
Hiking; and
Cross country preparation.
The course allows students to undertake a non-assessed option of physical education activities while undertaking studies towards the WACE

#### 6.4 Humanities and Social Sciences

Students selecting HASS ATAR courses should be achieving at least a high level C grade (consistent) in Year 10 HASS and English. The cognitive complexity of the course content in all courses increases from Year 11 to Year 12. The external exam at the end of Year 12 (ATAR exam) covers the work completed in both semesters of Year 12.

# **RELIGION & LIFE – ATAR COURSE**

The ATAR Religion and Life course provides students with opportunities to learn about religion and the interplay that occurs between religion, societies and people. Students develop an informed and critical understanding of this interplay by drawing from a detailed knowledge of one or more religions.

Every religion offers a system of beliefs and practices. In the ATAR Religion and Life course, students explore one or more religions and investigate the characteristics of religion, their origins, foundations, social influence and development over time. They analyse the role religion has played in society and understand the challenges and opportunities religions face.

Prerequisites: Students must have strong literacy skills in this course, therefore it is recommended that students have achieved a B grade or above in Year 10 English and a B grade or above in Year 10 Religious Education.

#### Year 11 AEREL

### UNIT 1

The focus of this unit is the place of religion in society. It examines the responses of people to religion, in particular how people understand the response of religion to their concerns, needs and questions. Students develop the skills required for conducting an inquiry, processing information, and communicating findings about the interplay between religion and life.

### UNIT 2

The focus of this unit is religious identity and purpose. It investigates how religion shapes, forms and supports people in life. The unit also examines how religion impacts on and interacts with, groups in society. Students develop the skills required for conducting an inquiry, processing information, and communicating findings about the interplay between religion and life.

### Yr 12 ATREL

The ATAR Religion and Life course provides students with opportunities to learn about religion and the interplay that occurs between religion, societies and people. Students develop an

informed and critical understanding of this interplay by drawing from a detailed knowledge of one or more religions. Every religion offers a system of beliefs and practices. In the ATAR Religion and Life course, students explore one or more religions and investigate the characteristics of religion, their origins, foundations, social influence and development over time. They analyse the role religion has played in society and understand the challenges and opportunities religions face. The connections between religion and life occur in many areas of human activity. Religion motivates and influences how people interact with each other and the world around them.

#### UNIT 3

The focus for this unit is the connection between past and present experiences of religion. Students analyse the impact of changes within society and how these changes shape the way individuals and groups interact with religion. They further develop research skills for conducting an inquiry, processing information and, communicating findings about the interplay between religion and life.

#### **UNIT 4**

The focus for this unit is the interplay between religion and life. Students explore how religion responds to, and interacts with, issues that arise within society. They further develop research skills for conducting an inquiry, processing information, and communicating findings about the interplay between religion and life.

# **ANCIENT HISTORY – ATAR COURSE**

The study of Ancient History has stimulated our imagination through the last two millennia, more recently inspiring a plethora of block buster films such as Gladiator, Troy, Pompeii and 300. Western society has striven to imitate the Ancient world of Greece, Rome and Egypt in many aspects of our government, art and architecture. Yet so much that we think we know about the ancient world are fallacies that we project onto the past. Ancient Greece was the birthplace of democracy, yet a quarter of the population were slaves and women had to veil their face in public. Ancient Rome controlled an empire larger than the European Union united through warfare and maintained by the spectacle of slaughter in the Gladiatorial games. During the glory and grandeur of Rome, they built structures that would not be equalled till modern times, They perfected indoor plumbing and heating yet washed their clothes in urine. Few now know that Cleopatra was not Egyptian and Alexander the Great was Macedonian not Greek.

By studying Ancient History students are given skills to decipher the past and apply the universal lessons of ancient history to modern politics and history.

Prerequisites: High level literary inquiry skills.

Year 11 AEHIA

#### **UNIT 1 - INVESTIGATING THE ANCIENT WORLD**

This unit provides an introduction to the nature of the remaining evidence of the ancient past and issues relevant to the investigation of the ancient world. The unit involves an investigation of the evidence for an ancient site, individual, group or events and how it has been interpreted and represented. Students also investigate historical authentication and reliability. The connection should be made between the significant issues under investigation and the selected electives.

#### **UNIT 2 - ANCIENT SOCIETIES**

This unit examines how people lived in the ancient world through an investigation of the remaining evidence. The unit focuses on the study of significant features of ancient societies, such as slavery; the family; and beliefs, rituals and funerary practices.

For the selected elective, students investigate the chronological and geographical context; institutions and structures; the ancient historical narrative; and the significant features of the society such as slavery, art and architecture, beliefs and the family.

Year 12 ATHIA

#### **UNIT 3 - PEOPLE, POWER AND AUTHORITY**

This unit examines the nature and exercise of power and authority in ancient societies in key periods, with reference to the evidence of significant political, military, religious, cultural and economic features. The study of an individual as part of this unit enables study of the influence of the individual on events and developments.

#### **UNIT 4 - RECONSTRUCTING THE ANCIENT WORLD**

This unit focuses on a significant historical period to develop an understanding of the relevant institutions, practices, key events and individuals of the period, in the context of a wide range of sources. This unit allows for greater study of the challenges associated with the interpretation and evaluation of evidence.

# **MODERN HISTORY – ATAR COURSE**

These four units help students make sense of the world, as we know it today. What events over the 20th century helped shape our nation and those around us? What has helped develop the state of international relations, treaties, fears, politics and policies?

Prerequisites: A very strong C grade in Year 10 HASS and English

Year 11 AEHIM

#### **UNIT 1 - UNDERSTANDING THE MODERN WORLD**

This unit examines developments of significance in the modern era, including the ideas that inspired them and their far-reaching consequences. Students examine **one** development or turning point that has helped to define the modern world. Students explore crucial changes, for example, the application of reason to human affairs; the transformation of production, capitalism and consumption, transport and communications; the challenge to social hierarchy and hereditary privilege, and the assertion of inalienable rights; and the new principles of government by consent. Through their studies, students explore the nature of the sources for the study of modern history and build their skills in historical method through inquiry. The key conceptual understandings covered in this unit are: what makes an historical development significant; the changing nature and usefulness of sources; the changing representations and interpretations of the past; and the historical legacy of these developments for the Western world and beyond.

#### UNIT 2 - MOVEMENTS FOR CHANGE IN THE TWENTIETH CENTURY

This unit examines significant movements for change in the 20th century that led to change in society, including people's attitudes and circumstances. These movements draw on the major ideas described in Unit 1, have been connected with democratic political systems, and have been subject to political debate. Through a detailed examination of one major 20th century movement, students investigate the ways in which individuals, groups and institutions have challenged existing political structures, accepted social organisation, and prevailing economic models, to transform societies. The key conceptual understandings covered in this unit are: the factors leading to the development of movements; the methods adopted to achieve effective change; the changing nature of these movements; and changing perspectives of the value of these movements and how their significance is interpreted.

#### Year 12 ATHIM

#### UNIT 3 - MODERN NATIONS IN THE TWENTIETH CENTURY

This unit examines the 'nation' as the principal form of political organisation in the modern world; the crises that confronted nations in the twentieth century; their responses to these crises, and the different paths they have taken to fulfil their goals.

Students study one topic/nation and study crises that challenged the stability of the government, the path of development and the social, economic and political order that has been maintained. Students examine the manner of control a country has developed to deal with internal divisions and external threats.

#### **UNIT 4 - THE MODERN WORLD SINCE 1945**

This unit focuses on the distinctive features of the modern world that emerged in the period 1945 – 2001. It aims to build students' understanding of the contemporary world – that is, why we are here at this point in time. These include changes to the nature of the world order: shifting international tensions, alliances and power blocs; the nature of various conflicts and regional and international attempts to create peace and security. This will include the rise and fall of the Cold War; the demise of the Soviet bloc; and the rise of European sovereign states and the European Union.

# **POLITICS AND LAW - ATAR COURSE**

The Politics and Law ATAR course examines the relationship between the process of making laws and the process of achieving justice primarily in Australia; but with some reference other countries around the world. The course aims to provide students with the knowledge of the key principles, structures, institutions and processes of Australia's political and legal system. Students will develop values and skills in order to critically evaluate the effectiveness of our political and legal system. They will do this with reference to contemporary examples of issues facing Australian society today and an interest in news and current affairs is essential.

The study of Politics and Law is a useful background to careers in law and politics but it extends to areas such as advocacy, public administration, international relations, foreign affairs, community development, teaching, journalism, human resource management, government and commerce.

Prerequisites: A very strong C grade in Year 10 HASS and English. An interest in reading and following political developments is highly desirable.

#### Year 11 AEPAL

#### **UNIT 1 - DEMOCRACY AND THE RULE OF LAW**

This unit examines the principles of a liberal democracy; the legislative, executive and judicial structures and processes of Australia's political and legal systems; the functioning of a non-democratic system; and the processes of a non-common law system.

Political and legal developments and contemporary issues (the last three years) are used to provide a framework for the unit.

#### **UNIT 2 - REPRESENTATION AND JUSTICE**

This unit examines the principles of fair elections; the electoral and voting systems in Australia since Federation, making reference to a recent (the last ten years) election in Australia; the electoral system of another country; an analysis of the civil and criminal law processes in Western Australia; and an analysis of a non-common law system.

Political and legal developments and contemporary issues (the last three years) are used to provide a framework for the unit.

#### **UNIT 3 - POLITICAL AND LEGAL SYSTEMS**

This unit examines various aspects of the political and legal system established by the Commonwealth Constitution (Australia), including the roles and powers of the legislative, executive and judicial branches of government, with a comparison to a non-Westminster system; the influence of individuals, political parties and pressure groups on the law making process of parliament and the courts; and the operation of federalism and the balance of power between the Commonwealth and the states in Australia.

Political and legal developments and contemporary issues (the last three years) are used to provide a framework for the unit.

### **UNIT 4 - ACCOUNTABILITY AND RIGHTS**

In this final unit students examine how effectively the system works to ensure the accountability of the legislature, the executive and the judicial branch. High profile examples where corruption has been uncovered and current methods to detect, prevent and prosecute breaches are studied. Students will also examine how rights are protected in Australia, and make comparisons with the protection of rights in another country.

Political and legal developments and contemporary issues (the last three years) are used to provide a framework for the unit.

# **RELIGION & LIFE – GENERAL COURSE**

The General Religion and Life course provides students with opportunities to learn about religion and explores the relationships between religion, society and individuals. It examines the nature of religion and how it offers individuals and their communities an understanding of the world around them. Students develop an understanding of ways in which people discover, understand and express their religious beliefs. They explore one or more religions and investigate the characteristics of religion, origins, foundations, cultural influences and development over time. They analyse the role religion has played in human affairs and explore issues of concern to religion. Through the General Religion and Life course, students learn skills that will enable them to understand the role religion plays in society and in the lives of people. They use a range of primary and secondary sources and employ a variety of methods to investigate information. These methods include research, observation, analysis, and discussion.

Minimum requirements: NIL

#### Yr 11 GEREL

#### UNIT 1

The focus of this unit is religion as a human activity. It explores how people search for meaning in life and the characteristics of religion. Students conduct research and develop the skills required for processing information and communicating findings about religion and life.

#### Content includes:

- The nature of religion
- The influence of religion; and
- Religious inquiry and learning skills.

#### UNIT 2

The focus of this unit is the role religion plays in society. It considers the responses offered by religion to issues that exist in society. Students conduct research and develop the skills required for processing information and communicating findings about religion and life.

This unit builds on the content covered in Unit 1.

#### Yr 12 GTREL

The General Religion and Life course provides students with opportunities to learn about religion and explores the relationships between religion, society and individuals. It examines the nature of religion and how it offers individuals and their communities an understanding of the world around them. Students develop an understanding of ways in which people discover, understand and express their religious beliefs. They explore one or more religions and investigate the characteristics of religion, origins, foundations, cultural influences and development over time. They analyse the role religion has played in human affairs and explore issues of concern to religion. Through the General Religion and Life course, students learn skills that will enable them to understand the role religion plays in society and in the lives of people. They use a range of primary and secondary sources and employ a variety of methods to investigate information. These methods include research, observation, analysis, and discussion.

Minimum requirements: An understanding of the Year 11 course content is assumed knowledge.

#### UNIT 3

The focus of this unit is the role religion plays in the lives of people. It explores how people interact with and respond to religion. Students consolidate the skills required for conducting an inquiry, processing information and communicating findings about religion and life.

#### **UNIT4**

The focus for this unit is the interplay between religion and life. Students explore how religion responds to and interacts with issues that arise within society. They further develop research skills for conducting an inquiry, processing information and communicating findings about the interplay between religion and life.

## MODERN HISTORY - GENERAL COURSE

The General Modern History course helps students gain an understanding of the driving forces behind present local and global issues- how people resisted change, challenged authority and dealt with crises past and present- and how societies change through time. The course helps develop useful life and work-based skills in students including: research, hypothesis testing, acceptance of different viewpoints and critical thinking skills.

#### Minimum requirements

Students should have achieved a C grade in Year 10 Humanities.

#### Year 11 GEHIM

#### **UNIT 1 – PEOPLE, PLACE AND TIME**

This unit allows students to become aware of our place within the historical narrative, key individuals and how areas change over time. Students study one or two electives, including both skills and knowledge aspects: Local history: How a selected suburb, town or area of Western Australia has changed over time with reference to the significant people of the area and relating the local history to Western Australia/Australia's history (e.g. Indigenous history, impact of wars, economic circumstances and migration).

#### **UNIT 2 – POWER AND AUTHORITY**

Societies consist of individuals and institutions that have various types of power and authority and which interact with each other. Individuals and groups, past and present, seek to influence the structures of power and authority. This is not always done in a fair manner.

Students study one elective, along with the required historical knowledge and skills: International authority: the League of Nations and the United Nations - through case studies, students look at the actions of these organisations and how they responded to crises and events e.g. rise of Hitler, war in the Middle East, genocide, and recent world events.

#### Year 12 GTHIM

#### **UNIT 3 – SOCIETIES AND CHANGE**

Students learn about the evolving nature of societies and the various forces for continuity and change that exist. Students learn that some values, beliefs and traditions are linked to the identity of a society. They also learn that, in any period of change, there are those individuals and institutions who support change, but others that oppose it, and that there are different interpretations of the resultant society.

#### **UNIT 4 – HISTORICAL TRENDS AND MOVEMENTS**

Students learn about the evolving nature of societies and the various forces for continuity and change that exist. Students learn that some values, beliefs and traditions are linked to the identity of a society. They also learn that, in any period of change, there are those individuals and institutions that support change, but others that oppose it, and that there are different interpretations of the resultant society.

## ANCIENT HISTORY – GENERAL COURSE

The Ancient History General course enables students to study life in early civilisations, based on the interpretation of the physical and written remains of different ancient societies. The study of ancient civilisations illustrates the development of distinctive features of contemporary societies, for example, social organisation and religion. The course also explores the possible motivations and actions of individuals, and how they shaped the political, social and cultural landscapes of the ancient world. 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: None, although an interest in applying mythology to 'real life characters' is important.

#### **UNIT 1 - ANCIENT CIVILISATIONS AND CULTURES**

This unit enables students to investigate life in early civilisations, including the social, cultural, political, economic, religious, and military structures, and the significant values, beliefs, and traditions that existed. They discover how the world and its people have changed, as well as the significant legacies that exist into the present. Students are able to trace the development of some of the distinctive features of contemporary societies, for example, social organisation, systems of law, governance and religion, through an examination of ancient civilisations.

#### **UNIT 2 - POWER IN THE ANCIENT WORLD**

In this unit, students learn that in ancient societies key individuals have created change – through revolution or peace – with groups and institutions, and using their power to shape their society. They investigate key individuals' motives, methods and power; the responses of others to their power, and their impact and influence on society.

#### Year 12 GTHIA

This unit provides an opportunity for students to study people from cultures and communities that no longer exist, and to investigate how these communities responded to the problems and challenges of their time. Ancient History allows students to explore the ancient historical narrative and to seek out evidence for this.

#### **UNIT 3 - SOCIETIES AND CHANGE**

Students learn about the evolving nature of societies and the various forces for continuity and change that exist. They also learn that values, beliefs, and traditions are linked to the identity of a society. Students will examine aspects such as mythology and slavery in the targeted ancient society.

#### **UNIT 4 - CONFRONTATION AND RESOLUTION**

In this unit, students learn that there are internal and external forces that result in confrontation and revolution within societies. and these have consequences for continuity and change. Students assess how power is used, how different groups and individuals respond, and whether there is the potential for greater confrontation or more effective resolution to conflict.

### 6.5 Languages

Students who completed Year 10 Latin studies will have the opportunity to sit a Latin exam in Year 11. Students will be provided a certificate upon successful completion of the exam, however it will not contribute towards the WACE.

#### 6.6 Mathematics

# MATHEMATICS APPLICATIONS – ATAR COURSE

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

Minimum requirements: Students should have achieved a B grade or above in Year 10 General Mathematics.

### Year 11 AEMAA

#### UNIT 1

Consumer arithmetic reviews the concepts of rate and percentage change in the context of earning and managing money and provides a context for the use of spread sheets. Algebra and matrices continues the Years 7–10 study of algebra and introduces the new topic of matrices. The emphasis of this topic is the symbolic representation and manipulation of information from real-life contexts using algebra and matrices. Shape and measurement extends the knowledge and skills students developed in the Years 7–10 curriculum with the concept of similarity and associated calculations involving simple and compound geometric shapes. The emphasis in this topic is on applying these skills in a range of practical contexts, including those involving three-dimensional shapes.

#### **UNIT 2**

Univariate data analysis and the statistical investigation process develop students' ability to organise and summarise univariate data in the context of conducting a statistical investigation. Applications of trigonometry extend students' knowledge of trigonometry to solve practical problems involving non-right-angled triangles in both two and three dimensions, including problems involving the use of angles of elevation and depression and bearings in navigation. Linear equations and their graphs uses linear equations and straight-line graphs, as well as linear-piece-wise and step graphs, to model and analyse practical situations.

#### Yr12 ATMAA

The ATAR Mathematics Applications course focuses on the use of Mathematics to solve problems in contexts that involve financial modelling, geometric and trigonometric analysis,

graphical and network analysis, and growth and decay in sequences. It also provides opportunities for students to develop systematic strategies based on the statistical investigation process for answering statistical questions that involve analysing univariate and bivariate data, including time series data.

Minimum requirements: Students must have achieved a C grade or above in Year 11 Mathematics Applications or have completed Year 11 Mathematics Methods.

#### **UNIT 3**

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

#### **UNIT 4**

Time series analysis continues students' study of statistics by introducing them to the concepts and techniques of time series analysis. The content is to be taught within the framework of the statistical investigation process. Loans, investments and annuities aims to provide students with sufficient knowledge of financial mathematics to solve practical problems associated with taking out or refinancing a mortgage and making investments. Networks and decision mathematics uses networks to model and aid decision making in practical situations.

# MATHEMATICS METHODS – ATAR COURSE

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

Mathematics Methods provides a foundation for further studies in disciplines in which mathematics and statistics have important roles. It is also advantageous for further studies in the health and social sciences. In summary, this course is designed for students whose future pathways may involve mathematics and statistics and their applications in a range of disciplines at the tertiary level.

#### Year 11 AEMAM

#### UNIT 1

This unit begins with a review of the basic algebraic concepts and techniques required for a successful introduction to the study of calculus. The basic trigonometric functions are then introduced. Simple relationships between variable quantities are reviewed, and these are used to introduce the key concepts of a function and its graph. The study of inferential statistics begins in this unit with a review of the fundamentals of probability and the introduction of the concepts of counting, conditional probability and independence. Access to technology to support the computational and graphical aspects of these topics is assumed.

#### **UNIT 2**

The algebra section of this unit focuses on exponentials. Graphs are examined and their applications in a wide range of settings are explored. Arithmetic and geometric sequences are introduced and their applications are studied. Rates and average rates of change are introduced, and this is followed by the key concept of the derivative as an 'instantaneous rate of change'. These concepts are reinforced numerically, by calculating difference quotients both geometrically as slopes of chords and tangents, and algebraically. Calculus is developed to study the derivatives of polynomial functions, with simple application of the derivative to curve sketching, the calculation of slopes and equations of tangents, the determination of instantaneous velocities and the solution of optimisation problems. The unit concludes with a brief consideration of anti-differentiation.

#### UNIT 3

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

Access to technology to support the computational aspects of these topics is assumed.

#### **UNIT 4**

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

Access to technology to support the computational aspects of these topics is assumed.

# MATHEMATICS SPECIALIST – ATAR COURSE

This course provides opportunities, beyond those presented in the Mathematics Methods ATAR course, to develop rigorous mathematical arguments and proofs, and to use mathematical models more extensively. Mathematics Specialist contains topics in functions and calculus that build on and deepen the ideas presented in the Mathematics Methods course, as well as demonstrate their application in many areas. The Mathematics Specialist course also extends understanding and knowledge of statistics and introduces the topics of vectors, complex numbers and matrices.

Prerequisites: Mathematics Specialist is to be studied in conjunction with the Mathematics Methods ATAR course as preparation for entry to specialised university courses, such as engineering, physical sciences and mathematics.

#### Year 11 AEMAA

#### UNIT 1

Unit 1 of the Mathematics Specialist ATAR course contains three topics: Combinatorics, Vectors in the plane, and Geometry that complement the content of the Mathematical Methods ATAR course. The proficiency strand, Reasoning, of the Year 7–10 curriculum is continued explicitly in Geometry through a discussion of developing mathematical arguments. While these ideas are illustrated through deductive Euclidean geometry in this topic, they recur throughout all topics in the Mathematics Specialist ATAR course. Geometry also provides the opportunity to summarise and extend students' studies in Euclidean Geometry. An understanding of this topic is of great benefit in the study of later topics in the course, including vectors and complex numbers.

Vectors in the plane provides new perspectives for working with two-dimensional space and serves as an introduction to techniques that will be extended to three-dimensional space in Unit 3.

Combinatorics provides techniques that are useful in many areas of mathematics, including probability and algebra. All topics develop students' ability to construct mathematical arguments.

The three topics considerably broaden students' mathematical experience and therefore begin an awakening to the breadth and utility of the course. They also enable students to increase their mathematical flexibility and versatility.

Access to technology to support the computational aspects of these topics is assumed.

#### UNIT 2

Unit 2 of the Mathematics Specialist ATAR course contains three topics: Trigonometry, Matrices, and Real and complex numbers.

Trigonometry contains techniques that are used in other topics in both this unit and Unit 3. Real and complex numbers provides a continuation of students' study of numbers, and the study of complex numbers is continued in Unit 3. This topic also contains a section on proof by mathematical induction. The study of Matrices is undertaken, including applications to linear transformations of the plane.

Access to technology to support the computational aspects of these topics is assumed.

#### Year 12 ATMAA

#### UNIT 3

Unit 3 of the Mathematics Specialist ATAR course contains three topics: Complex numbers, Functions and sketching graphs and Vectors in three dimensions. The study of vectors was introduced in Unit 1 with a focus on vectors in two-dimensional space. In this unit, three-dimensional vectors are studied and vector equations and vector calculus are introduced, with the latter extending students' knowledge of calculus from the Mathematics Methods ATAR course. Cartesian and vector equations, together with equations of planes, enables students to solve geometric problems and to solve problems involving motion in three-dimensional space. The Cartesian form of complex numbers was introduced in Unit 2, and the study of complex numbers is now extended to the polar form.

The study of functions and techniques of graph sketching, begun in the Mathematics Methods ATAR course, is extended and applied in sketching graphs and solving problems involving integration.

Access to technology to support the computational aspects of these topics is assumed.

#### **UNIT 4**

Unit 4 of the Mathematics Specialist ATAR course contains three topics: Integration and applications of integration, Rates of change and differential equations and Statistical inference.

In Unit 4, the study of differentiation and integration of functions continues, and the calculus techniques developed in this and previous topics are applied to simple differential equations, in particular in biology and kinematics. These topics demonstrate the real-world applications of the mathematics learned throughout the Mathematics Specialist ATAR course.

In this unit, all of the students' previous experience working with probability and statistics is drawn together in the study of statistical inference for the distribution of sample means and confidence intervals for sample means.

Access to technology to support the computational aspects of these topics is assumed.

# MATHEMATICS ESSENTIALS - GENERAL COURSE

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

Minimum requirements: Students must have achieved a Category 2 or above in the Numeracy component of the Online Literacy and Numeracy Assessment (OLNA).

#### 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.

#### **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.

#### Year 12 GTMAE

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

#### 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.

#### **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.

### CHEMISTRY – ATAR COURSE

The Chemistry ATAR course equips students with the knowledge, understanding and opportunity to investigate properties and reactions of materials. Theories and models are used to describe, explain and make predictions about chemical systems, structures and properties. Students recognise hazards and make informed, balanced decisions about chemical use and sustainable resource management. Investigations and laboratory activities develop an appreciation of the need for precision, critical analysis and informed decision making.

This course prepares students to be responsible and efficient users of specialised chemical products and processes at home or in the workplace. It also enables students to relate chemistry to other sciences, including biology, geology, medicine, molecular biology and agriculture, and prepares them for further study in the sciences.

Prerequisites:

#### Year 11 AECHE

#### UNIT 1 CHEMICAL FUNDAMENTALS: STRUCTURE, PROPERTIES AND REACTIONS

Chemists design and produce a vast range of materials for many purposes, including for fuels, cosmetics, building materials and pharmaceuticals. As the science of chemistry has developed over time, there has been an increasing realisation that the properties of a material depend on, and can be explained by, the material's structure. A range of models at the atomic and molecular scale enable explanation and prediction of the structure of materials and how this structure influences properties and reactions. In this unit, students relate matter and energy in chemical reactions as they consider the breaking and reforming of bonds as new substances are produced. Students can use materials that they encounter in their lives as a context for investigating the relationships between structure and properties.

Through the investigation of appropriate contexts, students explore how evidence from multiple disciplines and individuals has contributed to developing understanding of atomic structure and chemical bonding. They explore how scientific knowledge is used to offer reliable explanations and predictions, and the ways in which it interacts with social, economic and ethical factors.

Students use science inquiry skills to develop their understanding of patterns in the properties and composition of materials. They investigate the structure of materials by describing physical and chemical properties at the macroscopic scale, and use models of structure and primary

bonding at the atomic and sub-atomic scale to explain these properties. They are introduced to the mole concept as a means of quantifying matter in chemical reactions.

#### **UNIT 2 - MOLECULAR INTERATIONS AND REACTIONS**

Students develop their understanding of the physical and chemical properties of materials, including gases, water and aqueous solutions, acids and bases. Students explore the characteristic properties of water that make it essential for physical, chemical and biological processes on Earth, including the properties of aqueous solutions. They investigate and explain the solubility of substances in water, and compare and analyse a range of solutions. They learn how rates of reaction can be measured and altered to meet particular needs, and use models of energy transfer and the structure of matter to explain and predict changes to rates of reaction. Students gain an understanding of how to control the rates of chemical reactions, including through the use of a range of catalysts.

Through the investigation of appropriate contexts, students explore how evidence from multiple disciplines and individuals have contributed to developing understanding of intermolecular forces and chemical reactions. They explore how scientific knowledge is used to offer reliable explanations and predictions, and the ways in which it interacts with social, economic and ethical factors.

Students use a range of practical and research inquiry skills to investigate chemical reactions, including the prediction and identification of products and the measurement of the rate of reaction. They investigate the behaviour of gases, and use the Kinetic Theory to predict the effects of changing temperature, volume and pressure in gaseous systems.

#### Year 12 ATCHE

#### UNIT 3 - EQUILIBRIUM, ACIDS AND BASES, AND REDOX REACTIONS

The idea of reversibility of reaction is vital in a variety of chemical systems at different scales, ranging from the processes that release carbon dioxide into our atmosphere to the reactions of ions within individual cells in our bodies. Processes that are reversible will respond to a range of factors and can achieve a state of dynamic equilibrium. In this unit, students investigate acid-base equilibrium systems and their applications. They use contemporary models to explain the nature of acids and bases, and their properties and uses. This understanding enables further exploration of the varying strengths of acids and bases. Students investigate the principles of oxidation and reduction reactions and the production of electricity from electrochemical cells.

Through the investigation of appropriate contexts, students explore the ways in which models and theories related to acid-base and redox reactions, and their applications, have

developed over time and through interactions with social, economic and ethical considerations. They explore the ways in which chemistry contributes to contemporary debate in industrial and environmental contexts, including the use of energy, evaluation of risk and action for sustainability, and they recognise the limitations of science in providing definitive answers in different contexts.

Students use science inquiry skills to investigate the principles of dynamic chemical equilibrium and how these can be applied to chemical processes and systems. They investigate a range of electrochemical cells, including the choice of materials used and the voltage produced by these cells. Students use the pH scale to assist in making judgements and predictions about the extent of dissociation of acids and bases and about the concentrations of ions in an aqueous solution.

#### **UNIT 4 - ORGANIC CHEMISTRY AND CHEMICAL SYNTHESIS**

This unit focuses on organic chemistry and the processes of chemical synthesis by which useful substances are produced for the benefit of society. Students investigate the relationship between the structure, properties and chemical reactions of different organic functional groups and the vast diversity of organic compounds. Students also develop their understanding of 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.

Through the investigation of appropriate contexts, students explore the ways in which models and theories have developed over time and through interactions with social, economic and ethical considerations. They explore the ways in which chemistry contributes to contemporary debate regarding current and future uses of local, regional and international resources, evaluate the risk and action for sustainability, and they recognise the limitations of science in providing definitive answers in different contexts.

Students use science inquiry skills to investigate the principles and application of chemical structure in organic chemistry, and of chemical synthesis processes. They make predictions based on knowledge of types of chemical reactions, and investigate chemical reactions qualitatively and quantitatively.

# EARTH AND ENVIRONMENTAL SCIENCE – ATAR COURSE

This ATAR course explores our planet as a dynamic global system involving interactions between the geosphere, hydrosphere, atmosphere and the biosphere. A multidisciplinary approach, including geological and environmental sciences, encourages students to be curious about the world around them and to apply scientific principles to develop a balanced view of the benefits and challenges presented by the utilisation of resources. Management of environmental issues is explored, with students having opportunities to discuss issues and draw evidence-based conclusions. Students conduct practical investigations and have the opportunity to participate in field-based excursions that encourage them to apply what they have learnt in class to real world situations. This course provides an understanding of the minerals and energy industry and its contribution to Western Australia's economy.

Prerequisites: Strong C grade in Year 10 Science

Year 11 AEEES

#### **UNIT 1- EARTH SYSTEMS**

The Earth consists of interacting systems, including the geosphere, atmosphere, hydrosphere and biosphere. A change in any one sphere can impact on others at a range of temporal and spatial scales. In this unit, students build on their existing knowledge of Earth by exploring the development of understanding of Earth's formation and its internal and surface structure. Students study the processes that formed the oceans and atmosphere. They review the origin and significance of water at Earth's surface, how water moves through the hydrological cycle, and the environments influenced by water, in particular, the oceans, ice sheets and groundwater.

Students critically examine the scientific evidence for the origin of life, linking this with their understanding of the evolution of Earth's hydrosphere and atmosphere. They review evidence from the fossil record that demonstrates the interrelationships between major changes in Earth's systems and the evolution and extinction of organisms. They investigate how changes in Earth's systems influence the distribution and diversity of life on Earth.

They investigate how scientific knowledge is used to offer valid explanations and reliable predictions, and the ways in which it interacts with social, economic and cultural factors.

Students use science inquiry skills to engage in a range of investigations that help them develop the field and research skills used to interpret geological, historical and real-time scientific information.

#### **UNIT 2 - EARTH PROCESSES**

Earth system processes require energy. In this unit, students explore how the transfer and transformation of energy from the sun and Earth's interior enable and control processes within and between the geosphere, atmosphere, hydrosphere and biosphere. Students examine how the transfer and transformation of heat and gravitational energy in Earth's interior drive movements of Earth's tectonic plates. They analyse how the transfer of solar energy to Earth is influenced by the structure of the atmosphere; how air masses and ocean water move as a result of solar energy transfer and transformation to cause global weather patterns; and how changes in these atmospheric and oceanic processes can result in anomalous weather patterns.

Students use their knowledge of the photosynthetic process to understand the transformation of sunlight into other energy forms that are useful for living things. They explore how energy transfer and transformation in ecosystems are modelled and they review how biogeochemical cycling of matter in environmental systems involves energy use and energy storage.

Students investigate how scientific knowledge is used to offer evidence-based explanations and reliable predictions, and the ways in which it interacts with social, economic and cultural factors.

Students use inquiry skills to collect, analyse and interpret data relating to energy transfers and transformations and cycling of matter, and make inferences about the factors causing changes to movements of energy and matter in Earth systems.

#### Year 12 ATEES

#### **UNIT 3 - MANAGING EARTH RESOURCES**

Earth resources are required to sustain life and provide infrastructure for living, for example, food, shelter, medicines, transport, and communication, driving ongoing demand for mineral and energy resources and biotic resources. In this unit, students explore renewable and non-renewable resource formation and analyse the effects that resource extraction, sustainable use and associated rehabilitation processes have on Earth systems.

Students examine the occurrence of non-renewable mineral and energy resources and review how an understanding of Earth and environmental science processes guides resource exploration and extraction. They investigate how the rate of extraction is managed to sustain the quality and availability of renewable resources, including water, energy resources and biota, and the importance of monitoring and modelling to manage these resources at local, regional and global scales. Students learn about ecosystem services and how natural and

anthropogenic changes of the biosphere, hydrosphere, atmosphere and geosphere influence resource availability and sustainable management.

Students investigate the ways in which science contributes to contemporary debate regarding local, regional and international resource use and action for sustainability, and recognise the limitations of science in providing definitive answers in different contexts.

Students use science inquiry skills to collect, analyse and interpret data relating to the formation, extraction, and processing of resources. They critically analyse the range of factors that determine management of renewable and non-renewable resources.

#### **UNIT 4 – EARTH HAZARDS AND CLIMATE CHANGE**

Earth hazards occur over a range of timescales and have significant impacts on Earth systems across a wide range of spatial scales. Investigation of naturally occurring and anthropogenic Earth hazards enables prediction of their impacts, and the development of management and mitigation strategies. In this unit, students examine the causes and effects of naturally occurring Earth hazards, including volcanic eruptions, earthquakes and tsunamis. The composition of magma is examined to predict the degree of volcanic explosivity and hence the risk of hazard that an eruption could inflict on the environment. This unit focuses on the timescales at which the effects of natural and human-induced change are apparent and the ways in which scientific data are used to provide strategic direction for the mitigation of Earth hazards and environmental management decisions.

Students review the scientific evidence for climate change models, including the examination of evidence from the geological record, oceanic and atmospheric data, and explore different interpretations of the same evidence. They consider the reliability of these models for predicting climate change, and the implications of future climate change events, including changing weather patterns, globally and in Australia, for example, changes in flooding patterns or aridity, and changes to vegetation distribution, river structure and groundwater recharge.

They investigate the ways in which science contributes to contemporary debate regarding local, regional and international management of Earth hazards, evaluation of risk and action for sustainability, and recognise the limitations of science in providing definitive answers in different contexts.

Students use inquiry skills to collect, analyse and interpret data relating to the cause and impact of Earth hazards. They critically analyse the range of factors that influence the magnitude, frequency, intensity and management of Earth hazards at local, regional and global levels.

# **HUMAN BIOLOGY - ATAR COURSE**

#### Yr11 AEHBY

Human Biology is valuable for a variety of career paths. The course content deals directly and indirectly with many different occupations in fields such as science education, medical and paramedical fields, food and hospitality, childcare, sport and social work. Appreciation of the range and scope of such professions broadens students' horizons and enables them to make informed choices. 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.

Prerequisites: Students should have achieved a B grade or above in Year 10 Science.

#### UNIT 1 - THE FUNCTIONING OF THE HUMAN BODY

This unit looks at how human structure and function supports cellular metabolism and how lifestyle choices affect body functioning.

#### **UNIT 2 - REPRODUCTION AND INHERITANCE**

This unit provides opportunities to explore, in more depth, the mechanisms of transmission of genetic materials to the next generation, the role of males and females in reproduction and how interactions between genetics and the environment influence early development. Students learn how cellular mechanisms for gamete production and zygote formation contribute to human diversity, and that meiosis and fertilisation are important in producing new genetic combinations.

#### Yr 12 ATHBY

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

Minimum requirements: Students must have achieved a C grade or above in Year 11 Human Biology.

#### **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.

## PSYCHOLOGY – ATAR COURSE

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

Prerequisites: Strong C grade in Year 10 Science

Year 11 AEPSY

#### UNIT 1

This unit focuses on a number of concepts that enable students to gain an understanding of how and why people behave the way they do. Students are introduced to the human brain, focusing on the major parts and lobes of the cerebral cortex, and review case studies, illustrating the link between the brain and behaviour. They also explore the impact of external factors, such as physical activity and psychoactive drugs, on individuals' behaviour. Cognitive processes, such as sensation and perception and selective and divided attention, are investigated. The impact of others on behaviour is also studied. Students examine different types of relationships and look at the role of verbal and non-verbal communication in initiating, maintaining and regulating relationships. Students are introduced to ethics in psychological research and carry out investigations, following the steps in conducting scientific research.

They identify the aims of psychological investigations and apply appropriate structure to sequence data using correctly labelled tables, graphs and diagrams.

#### UNIT 2

This unit introduces students to developmental psychology by looking at the concept of average development and changes expected as people age. They 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 several historical perspectives used to explain personality such as Freud's psychodynamic approach. Students investigate the influence of others on self-concept, identity and attitudes. They explore the behaviours observed within groups, such as deindividuation and social loafing, and causes of prejudice. Psychological research methods introduced in Unit 1 are further explored.

#### Year 12 ATPSY

#### UNIT 3

The focus of this unit is to introduce new concepts which assist students to have a better understanding of human behaviour. In this unit, students study the functions of the four lobes of the cerebral cortex and examine how messages are transmitted from the brain to the body. They focus on how behaviour is influenced by learning, by reviewing classical and operant conditioning, negative and positive reinforcement and observational learning. They further expand their knowledge and understanding by examining behaviour that is not influenced by learning, such as heredity, hormones and recreational drugs. Students learn about the impact of others on individual behaviour. They examine the socialisation processes observed within families and explore 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. Students engage in detailed investigations of experimental methods, noting practical issues associated with research and its application.

#### **UNIT 4**

In this unit, students are introduced to theories of development, including Piaget's theory of cognitive development and Kohlberg's theory of moral development. They review contemporary personality theories and their limitations and analyse the causes of conformity and obedience by investigating the results of famous experiments conducted by Asch, Milgram and Zimbardo. They also gain an understanding of factors that shape a sense of community and explore the varied responses individuals have to significant events. Students

continue to develop their understanding and application of psychological research methods. They manipulate dependent and independent variables to test hypotheses and use statistical significance to draw conclusions.

**INTEGRATED SCIENCE - GENERAL COURSE** 

The Integrated Science General course enables students to investigate science issues in the context of the world around them. It encourages students to develop their scientific skills of curiosity, observation, collection and analysis of evidence, in a range of contexts. The multidisciplinary approach, including aspects of biology, chemistry, geology and physics, further encourages students to be curious about the world around them and assume a balanced view of the benefits and challenges presented by science and technology. Students conduct practical investigations that encourage them to apply what they have learnt in class to real-world situations and systems.

Prerequisites: NIL

Year 11 GEISC

**UNIT 1** 

In this unit, students develop an understanding of the processes involved in the functioning of systems from the macro level (cycles in nature and Earth systems) to systems at the organism, cellular and molecular level. They investigate and describe the effect of human activity on the functioning of cycles in nature. By integrating their understanding of Earth and biological systems, students come to recognise the interdependence of these systems.

Students investigate structure and function of cells, organs and organisms, and the interrelationship between the biological community and the physical environment. They use a variety of practical activities to investigate patterns in relationships between organisms.

Practical experiences form an important part of this course. They provide valuable opportunities for students to work together to collect and interpret first-hand data in the field or the laboratory. In order to understand the interconnectedness of organisms to their physical environment, and the impact of human activity, students analyse and interpret data collected through investigations in the context studied. They will also use sources relating to other Australian, regional and global environments.

The context that is used to teach all the key concepts should be broad and integrate all areas of science to assist in the delivery of the key concepts. It should engage students, have local real-life application, and be relevant to the student's everyday life.

#### UNIT 2

In this unit, students develop an understanding of the processes involved in the transformations and redistributions of matter and energy in biological, chemical and physical systems, from the atomic to the macro level. Students will investigate the properties of elements, compounds and mixtures, and how substances interact with each other in chemical reactions to produce new substances. They explore the concepts of forces, energy and motion and recognise how an increased understanding of scientific concepts has led to the development of useful technologies and systems.

Practical experiences are an important part of this course that provide valuable opportunities for students to work together to collect and interpret first-hand data. In order to understand the interconnectedness of organisms to their physical environment, and the impact of human activity, students analyse and interpret data collected through investigation of the context studied. They will also use sources relating to other Australian, regional and global environments.

The context that is used to teach all the key concepts should be broad and integrate all areas of science to assist in the delivery of the key concepts. It should engage students, have local real-life application, and be relevant to the student's everyday life.

#### Year 12 GTISC

#### UNIT 3

In this unit, students integrate ideas relating to the processes involved in the movement of energy and matter in ecosystems. They investigate and describe a number of diverse ecosystems, exploring the range of living and non-living components, to understand the dynamics, diversity and interrelationships of these systems.

They investigate ecosystem dynamics, including interactions within and between species, and interactions between living and non-living components of ecosystems. They also investigate how measurements of population numbers, species diversity, and descriptions of species interactions, can form the basis for comparisons between ecosystems.

Fieldwork is an important part of this course. Fieldwork provides valuable opportunities for students to work together to collect first-hand data and to experience local ecosystem interactions. In order to understand the interconnectedness of organisms, the physical

environment and human activity, students analyse and interpret data collected through investigation of a local environment. They will also use sources relating to other Australian, regional and global environments.

#### **UNIT 4**

This unit provides students with the opportunity to conduct scientific investigations that will increase their understanding of important scientific concepts and processes. Students will explore the properties of chemical substances that determine their use, and the techniques involved in separating mixtures and solutions. They will investigate forces acting upon an object and the effects of kinetic, potential and heat energy on objects. Students will discover the way in which increases in the understanding of scientific concepts have led to the development of useful technologies and systems.

Practical experiences are an essential part of the Integrated Science General course. Investigations and experimentation should be incorporated into the delivery of the course and designed to further develop the students' skills in the areas of formulating hypothesis, planning, conducting, representing data in meaningful ways, interpreting data and scientific texts, and communicating findings to specific audiences using ICT and multimodal formats.

The context that is used to teach the key concepts should be broad and integrate all areas of science to assist in the delivery of the key concepts. It should engage students, have local real-life application, and be relevant to the student's everyday life.

# **PSYCHOLOGY - GENERAL COURSE**

This course is a scientific study of how people think, feel and act. It is about the complexities of human behaviour looking at oneself and others around us in the community.

Prerequisites: None, although limited mathematical ability is required for the General Psychology courses. Students are expected to be able to use simple mathematical skills they have developed in years 7-10, and use calculators.

#### Year 11 GEPSY

# UNIT 1 - SELF (PERSONALITY & COGNITION) AND OTHERS (RELATIONAL INFLUENCES & COMMUNICATION)

This unit looks at how and why people behave as they do. Students learn about the human brain and explore the impact of external factors on behaviour, such as hormones and drugs. They examine different types of relationships and the role of communication in initiating,

maintaining and regulating relationships. Students explore what is meant by the term personality and examine historical perspectives used to explain personality,

They explore behaviour and some causes of prejudice. Students are also introduced to ethics in psychology and carry out investigations.

# UNIT 2 - SELF (BIOLOGICAL INFLUENCES & DEVELOPMENTAL PSYCHOLOGY) AND OTHERS (SOCIAL PSYCHOLOGY, CULTURE AND VALUES)

This unit introduces the brain. Students explore the impact of factors influencing behaviour, emotion, thought etc. Consideration is given to group behaviour and the impact of the size of the group. There is a focus on developmental psychology, analysing twin and adoption studies to gain insight into the nature/nurture debate and look at the role of play and parenting in assisting development. The influence of culture in shaping attitudes towards issues such as mental health in looked at in detail.

#### Year 12 GTPSY

# UNIT 3 - SELF (PERSONALITY & COGNITION) AND OTHERS (RELATIONAL INFLUENCES & COMMUNICATION)

This unit focuses on the functions of brain and examines how messages are transmitted from the brain to the body. It explores how behaviour is influenced by learning and other factors, and the impact of others on individual behaviour. Theorists such as Pavlov are studied. Students examine socialisation processes (friendship development) observed within families and peer groups, and how social background and gender can shape communication styles. There is also a focus on developmental and contemporary personality theories, and behaviours observed when individuals are examined in the social context.

# UNIT 4 - SELF (BIOLOGICAL INFLUENCES & DEVELOPMENTAL PSYCHOLOGY) AND OTHERS (SOCIAL PSYCHOLOGY, CULTURE AND VALUES)

Students analyse the causes of conformity and obedience and gain an understanding of the factors that shape a sense of community. Students expand on their knowledge of ethics in psychological research as they engage in detailed investigations. Students look at the links between the brain and behaviour, considering developmental psychology (Piaget) and moral development (Kohlberg).

#### 6.8 Technologies

# MATERIALS, DESIGN & TECHNOLOGY (WOOD) - ATAR COURSE

The ATAR Materials Design and Technology course is a practical course with the design and manufacture of products as the major focus. Working with materials, students develop a range of processing, manufacturing and organisational skills. When designing with materials, they develop cognitive skills such as critiquing, analysing, solving problems, generating innovative ideas and communicating what they do. This process enhances employability and may lead to further training and employment opportunities in areas that include textiles and clothing, manufacturing, design, built environment, science and engineering.

Prerequisites: Students should have completed a Year 10 MDTcourse.

#### UNIT 1

Students develop an understanding of the elements and fundamentals of design and consider human factors involved in the design, production and use of their projects. They develop creative thinking strategies and work on design projects within specified constraints. Students learn about the classification, structure and properties of a variety of materials, making appropriate materials selection for design needs, manufacturing and production skills and techniques. They develop the skills and techniques appropriate to the materials being used and gain practice in planning and managing processes through the production of design project. They learn about risk management and ongoing evaluation processes.

#### **UNIT 2**

Students learn about the nature of designing for a client, target audience or market, the nature, properties and environmental impacts and issues related to a variety of materials and production techniques. They develop creative thinking strategies, and work on design projects. Students extend their understanding of safe working practices and contemporary manufacturing techniques, and develop the knowledge, understanding and skills required to manage the processes of designing and manufacturing.

#### Year12 ATMDT

The ATAR Materials Design and Technology course is a practical course with the design and manufacture of products as the major focus. Working with materials, students develop a range of processing, manufacturing and organisational skills. When designing with materials, they develop cognitive skills such as critiquing, analysing, solving problems, generating innovative

ideas and communicating what they do. This process enhances employability and may lead to further training and employment opportunities in areas that include textiles and clothing, manufacturing, design, built environment, science and engineering.

Prerequisites – Students must have achieved a C grade or above in the Year 11 corresponding context Materials Design and Technology course.

#### **UNIT 3**

Students extend their understanding of design aesthetics through the application of the elements and principles of design and the use of creative and critical thinking strategies. Students work with an open and self-directed design brief to manage a project to design products to meet needs. Students investigate a range of materials and analyse the molecular structure, relating material characteristics and properties, and methods of processing and finishing, appropriate to their application and use. Students identify and manage risks, and select and use appropriate methods for communicating ideas and design development. Students develop competence with production processes and learn to manage projects to pre-determined design specifications.

#### **UNIT 4**

Students investigate and analyse cultural and social factors which may have influenced historical and contemporary design. Students extend their understanding of design aesthetics by using creative and critical thinking strategies. 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 that reflect their personal influences in combination with the style and tastes of a target audience/market.

# MATERIALS, DESIGN & TECHNOLOGY (WOOD) - GENERAL COURSE

The Materials Design and Technology General course is a practical course. The course allows students to explore and use materials in the learning context of wood with the design and manufacture of products as the major focus. There is also the flexibility to incorporate additional materials from outside the designated context. This will enhance and complement the knowledge and skills developed within the course as many modern-day products are manufactured using a range of different material types.

Students examine social and cultural values and the short-term and long-term impacts of the use and misuse of materials and associated technologies. Through this inquiry, experimentation and research, students develop their creativity and understanding of the society in which they live.

Working with materials, students develop a range of manipulation, processing, manufacturing and organisational skills. When designing with materials, they develop cognitive skills, such as solving problems, generating ideas, creative design strategies and communicating what they do.

This makes them more technologically literate and, as consumers, enables them to make more informed decisions about the use and misuse of technology. The Materials Design and Technology General course aims to prepare all students for a future in a technological and material world by providing the foundation for lifelong learning about how products are designed and how materials are developed and used.

Prerequisites - NIL

#### Year 11 GEMDTW

#### UNIT 1

Students interact with a variety of items that have been specifically designed to meet certain needs. Students are introduced to the fundamentals of design. They learn to communicate various aspects of the technology process by constructing what they design. Throughout the process, students learn about the origins, classifications, properties and suitability for purpose of the materials they are using, and are introduced to a range of production equipment and techniques. They develop materials manipulation skills and production management strategies, and are given the opportunity to realise their design ideas through the production of their design project.

#### UNIT 2

Students interact with products designed for a specific market. They use a range of techniques to gather information about existing products and apply the fundamentals of design. Students learn to conceptualise and communicate their ideas and various aspects of the design process within the context of constructing what they design. Throughout the process, students learn about the origins, classifications, properties and suitability for end use of materials they are working with.

Students are introduced to a range of technology skills and are encouraged to generate ideas and realise them through the production of their design projects. They work within a defined

environment and learn to use a variety of relevant technologies safely and effectively. Students, in consultation with teachers, select projects of interest and then design and make products suitable for a specific market.

#### Year 12 GTMDTW

#### UNIT 3

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

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

#### **UNIT 4**

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

Students extend their understanding of safe working practices and contemporary manufacturing techniques and develop the knowledge, understanding and skills required to manage the processes of designing and manufacturing.

#### 6.9 Vocational Education and Training (VET)

VET programs may suit students who like a more practical approach to schooling. VET offers a combination of education and industry training whilst students are in Years 11 and 12. Units of competency, linked to a certificate course are part of VET, delivered at a Trade Training Centre, TAFE or VET in a workplace.

Certificate courses are a pathway to the achievement of WACE and employment for all students. Successful completion of VET courses/certificates may provide students with improved access to TAFE Colleges, traineeships, apprenticeships and future employment. All certificates are aligned with the Australian Qualifications Framework.

# AUTHORITY DEVELOPED WORKPLACE LEARNING PROGRAM - ENDORSED PROGRAM

Our Authority Developed Workplace Learning Program (ADWPL) class program is a school-based training program and is intended for students who are not sure of a desired career. Students can try two different careers as a transition from school to an apprenticeship each term. It provides an introduction into the apprenticeship opportunities within various trades, or industries.

#### The ADWPL program:

- assists students to make career decisions;
- can enable pathways to an apprenticeship and employment; and
- earns WACE credits for successful completion of each block of 55hrs, a skills journal and worklog per 55 hours undertaken.

# **AUTHORITY DEVELOPED COMMUNITY SERVICE**

Community Service is an Authority-developed endorsed program that is managed by individual schools and can be adapted to suit all school contexts and student abilities. This is a 55-hour program in which a student must undertake at least 50 hours of community service and up to five hours of induction and reflection. A student can participate and engage in one or more community service activities to build on knowledge and understanding and develop abilities, skills and/or techniques.

### VET DELIVERED TO SECONDARY STUDENTS

Through Immaculate Heart College, VET courses Delivered to Secondary Students (VETDSS) are offered by the North and South Metropolitan TAFE Colleges as well as private Registered Training Organisations.

VETDSS program has two key phases. Students will study at school for three days per week and attend TAFE and the workplace for two days per week. Studies in a certificate course will, on completion, contribute towards the WACE.

The industries available in the VETDSS program are based on the TAFE offerings or other registered training organisations. Students usually apply for VETDSS programs in Year 10, for Senior Secondary Schooling. These offerings are usually available for review in August each year. An example of some of the offerings may include:

- Automotive (heavy & light vehicle, auto body refinishing & repair, auto electrical);
- Building & Construction (wall & floor tiling, bricklaying, carpentry & joinery, ceiling fixing, plastering);
- Community Services, Health and Education;
- Hospitality and Tourism;
- Horticulture (landscaping, nursery, turf, gardening);
- Furniture Trades (cabinet making, furniture finishing, upholstery);
- Light Manufacturing (cabinet making,fFloorcCovering, furniture making, glazing and glass processing, timber furniture polishing, upholstering, wood machining);
- Metals and Engineering (plant, fabrication and mechanical fitting);
- Personal Services (beauty/make-up, retail and wholesale); and
- Electrical

The above information provides only an indication of the trades to be delivered and will depend upon skill shortages at the time and participating Registered Training Organisation's (RTO) ability to deliver.

## SCHOOL BASED TRAINEESHIPS AND APPENTICESHIPS

School Based Traineeships or apprenticeships provide the opportunity for students to start a traineeship whilst also completing the WACE. Under these arrangements students are both a full-time student and a part-time employee, with the same employment and training responsibilities as other trainees.

In order to be a school-based trainee a student must:

- be a full-time Senior Secondary student in Years 11 or 12;
- find an employer willing to train them in their workplace;
- have the school's agreement to undertake a school based training;
- have reviewed the competencies required to complete the WACE; and
- have parent's/carer's permission (if under the age of 18).

School Based Trainees or Apprentices undertake a Certificate II or higher in a chosen industry. Training on-the-job will be equivalent to a full day/shift in the workplace. Off-the-job training may also be taken at a Registered Training Centre or a Registered Training Provider. There must be an average of 7.5 hours of paid work per week integrated over the period of the Training Contract, including school holidays. Students need to find an employer to offer a School Based Traineeship. SBT training will generally take one day per week in Year 11, and two days per week in Year 12. For the remaining three days students must attend school to complete School Curriculum and Standards Authority courses.

Immaculate Heart College is supported by Apprenticeship Support Australia for School-based Apprenticeship or Traineeships

#### 7 Post College Life

#### 7.1 Alternative University Entry

There are many ways of entering university courses! All Western Australian universities offer alternative pathway entry. Selecting your entry method will depend upon your career aspirations, academic ability, homelife status, mental health, and the ability to persevere and focus.

Pathways include preparation, enabling and bridging courses, portfolio entry, mature age entry (aged 20 or over before 1 March in the admission year), first in family entry, pathways for Aboriginal and/or Torres Strait Islander students, and pathways that recognise prior learning and professional experience. Additionally, students with TAFE qualifications can apply for credits/advanced standing for the units completed in Diploma or Advanced Diploma programs, when enrolling at university. This pathway can result in a reduction in the length of the university course (and therefore HECS debt). For more information visit the Alternative University Entry page of the TISC website.

# 8 Career, TAFE, WA University Contacts

Jobs & Skills Centre WA www.jobsandskills.wa.gov.au 13 64 64	This centre aims to help in the transition from school into employment and training. Computer programs including JAC (Job and Course Explorer) are available to assist with career decision making and resume writing. A counselling service is also available.
Metropolitan TAFE Colleges North Metropolitan TAFE  www.northmetrotafe.wa.edu.au	South Metropolitan TAFE www.southmetrotafe.wa.edu.au
Tertiary Institutions Service Centre (TISC)	WA Universities Curtin University
www.tisc.edu.au	www.curtin.edu.au
(08) 9318 8000	
info@tisc.edu.au	
Edith Cowan University (ECU)	Murdoch University
www.ecu.edu.au	www.murdoch.edu.au
Notre Dame University	University of Western Australia (UWA)
www.nd.edu.au	www.uwa.edu.au

#### 9 Online Resources

- Swanonline: <a href="https://www.swan.wa.edu.au/swan-online/">https://www.swan.wa.edu.au/swan-online/</a>
- WACE Checker: https://wacechecker2021.scsa.wa.edu.au/
- Facebook for Students/Parents: <a href="https://www.facebook.com/scsawa/">https://www.facebook.com/scsawa/</a>
- ATAR and VET Examination Information: <a href="https://senior-secondary.scsa.wa.edu.au/assessment/examinations">https://senior-secondary.scsa.wa.edu.au/assessment/examinations</a>
- DEPARTMENT OF EDUCATION, SKILLS AND EMPLOYMENT: <a href="mailto:employment.gov.au">employment.gov.au</a>
   Information on employment and workplace relations.
- JOB OUTLOOK joboutlook.gov.au
- MYFUTURE <u>myfuture.edu.au</u>

Occupations, demand, average weekly earnings, training, and funding.

- THE GOOD UNIVERSITIES GUIDE <a href="www.gooduniguide.com.au">www.gooduniguide.com.au</a>
   Comprehensive information about tertiary education pathways, and career options.
- JOBSEARCH <u>www.jobsearch.gov.au</u>
   Jobs, demands, average wages and entry training.
- GOVERNMENT SERVICES <u>www.australia.gov.au</u>
- OPEN UNIVERSITIES AUSTRALIA <u>www.open.edu.au</u>
- CAREER ONE <u>www.careerone.com.au</u>
- SKILLSROAD <u>www.skillsroad.com.au</u>