

Leeming Senior High School

**2022  
SENIOR DIRECTORY**



**LEEMING SHS**

**H A R M O N Y ~ E X C E L L E N C E**

## CONTENTS

WELCOME TO THE SUBJECT REQUESTS FOR YEAR 11 IN 2022.....	4
2022 Course & Qualification Grid.....	5
YEAR 11 IN 2022 SUBJECT PATHWAY GUIDE.....	6
Chapter 1 <b>THE ARTS</b> .....	7
(List A Courses <b>except General Design Graphics</b> ).....	7
ATAR Media Production & Analysis .....	8
ATAR Visual Arts .....	9
ATAR Drama.....	10
General Drama .....	11
General Design Graphics.....	12
Certificate II Music Industry- CUA20615.....	13
General Visual Art.....	14
General Dance.....	15
Certificate II Creative Industries (Media) – CUA20215 .....	16
Chapter 2 <b>ENGLISH</b> .....	17
(List A Courses) .....	17
ATAR English.....	18
ATAR English Literature .....	19
General English .....	20
Chapter 3 <b>HEALTH AND PHYSICAL EDUCATION</b> .....	21
(List B Courses <b>except ATAR Health Studies</b> ).....	21
Health and Physical Education Guide for Families .....	22
Year 10 Pathways into Year 11 and 12.....	22
ATAR Physical Education Studies.....	23
General Physical Education .....	24
ATAR Health Education Studies .....	25
General Health Education Studies .....	26
General Outdoor Education.....	27
Certificate II Sport and Recreation SIS20115.....	28
Chapter 4 <b>LANGUAGES</b> .....	29
(List A Courses) .....	29
ATAR French Second Language.....	30

ATAR Japanese Second Language .....	31
Chapter 5 <b>MATHEMATICS</b> .....	32
(List B Courses) .....	32
Mathematics Guide for Families .....	33
Year 10 Pathways into Year 11 and 12 .....	33
ATAR Mathematics Specialist .....	34
ATAR Mathematics Methods .....	35
ATAR Mathematics Applications .....	36
General Mathematics Essentials .....	37
Chapter 6 <b>HASS</b> .....	38
(List A Courses except ATAR and General Psychology) .....	38
ATAR Economics .....	39
ATAR Geography .....	40
ATAR Modern History .....	41
ATAR Politics and Law .....	42
ATAR Psychology .....	43
General Career and Enterprise .....	44
General Psychology .....	45
Chapter 7 <b>SCIENCE</b> .....	46
(List B Courses) .....	46
Science Guide for Families .....	47
Year 10 Pathways into Year 11 and 12 .....	47
ATAR Biology .....	48
ATAR Aviation Studies .....	49
ATAR Chemistry .....	50
ATAR Human Biology .....	51
ATAR Physics .....	52
General Human Biology .....	53
General Aviation Studies .....	54
Chapter 8 <b>TECHNOLOGY AND ENTERPRISE</b> .....	55
(List B Courses except General Business Management and General Children, Family & Community) .....	55
ATAR Accounting and Finance .....	56
ATAR Applied Information Technology .....	57
General Automotive Engineering & Technology .....	58
General Building and Construction .....	59

<b>General Business Management and Enterprise .....</b>	<b>60</b>
<b>General Children, Family and Community .....</b>	<b>61</b>
<b>General Food Science &amp; Technology .....</b>	<b>62</b>
<b>General Design Photography .....</b>	<b>63</b>
<b>General Design Technical Graphics .....</b>	<b>64</b>
<b>General Materials, Design &amp; Technology Woodwork.....</b>	<b>65</b>
<b>Certificate II Automotive Vocational Preparation AUR20716 .....</b>	<b>66</b>
<b>Certificate II Community Services CHC22015.....</b>	<b>67</b>
<b>Certificate II Engineering Pathways MEM20413 .....</b>	<b>68</b>
<b>Certificate III Information, Digital Media and Technology ICT30115..</b>	<b>69</b>

Dear Parents/Guardians,

## WELCOME TO THE SUBJECT REQUESTS FOR YEAR 11 IN 2022

Thank you for considering Leeming Senior High School for your child's senior school education. This is a very important time and decisions need to be carefully considered.

The 2022 Senior Directory will outline the extensive range of courses and qualifications available for request at Leeming Senior High School in 2022. It is extremely important that families fully discuss a student's intentions for Year 11 and 12 and beyond. As you consider the information that is listed within the 2022 Senior Directory, please take into account the following key points:

- The fixed **2022 Course & Qualification grid** is located on page 5, with a **Pathway Guide** on page 6.
- Students must select ONE course or qualification from EACH of the six horizontal gridlines (one from gridline 1, one from gridline 2, one from gridline 3 etc).
- A student that is considering applying for direct University entrance at the end of Year 12 **MUST** select a minimum of four ATAR courses (five ATAR courses is the recommended maximum).
- Assess the minimum grade prerequisites in considering what course (ATAR or General) or which qualification is academically appropriate for your child – **PREREQUISITES ARE DEFINITIVE**. Any discussions regarding minimum grade prerequisites must be directed in a formalised email request to Damon Atthowe (Deputy Principal Years 11-12) via [damon.atthowe@education.wa.edu.au](mailto:damon.atthowe@education.wa.edu.au)
- Courses are organised into a Year 11 and Year 12 syllabus. The cognitive complexity of the syllabus content increases from Year 11 to Year 12.
- Courses and qualifications will only run with a minimum number of enrolled students.
- A student must have at least one "List A" and one "List B" course ("List A" courses are coloured **BLUE** and "List B" courses are coloured **RED**).
- Certificate II or III qualifications **DO NOT** count as "List A" or "List B" courses (they are shown in **BLACK**).
- It is recommended that all students select ONE Certificate II/III qualification as a strategy in creating a balanced enrolment (especially for students considering a TAFE enrolment at the end of Year 12).
- A student can select a **MAXIMUM** of two Certificate II/III qualifications.

The school accesses your child's latest report, all secondary school results, teacher recommendations plus various forms of course and pathway information to assist you in making your final course and qualification requests for the 2022 academic year.

Kind regards,

Brendon Wallwork  
Principal  
Leeming Senior High School

Damon Atthowe  
Deputy Principal  
Leeming Senior High School

## 2022 Course & Qualification Grid

Line 1	ATAR English A1ENG	ATAR Human Biology A1HBY	ATAR Japanese as a 2 <sup>nd</sup> Language A1JSL	ATAR Maths Applications A1MAA	ATAR Maths Methods A1MAM	ATAR Politics and Law A1PAL	GENERAL English G1ENG	GENERAL Human Biology G1HBY	GENERAL Maths Essentials G1MAE	GENERAL Outdoor Education G1OED	Certificate II Engineering MEM	
Line 2	ATAR English A1ENG	ATAR Maths Applications A1MAA	ATAR Maths Specialist A1MAS	ATAR Media Production and Analysis A1MPA	ATAR Psychology A1PSY	Certificate II Automotive Vocational Preparation AUR	GENERAL Children, Family and Community G1CFC	GENERAL English G1ENG	GENERAL Maths Essentials G1MAE	GENERAL Design Woodwork G1MDTW	GENERAL Psychology G1PSY	
Line 3	ATAR Chemistry A1CHE	ATAR English A1ENG	ATAR Geography A1GEO	ATAR Physical Education Studies A1PES	ATAR Visual Arts A1VAR	Certificate II Music Industry CUM	GENERAL Business Management and Enterprise G1BME	GENERAL Design Technical Graphics G1DEST	GENERAL English G1ENG	GENERAL Physical Education Studies G1PES	GENERAL Visual Arts G1VAR	
Line 4	ATAR Accounting and Finance A1ACF	ATAR English A1ENG	ATAR Modern History A1HIM	ATAR Maths Applications A1MAA	ATAR Maths Methods A1MAM	GENERAL Automotive, Engineering and Technology G1AET	GENERAL Dance G1DAN	GENERAL Design Graphics G1DESG	GENERAL Design Photography G1DESP	GENERAL English G1ENG	Certificate II Sport and Recreation VSR	
Line 5	ATAR Aviation Studies A1AVN	ATAR Drama A1DRA	ATAR Health Education Studies A1HEA	ATAR Maths Methods A1MAM	ATAR Physics A1PHY	Certificate II Community Service CHC	GENERAL Aviation Studies G1AVN	GENERAL Building and Construction G1BCN	GENERAL Design Photography G1DESP	GENERAL English G1ENG	GENERAL Food Science and Technology G1FST	Certificate III Information Digital Media Technology ICA3
Line 6	ATAR Applied Information Technology A1AIT	ATAR Biology A1BLY	ATAR Economics A1ECO	ATAR French as a 2 <sup>nd</sup> Language A1FSL	ATAR English Literature A1LIT	Certificate II Creative Industries (Media) CUF	GENERAL Careers and Enterprise G1CAE	GENERAL Drama G1DRA	GENERAL Health Education Studies G1HEA	GENERAL Maths Essentials G1MAE		

## YEAR 11 IN 2022 SUBJECT PATHWAY GUIDE

The subject pathway guide shown below is for families to assess which Leeming Senior High School subjects are appropriate to request in 2022. Be aware that if a student is not meeting the minimum grade requirements for a pathway then they **CANNOT** request this pathway within a subject area eg. if a student is achieving a “C” grade in Year 10 English then they **CANNOT** request ATAR English in Year 11 (the General English course would be the appropriate selection).

	“ATAR” COURSES	“GENERAL” COURSES	CERTIFICATE II QUALIFICATIONS
<b>Grade Requirement in Year 10 subject area to select subjects</b>	“A” OR “B” GRADE (must also have completed the Mathematics 10A content for either an ATAR Mathematics Specialist or ATAR Mathematics Methods enrolment)	PREFERRED “C” GRADE IN RELATED AREA	PREFERRED “C” GRADE IN RELATED AREA
<b>Year 10 Teacher recommendation to select subjects</b>	YES	YES	YES
<b>University or TAFE pathway</b>	UNIVERSITY	TAFE	TAFE
<b>Compulsory school- based and University exams in Year 11/12</b>	YES	NO	NO
<b>OLNA (Online Literacy and Numeracy Assessment) completion pre-requisite to select subjects</b>	YES	YES	NO
<b>Can I choose this pathway if I have completed OLNA successfully?</b>	YES	YES	YES



# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 1

### ARTS

(List A Courses **except** General Design Graphics)

- ATAR Media Production & Analysis
- ATAR Visual Arts
- ATAR Drama
- General Drama
- **General Design Graphics**
- Certificate II Music Industry
- General Visual Art
- General Dance
- Certificate II Creative Industries (Media)



# ATAR Media Production & Analysis

## Rationale

The ATAR Media Production and Analysis course aims to prepare all students for a future in a digital and interconnected world by providing the skills and knowledge to tell their own stories and interpret others' stories. Students learn the languages of media communication and how a story is constructed using representations. Students are encouraged to explore, experiment and interpret their digital world, reflecting and analysing contemporary life while understanding that this is done under social, cultural and institutional constraints. Students as users and creators of media products, consider the important role of audiences and their context.

Students also produce their own media work. Two films are made during the year, enabling students to demonstrate their understanding of media, as well as express their creativity and originality. When producing media work, students learn to make decisions about all aspects of production, including creative choices across pre-production, production and post-production phases. This provides an opportunity to manipulate technologies which simulate industry experiences.

## Aims

The ATAR Media Production and Analysis course is designed to facilitate achievement of the following outcomes.

### Outcome 1 – Media ideas

Students use critical awareness and cultural understandings to explore and develop media ideas. In achieving this outcome, students:

- Understand how media communicate ideas in particular contexts and for different audiences and purposes.
- Explore technologies, codes and conventions to create meaning and develop ideas.
- Present ideas, designs and production plans.

### Outcome 2 – Media production

Students use skills, techniques, processes, conventions and technologies to create media work for audience, purpose and context. In achieving this outcome, students:

- Use media skills, process and technologies.
- Use media codes and conventions for audience, purpose and context.
- Fulfil a range of production roles and responsibilities.

### Outcome 3 – Responses to media

Students use critical, social, cultural and aesthetic understandings to respond to, reflect on and evaluate media work. In achieving this outcome, students:

- Understand how meaning is constructed in media work.
- Understand relationships between media work, cultural contexts and audiences.
- Use strategies to investigate and comment on media work and evaluate media productions.

### Outcome 4 – Media in society

Students understand the role of media in society. In achieving this outcome, students:

- Understand the impact of technological developments, and controls and constraints, on media production and use.
- Understand the influence of social, historical and cultural contexts on media production and use.
- Understand how cultural values are influenced by the media and in turn influence media production.

## Structure of the syllabus

### Unit 1 – Popular culture

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

### Unit 2 – Journalism

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

## ATAR Visual Arts

### Rationale

The ATAR Visual Arts course is the practice and theory of the broad areas of art, craft and design. Students have opportunities to express their imagination, develop personal imagery, develop skills and engage in the making and presentation of artwork. They develop aesthetic understandings and a critical awareness that assists them to appreciate and make informed evaluations of art. This course places value on divergence, uniqueness and individuality.

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

The ATAR Visual Arts course encourages students to develop art skills together with creative and analytical ways of thinking. Students work through a process of inquiry, exploration and experimentation. They then start to develop resolved artwork. This course allows them to engage in traditional, modern and contemporary art forms, such as sculpture, painting, drawing, printmaking, collage, ceramics, earth art, video art, photography, and montage.

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

### Aims

The ATAR Visual Arts course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Visual arts ideas

Students use creative processes to research, develop and communicate art ideas. In achieving this outcome, students:

- Research and generate ideas.
- Use visual language to express ideas.
- Develop and refine ideas for specific purposes, contexts and audiences.

#### Outcome 2 – Visual arts skills, techniques and processes

Students use creative skills, techniques, processes, technologies and conventions to produce resolved artwork. In achieving this outcome, students:

- Use art elements and principles in the production of artwork.
- Use skills, techniques and processes to complete artwork.
- Select and present artwork for audiences and contexts.

#### Outcome 3 – Responses to visual arts

Students respond to, reflect on and critically evaluate their own art and the art of others. In achieving this outcome, students:

- Respond to the qualities of artwork.
- Reflect on the thinking and creative processes of their art experiences.
- Critically evaluate artwork using visual language and art terminology.

#### Outcome 4 – Visual arts in society

Students understand the role of visual arts in society. In achieving this outcome, students:

- Understand how art varies according to time and place.
- Understand the social, cultural and historical contexts of visual arts.

## Structure of the syllabus

### Unit 1 – Differences

The focus of this unit is differences. Students consider differences arising from cultural diversity, place, gender, class and historical period in their art making and interpretation.

### Unit 2 – Identities

The focus of this unit is identities. Students explore concepts or issues related to personal, social, cultural or gender identity in their art making and interpretation.

## ATAR Drama

### Rationale

Students achieve outcomes through the key activities of creation, performance and reflection. They explore and communicate ideas and learn particular processes and skills to enable them to work with drama forms, styles, conventions and technologies. They reflect, respond and evaluate drama and become critical, informed audiences, understanding drama in the context of their own society and culture, drawing on a diverse range of drama from other cultures, places and times to enrich their inter cultural understanding.

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

While some students intend to make a career in drama and related fields, they also participate in drama for enjoyment and satisfaction. They experience the pleasure that comes from developing personal skills, knowledge and understandings that can be transferred to a range of careers and situations. The Drama ATAR course builds confidence, empathy, understanding about human experience, and a sense of identity and belonging. These are invaluable qualities for contemporary living.

### Aims

The Drama ATAR course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Drama ideas

Students create, interpret, explore, develop and present drama ideas. In achieving this outcome, students:

- Articulate their own ideas and interpret the ideas of others to make drama.
- Explore and experiment to develop ideas in drama.
- Present drama ideas for specific purposes, audiences and spaces.

#### Outcome 2 – Drama skills and processes

Students apply drama skills, techniques, processes, conventions and technologies. In achieving this outcome, students:

- Apply specific skills, techniques and processes.
- Apply knowledge and conventions of drama.
- Use technologies and undertake production roles and responsibilities.

#### Outcome 3 – Drama responses

Students respond to, reflect on and evaluate drama. In achieving this outcome, students:

- Respond to drama using processes of engagement and enquiry.
- Reflect on the process of producing and performing drama.
- Evaluate drama using critical frameworks and cultural perspectives.

#### Outcome 4 – Drama in society

Students understand the role of drama in society. In achieving this outcome, students:

- Understand the inter-relationships between drama and its historical and cultural contexts.
- Understand the social and cultural value and purpose of drama.
- Understand economic considerations related to drama.

## Structure of the syllabus

### Unit 1 – Representational, realist drama

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

### Unit 2 – Presentational, non-realist drama

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

## General Drama

### Rationale

Students achieve outcomes through the key activities of creation, performance and reflection. They explore and communicate ideas and learn particular processes and skills to enable them to work with drama forms, styles, conventions and technologies. They reflect, respond and evaluate drama and become critical, informed audiences, understanding drama in the context of their own society and culture, drawing on a diverse range of drama from other cultures, places and times to enrich their intercultural understanding.

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

While some students intend to make a career in drama and related fields, they also participate in drama for enjoyment and satisfaction. They experience the pleasure that comes from developing personal skills, knowledge and understandings that can be transferred to a range of careers and situations. The General Drama course builds confidence, empathy, understanding about human experience, and a sense of identity and belonging. These are invaluable qualities for contemporary living.

### Aims

The General Drama course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Drama ideas

Students create, interpret, explore, develop and present drama ideas. In achieving this outcome, students:

- Articulate their own ideas and interpret the ideas of others to make drama.
- Explore and experiment to develop ideas in drama.
- Present drama ideas for specific purposes, audiences and spaces.

#### Outcome 2 – Drama skills and processes

Students apply drama skills, techniques, processes, conventions and technologies. In achieving this outcome, students:

- Apply specific skills, techniques and processes.
- Apply knowledge and conventions of drama.
- Use technologies and undertake production roles and responsibilities.

#### Outcome 3 – Drama responses

Students respond to, reflect on and evaluate drama. In achieving this outcome, students:

- Respond to drama using processes of engagement and inquiry.
- Reflect on the process of producing and performing drama.
- Evaluate drama using critical frameworks and cultural perspectives.

#### Outcome 4 – Drama in society

Students understand the role of drama in society. In achieving this outcome, students:

- Understand the interrelationships between drama and its historical and cultural contexts.
- Understand the social and cultural value and purpose of drama.
- Understand economic considerations related to drama.

## Structure of the syllabus

### Unit 1 – Dramatic storytelling

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

### Unit 2 – Drama performance events

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

## General Design Graphics

### Rationale

In the Graphic Design Graphics course students develop skills and processes for current and future industry and employment markets. This is a General course which develops graphic computing skills, and pairs well with Visual Art courses. It suits students who may be thinking of Graphic Design at university level.

In this course, students are equipped with the knowledge and skills to understand design principles and processes, analyse problems and devise innovative strategies through projects. Students are able to focus on particular contexts from a choice of photography, graphics, dimensional design and technical graphics. The General Design Graphics General course also emphasises the scope of design in trade based industries allowing students to maximise vocational pathways.

### Aims

Students have the opportunity to apply for entry into Murdoch, Curtin and Edith Cowan University (ECU) to study an area in the Creative Arts. This is achieved by submitting a portfolio which will be developed throughout the course and going through the application requirements for portfolio entry into University. For Murdoch and ECU, this pathway does not require an ATAR score, however once entered into University the student can only study an area in the Creative Arts. With entry into Curtin University they require a portfolio and at least one ATAR subject score. Students build on their knowledge of corporate design and respond to a client brief.

Students will design the branding and image of a music band and create an album cover, poster advertisement and merchandise. Students will respond to popular designers and gain knowledge in their skills and techniques when creating effective corporate designs. The Design General course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Design understandings

Students understand that design theory, audience response, and design principles are reflected in design. In achieving this outcome, students:

- understand that communication theories are demonstrated in design; and
- understand that design and audience behaviours are related.

### Outcome 2 – Design process

Students apply the design process to develop design solutions. In achieving this outcome, students:

- generate ideas to develop design solutions; and
- refine the development of design solutions.

### Outcome 3 – Application of design

Students use skills, techniques and methods to plan, construct and produce design creations. In achieving this outcome, students:

- use interpretative skills when constructing design creations;
- use design skills, techniques and methods to construct creations; and
- use planning and production methodologies to construct design creations.

### Outcome 4 – Design in society

Students understand the relationship between design, society and culture. In achieving this outcome, students:

- understand how values, beliefs and attitudes are communicated and learned through design;
- understand responsibilities and issues in developing design; and
- understand relationships between social practices and design.

## Certificate II Music Industry- CUA20615

Certificate II in Music Industry CUA20615 is offered to students under the auspices of the College of Sound and Music Production (RTO #41549). This qualification is for those students who have an interest in music and are keen to develop skills as a musician or producer with the aim to perform, use music technology and be involved with live music events. There are no academic entry requirements for this qualification however competency on a music instrument is recommended.

### Job roles (post completion of this qualification):

- Musician
- Stage Producer
- Session Musician
- Band Member
- Music Technician
- Director
- Performer
- Arranger
- Singer
- Stage Manager
- Songwriter
- Promoter

### Future Pathway Options

- CUA30915 Certificate III in Music Industry
- CUA40915 Certificate IV in Music Industry
- CUA50815 Diploma of Music Industry
- CUA60515 Advanced Diploma of Music Industry

### The Certificate II Music Industry qualification as a subject selection is appropriate for students that:

- Have a desire to follow a career pathway within the Music and Performance industry.
- Are seeking a vocational training pathway (post- secondary schooling) within the TAFE sector.
- Are following an ATAR (University) pathway with their enrolment at Leeming Senior High School but also have a keen interest in Music and Performance

As the theoretical components of the Certificate II Music Industry are completed using web based learning tools, it is compulsory that students interested in enrolling in this qualification have their own school approved device (see Leeming Senior High School Bring Your Own Device information on this link - [Policies](#)) Without a device, students will not be able to complete the theoretical components of this qualification.

### Parents/Guardians must also be aware that students will be removed from this qualification if:

- There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.
- A student has not obtained a Unique Student Identifier (USI) by December 2021.

### The units of competency covered within the Certificate II in Music Industry:

BSBWHS201	• Contribute to health and safety of self and others
CUFIND201A	• Develop and apply creative arts industry knowledge
BSBWOR203A	• Work effectively with others
CUAMPF201	• Play or sing simple musical pieces
CUAMPF202	• Incorporate music technology into performance
CUAMPF203	• Develop ensemble skills for playing or singing music
CUAMCP201	• Incorporate technology into music making
CUAMPF404	• Perform music as part of a group

## General Visual Art

### Rationale

In the General Visual Arts course, students explore the broad areas of art, craft and design. Students have opportunities to make and present their own art works, express their imagination and develop personal imagery. They learn specific art skills and develop a critical awareness that assists them to appreciate, and make, informed evaluations of art.

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

The General Visual Arts 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. This course allows them to engage in traditional, modern and contemporary art forms and conventions, such as sculpture, painting, drawing, graphic design, printmaking, collage, ceramics, earth art, video art, installations, textiles, performance, photography, montage, multimedia, and time-based works and environments.

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

### Aims

The General Visual Arts course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Visual arts ideas

Students use creative processes to research, develop and communicate art ideas. In achieving this outcome, students:

- Research and generate ideas.
- Use visual language (elements and principals of art) to express ideas.
- Develop and refine ideas for specific purposes, contexts and audiences.

#### Outcome 2 – Visual arts skills, techniques and processes

Students use creative skills, techniques, processes, technologies and conventions to produce resolved artworks. In achieving this outcome, students:

- Use art elements and principles in the production of artworks.
- Use skills, techniques and processes to complete artworks.
- Select and present artworks for audiences and contexts.

#### Outcome 3 – Responses to visual arts

Students respond to, reflect on and critically evaluate their own art and the art of others. In achieving this outcome, students:

- Respond to the qualities of artworks.
- Reflect on the thinking and creative processes of their art experiences.
- Critically evaluate artworks referring to visual language (the elements and principles of art and design) and using art terminology.

#### Outcome 4 – Visual arts in society

Students understand the role of visual arts in society. In achieving this outcome, students:

- Understand how art varies according to time and place.
- Understand the social, cultural and historical contexts of visual arts.

## Structure of the syllabus

### Unit 1 – Experiences

The focus for Unit 1 is experiences. Students base art making and interpretation on their lives and personal experiences, observations of the immediate environment, events and/or special occasions.

### Unit 2 – Explorations

The focus for Unit 2 is 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.



## General Dance

### Rationale

Dance is dynamic and powerful. It embodies our ideas, thoughts, emotions and values and provides a unique opportunity to develop physically, creatively, aesthetically, emotionally and intellectually. As an art form, dance encourages artistic creativity and the active use of the imagination.

### Aims

This course is divided in to three content areas:

- Choreography
- Performance
- Contextual knowledge.

### Structure of the syllabus

The Year 11 General syllabus is divided into two units, each of one semester duration.

#### Unit 1 – Exploring the components of dance

In this unit, students learn skills, explore the elements of dance and processes of choreography, and create choreographic tasks to produce dance works for performance.

#### Unit 2 – Dance as entertainment

In this unit, students explore the entertainment potential of dance and choreography. This leads to performance for audiences.

### Assessment types

#### Performance and Production

This involves exploring ideas, improvising, manipulating the elements of dance and using choreographic devices and structures to create original dance. Students demonstrate competence in the use of the taught technical dance skills and styles, and use them to perform for a range of audiences. A practical test is included in this assessment type. This comprises 70% of the assessment weighting.

#### Response

Students need to write responses to analyse and evaluate their own, and others' or professional dance works. Students also complete an EST as part of the General Course. This comprises 30% of the assessment weighting.



## Certificate II Creative Industries (Media) – CUA20215

This qualification at Leeming Senior High School provides the skills and knowledge for an individual to be competent in assisting a media crew with sound recording, basic camera work and some vision and sound editing. Work may be undertaken as part of a team and would be performed under supervision. This qualification reflects the role of individuals who perform a range of mainly routine tasks in the creative industry sectors, work under direct supervision, and use practical skills and fundamental operational knowledge in a defined context. It is, in essence, a preparatory qualification that can be used as a pathway into CUF30107 Certificate III in Media. The qualification is auspiced through AUSPAN.

Job roles (post completion of this qualification):

- Production Assistant (Film, Television or Radio)
- Production Assistant (Film, Television, Radio or Stage)

The Certificate II Media qualification as a subject selection is appropriate for students that:

- Have a desire to follow a career pathway within the film and television industry.
- Are seeking a pre-apprenticeship qualification and vocational training pathway (post- secondary schooling) within the TAFE sector.
- Are following an ATAR (University) pathway with their enrolment at Leeming Senior High School but also have a keen interest in the film and television industry.

**As the theoretical components of the Certificate II Creative Industries (Media) are completed using web based learning tools, it is compulsory that students interested in enrolling in this qualification have their own school approved device (see Leeming Senior High School Bring Your Own Device information on this link - [Policies](#)) Without a device, students will not be able to complete the theoretical components of this qualification.**

**Parents/Guardians must also be aware that students will be removed from this qualification if:**

**There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.**

**A student has not obtained a Unique Student Identifier (USI) by December 2021.**

The units of competency listed below are those that will be completed across both Years 11 and 12 within the Certificate II Creative Industries (Media) qualification at Leeming Senior High School Please note that these competencies may vary slightly subject to availability.

CUAWHS302	<ul style="list-style-type: none"> <li>• Apply work health and safety practices.</li> </ul>
CUACAM201	<ul style="list-style-type: none"> <li>• Assist with a basic camera shoot.</li> </ul>
CUASOU2	<ul style="list-style-type: none"> <li>• Assist with sound recordings.</li> </ul>
CUARES201	<ul style="list-style-type: none"> <li>• Collect and organise content for broadcast or publications.</li> </ul>
CUAIND201	<ul style="list-style-type: none"> <li>• Develop and apply creative arts industry knowledge.</li> </ul>
CUASOU201	<ul style="list-style-type: none"> <li>• Develop basic audio skills and knowledge.</li> </ul>
BSBDES201	<ul style="list-style-type: none"> <li>• Follow a design process.</li> </ul>
BSBWOR202	<ul style="list-style-type: none"> <li>• Organise and complete daily work activities.</li> </ul>
CUAPOS201	<ul style="list-style-type: none"> <li>• Perform basic vision and sound editing.</li> </ul>
BSBWOR203	<ul style="list-style-type: none"> <li>• Work effectively with others.</li> </ul>



# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 2

### ENGLISH

(List A Courses)

- ATAR English
- ATAR English Literature
- General English

## ATAR English

### Rationale

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.

### Aims

All senior secondary English courses aim to develop students'

- skills in listening, speaking, reading, viewing and writing;
- capacity to create texts for a range of purposes, audiences and contexts; and
- understanding and appreciation of different uses of language.

In addition, the English ATAR course aims to develop students' ability to:

- understand the use of language for communication;
- analyse, evaluate and create sustained imaginative, interpretive and persuasive texts in a range of modes; and
- engage in critical analysis and evaluation.

## Structure of the syllabus

### 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, persuasive and analytical 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.

## ATAR English Literature

### Rationale

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

Students enjoy and respond creatively and critically to literary texts drawn from the past and present and from Australian and other cultures. They reflect on what these texts offer them as individuals, as members of Australian society and as world citizens. Students establish and articulate their views through creative response and logical argument. They reflect on qualities of literary texts, appreciate the power of language and inquire into the relationships between texts, authors, readers, audiences and contexts as they explore ideas, concepts, attitudes and values.

### Aims

The set of English courses aims to develop students'

- skills in listening, speaking, reading and writing;
- capacity to create texts for a range of purposes, audiences and context; and
- understanding and appreciation of different uses of language.

In addition, the Literature ATAR course aims to develop students'

- ability to respond personally, critically and imaginatively to a range of literary texts;
- drawn from Australian and other historical, contemporary and cultural contexts and traditions;
- capacity to engage with and contest complex and challenging ideas in order to form their own interpretations informed by a range of critical perspectives; and
- capacity to reflect critically on connections and resonances between texts.

## Structure of the syllabus

### Unit 1

Unit 1 develops students' knowledge and understanding of different ways of reading and creating literary texts drawn from a widening range of historical, social, cultural and personal contexts. Students analyse the relationships between language, text, contexts, individual points of view and the reader's response. This unit develops knowledge and understanding of different literary conventions and storytelling traditions and their relationships with audiences. A range of literary forms is considered: prose fiction, poetry and drama. The significance of ideas and the distinctive qualities of texts are analysed through detailed textual study. Through the creation of analytical responses, students frame consistent arguments that are substantiated by relevant evidence. In the creation of imaginative texts, students explore and experiment with aspects of style and form.

### Unit 2

Unit 2 develops students' knowledge and understanding of intertextuality, the ways literary texts connect with each other. Drawing on a range of language and literary experiences, students consider the relationships between texts, genres, authors, readers, audiences and contexts. The ideas, language and structure of different texts are compared and contrasted. Exploring connections between texts involves analysing their similarities and differences through an analysis of the ideas, language used and forms of texts. Students create analytical responses that are evidence-based and convincing. By experimenting with text structures and language features, students understand how their imaginative texts are informed by analytical responses.

## General English

### Rationale

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.

### Aims

All senior secondary English courses aim to develop students' ability to:

- listen, speak, read, view and write;
- create texts for a range of purposes, audiences and contexts; and
- understand and appreciate different uses of language.

In addition, the English General course aims to develop students' ability to:

- use and apply language and information effectively, confidently and creatively in vocational, community and academic contexts and enhance their broader communication skills;
- understand the ways in which text structure, stylistic features and register combine to make meaning and influence responses;
- be proficient in comprehending and creating a range of written, oral, multimodal and digital forms; and
- work collaboratively, interacting confidently and effectively with others in everyday, community, social and applied learning contexts.

## Structure of the syllabus

### Unit 1

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

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.



# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 3

# HEALTH & PHYSICAL EDUCATION

(List B Courses **except** ATAR Health Studies)

- **ATAR Physical Education Studies**
- **General Physical Education Studies**
- **General Outdoor Education**
- **ATAR Health Education Studies**
- **General Health Education Studies**
- **Certificate II Sport & Recreation**

# Health and Physical Education Guide for Families

## Year 10 Pathways into Year 11 and 12

Expected achievement/background in Year 10	Year 11 HPE Courses
Teacher Recommendation. <u>Desired</u> : B grade minimum in Physical Education, Science and English.	ATAR Physical Education Studies
Teacher Recommendation. <u>Desired</u> : B grade minimum in Health Education and English	ATAR Health Education Studies
Teacher Recommendation. <u>Essential</u> : Students having completed Year 10 Outdoor Education will have priority when selecting this course. Others students will need to prove current swimming capabilities.	General Outdoor Education
<u>Desired</u> : C grade in English, Health and Physical Education is desirable.	General Physical Education Studies General Health Education Studies Certificate II Sport and Recreation

## ATAR Physical Education Studies

### Rationale

Study of the ATAR Physical Education Studies course contributes to the development of the whole person. It promotes the physical, social and emotional growth of students. Throughout the course, emphasis is placed on understanding and improving performance in physical activities. The integration of theory and practice is central to studies in this course. Assessment in this course is 70% theory and 30% practical.

The ATAR Physical Education Studies course focuses on the complex interrelationships between motor learning and psychological, biomechanical and physiological factors that influence individual and team performance. Students engage as performers, leaders, coaches, analysts and planners of physical activity.

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

### Aims

#### Outcome 1 – Skills for physical activity

Students apply decision making, movement and tactical skills to enhance participation in physical activity. In achieving this outcome, students:

- make on-the-spot decisions to apply movement patterns in solving tactical problems;
- perform movement skills to enhance participation; and
- implement tactics to enhance participation.

#### Outcome 2 – Self-management and interpersonal skills for physical activity

Students apply self-management and interpersonal skills to enhance participation in physical activity. In achieving this outcome, students:

- apply mental skills in undertaking selected roles;
- make informed decisions in undertaking selected roles;
- apply communication skills in undertaking selected roles; and
- apply cooperation skills in undertaking selected roles.

#### Outcome 3 – Knowledge and understanding of movement and conditioning concepts for physical activity

Students understand movement and conditioning concepts that enhance participation in physical activity. In achieving this outcome, students:

- understand movement concepts; and
- understand conditioning concepts.

#### Outcome 4 – Knowledge and understanding of sport psychology concepts for physical activity

Students understand mental skills, motor learning, coaching and tactical concepts that inform the enhancement of participation in physical activity. In achieving this outcome, students:

- understand mental skills training concepts;
- understand motor learning and coaching concepts; and
- understand tactical concepts of games and activities.

### Structure of the syllabus

#### Unit 1

The focus of this unit is to explore anatomical and biomechanical concepts, the body's responses to physical activity, and stress management processes, to improve the performance of themselves and others in physical activity. The sporting context studied in this unit will be selected from one of the WACE practical examination sports.

#### 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. The sporting context studied in this unit will be selected from one of the WACE practical examination sports.



# General Physical Education

## Rationale

The General Physical Education Studies course contributes to the development of the whole person. It promotes the physical, social and emotional growth of students. Throughout the course, emphasis is placed on understanding and improving performance in physical activities. The integration of theory and practice is central to studies in this course. Assessment in this course is 50% theory and 50% practical.

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

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

## Aims

### Outcome 1 – Skills for physical activity

Students apply decision-making, movement and tactical skills to enhance participation in physical activity. In achieving this outcome, students:

- make on-the-spot decisions to apply movement patterns in solving tactical problems;
- perform movement skills to enhance participation; and
- implement strategies and tactics to enhance participation.

### Outcome 2 – Self-management and interpersonal skills for physical activity

Students apply self-management and interpersonal skills to enhance participation in physical activity. In achieving this outcome, students:

- apply mental skills in undertaking selected roles;
- make informed decisions in undertaking selected roles;
- apply communication skills in undertaking selected roles; and
- apply cooperation skills in undertaking selected roles.

### Outcome 3 – Knowledge and understanding of movement and conditioning concepts for physical activity

Students understand movement and conditioning concepts that enhance participation in physical activity. In achieving this outcome, students:

- understand movement concepts; and
- understand conditioning concepts.

### Outcome 4 – Knowledge and understanding of sport psychology concepts for physical activity

Students understand mental skills, motor learning, coaching and tactical concepts that inform the enhancement of participation in physical activity. In achieving this outcome, students:

- understand mental skills training concepts;
- understand motor learning and coaching concepts; and
- understand tactical concepts of games and activities.

## Structure of the syllabus

### Unit 1

The focus of this unit is the development of students' knowledge, understanding and application of anatomical, physiological and practical factors associated with performing in physical activities. The sporting context studied in this unit will be selected from Softball, Touch Rugby, Netball or Basketball.

### Unit 2

The focus of this unit is the impact of physical activity on the body's anatomical and physiological systems. Students are introduced to these concepts which support them to improve their performance as team members and/or individuals. The sporting context studied in this unit will be selected from Badminton, Volleyball, Netball or Basketball.

## ATAR Health Education Studies

### Rationale

The Health Studies ATAR course focuses on the study of health as a dynamic quality of human life. Students undertaking this course develop the knowledge, understanding and skills necessary to promote an understanding of the importance of personal and community action in promoting health.

The influence of social, environmental, economic and biomedical determinants of health is a key focus of the course. Other course content includes the influence of beliefs, attitudes and values on health behaviour, and the importance of self-management and interpersonal skills in making healthy decisions.

Using an inquiry process, students draw on their knowledge and understandings of health concepts and investigate health issues of interest. Through this process, they develop research skills that can be applied to a range of health issues or concerns.

This course will prepare students for career and employment pathways in a range of health and community service industries. Students will have the opportunity to develop key employability and life skills, including communication, leadership, initiative and enterprise. Inquiry skills will equip students to adapt to current and future studies and work environments.

### Aims

The Health Studies ATAR course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Knowledge and understandings

Students understand factors and actions that influence health.

In achieving this outcome, students:

- understand the determinants of health;
- understand actions and strategies that influence health; and
- understand and apply frameworks, models and theories to explain health concepts.

#### Outcome 2 – Beliefs, attitudes and values

Students understand the influence of beliefs, attitudes, values and norms on health. In achieving this outcome, students:

- understand the relationship between beliefs, attitudes, values, and health behaviour;
- understand the influence of attitudes and values on health behaviour; and
- understand the range of factors influencing beliefs, attitudes, values and norms.

#### Outcome 3 – Self-management and interpersonal skills

Students use self-management and interpersonal skills to promote health. In achieving this outcome, students:

- apply self-understanding and decision-making skills; and
- apply communication and cooperation skills.

#### Outcome 4 – Health inquiry

Students use inquiry skills and processes to investigate and respond to health issues. In achieving this outcome, students:

- plan a health inquiry to define and research a health issue;
- use a range of information to explore a health issue;
- interpret information to develop a response to the health issue; and
- present findings and link the investigation to the response.

### Structure of the syllabus

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

#### Unit 1 (with 4 modules)

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 (with 4 modules)

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.

## General Health Education Studies

### Rationale

The Health Studies General course focuses on the study of health as a dynamic quality of human life. Students undertaking this course develop the knowledge, understanding and skills necessary to promote an understanding of the importance of personal and community action in promoting health. The influence of social, environmental, economic and biological determinants of health is a key focus of the course. Other course content includes the influence of beliefs, attitudes and values on health behaviour, and the importance of self-management and interpersonal skills in making healthy decisions. Using an inquiry process, students draw on their knowledge and understandings of health concepts and investigate health issues of interest. Through this process, they develop research skills that can be applied to a range of health issues or concerns.

This course will prepare students for career and employment pathways in a range of health and community service industries. Students will have the opportunity to develop key employability and life skills, including communication, leadership, initiative and enterprise. Inquiry skills will equip students to adapt to current and future studies and work environments.

### Aims

The Health Studies General course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Knowledge and understandings

Students understand factors and actions that influence health. In achieving this outcome, students:

- understand the determinants of health;
- understand actions and strategies that influence health; and
- understand and apply frameworks, models and theories to explain health concepts.

#### Outcome 2 – Beliefs, attitudes and values

Students understand the influence of beliefs, attitudes, values and norms on health. In achieving this outcome, students:

- understand the relationship between beliefs, attitudes, values, and health behaviour;
- understand the influence of attitudes and values on health behaviour; and
- understand the range of factors influencing beliefs, attitudes, values and norms.

#### Outcome 3 – Self-management and interpersonal skills

Students use self-management and interpersonal skills to promote health. In achieving this outcome, students:

- apply self-understanding and decision-making skills; and
- apply communication and cooperation skills.

#### Outcome 4 – Health inquiry

Students use inquiry skills and processes to investigate and respond to health issues. In achieving this outcome, students:

- plan a health inquiry to define and research a health issue;
- use a range of information to explore a health issue;
- interpret information to develop a response to the health issue; and
- present findings and link the investigation to the response.

### Structure of the syllabus

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

#### Unit 1

This unit focuses on personal health and wellbeing and what it means to be healthy. Students explore factors which influence their health, and design action plans to improve health and achieve set goals. Key consumer health skills and concepts, and the relationship between beliefs, attitudes, values and health behaviour, and the impact of social and cultural norms, are introduced. Key self-management and interpersonal skills required to build effective relationships are explored. Health inquiry skills are developed and applied to investigate and report on health issues.

#### Unit 2

This unit focuses on personal health and introduces the many factors which influence health. The notion of prevention is central to this unit, and students explore actions, skills and strategies to cope with health influences and improve health. In addition to health determinants, the influence of cognitive dissonance on decision making and the role of communities in shaping norms and expectations are explored. Self-management and cooperative skills are examined and students continue to develop and apply health inquiry skills.

## General Outdoor Education

### Rationale

Through interaction with the natural world, the Outdoor Education General course aims to develop an understanding of our relationships with the environment, others and ourselves. The ultimate goal of the course is to contribute towards a sustainable world.

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

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

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 empowers them to work toward achieving an ecologically sustainable world.

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.

### Structure of the syllabus

Students must understand that Outdoor Education comprises theoretical and practical requirements. Students are trained to increase their understanding and abilities in outdoor pursuits such as snorkelling, off-road cycling, navigation, bushwalking, sailing and power boat handling all within the context of minimal impact practices. Students need to be prepared to participate in, organise and plan a 3 day (Sea Trek) camp in Year 12 as well as a day snorkelling excursion that is usually held at Rottnest Island. Students need to be able to swim 200m unaided in open water and have access to a roadworthy bicycle and helmet. Students who have completed Outdoor Education in Year 10 will have priority when selecting this course.

In Term 1 in Year 12 the boating units undertaken at the Marine Education Boatshed contribute to the achievement of the Recreational Skippers Ticket qualification. It is mandatory for all students to have this qualification to be able to attend Sea Trek in Term 3 and to complete the overnight camping requirement. If a student fails, the theory test or practical test the Marine Education Boatshed staff usually offer the opportunity to re sit these tests during the Term 1 holidays. If a pass is still not achieved, it may be necessary for a student to re-sit their assessment at an alternative Registered Training Organization who will charge a fee for their services (paid for by the family of the student). All students need to have achieved the Recreational Skippers Ticket qualification by the end of May.

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

### Unit 1 – Experiencing the outdoors

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

### Unit 2 – Facing challenges in the outdoors

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

## Certificate II Sport and Recreation SIS20115

This two-year qualification at Leeming Senior High School (auspiced through IVET) provides students with skills and knowledge in the sport, fitness and recreation industry as well as in first aid and emergency situations, sport safety, customer and quality service within the sports industry as well as equipment maintenance. Work will be undertaken as part of a team and would be performed under supervision.

### Job roles (post completion of this qualification):

The Certificate II Sport and Recreation qualification as a subject selection is appropriate for students that:

- have a desire to follow a career pathway within Sport and Recreation industry fields such as:  
Pool Lifeguard, Sports Retail, Sports Trainer, Swim Teacher, Recreation Officer, Leisure Services Officer;
- are seeking a pre-apprenticeship qualification and vocational training pathway (post- secondary schooling) within the TAFE sector; and/or
- are following an ATAR (University) pathway with their enrolment at Leeming Senior High School but also have a keen interest in the Sport and Recreation industry.

**As the theoretical components of the Certificate II Sport and Recreation are completed using web based learning tools, it is compulsory that students interested in enrolling in this qualification have their own school approved device (see Leeming Senior High School Bring Your Own Device information on this link [Policies](#)) Without a device, students will not be able to complete the theoretical components of this qualification.**

**Parents/Guardians must also be aware that students will be removed from this qualification if:**

**There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.**

**A student has not obtained a Unique Student Identifier (USI) by December 2021.**

Interested students must also understand that the Certificate II Sport and Recreation qualification comprises 80% theoretical and 20% practical requirements. Students are learning how to work within the Sport and Recreation industry and increase their understanding and abilities within sporting fields. It is not like Lower School Physical Education.

The units of competency listed below are those that will be completed across both Years 11 and 12 within the Certificate II Sport and Recreation qualification at Leeming Senior High School (please note that these competencies may vary slightly subject to availability).

Unit Code	Unit Title
<b>YEAR 11 UNITS OF COMPETENCY</b>	
BSBWOR202A	• Organise and complete daily work activities
HLTWHS001	• Participate in Workplace Health and Safety
SISXIND006	• Conduct Sport, Fitness or Recreation Events
SISSOF101	• Develop and Update Officiating Knowledge
SISSCOP201A	• Prepare a Pre or Post Event Meal
SISXEMR001	• Respond to Emergency Situations
HLTAID003	• Provide First Aid
<b>YEAR 12 UNITS OF COMPETENCY</b>	
SISXIND001	• Work Effectively in Sport, Fitness and Recreation Environments
SISXIND002	• Maintain Sport, Fitness and Recreation Industry Knowledge
SISXCCS001	• Provide Quality Service
SISXCAI002	• Assist With Activity Sessions
SISXCAI001	• Provide Equipment For Activities
SISXFAC001	• Maintain Equipment For Activities



# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 4

### LANGUAGES

(List A Courses)

- **ATAR French Second Language**
- **ATAR Japanese Second Language**

NOTE - ATAR Languages courses attract a 10% ATAR bonus. This is only added to a student's final ATAR score.

## ATAR French Second Language

### Rationale

All students wishing to study a WACE language course are required by SCSA to complete an application form to ensure that they select the course best suited to their linguistic background and educational needs. If you would like to study French in Year 11 and 12 please speak to your Language Teacher to discuss your suitability for the WACE language courses and to get a copy of this application form.

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

This course is aimed at students for whom French is a second, or subsequent, language. These students have not been exposed to, or interacted in, the language outside of the language classroom. They have typically learnt everything they know about the French language and culture through classroom teaching in an Australian school, or similar environment, where English is the language of school instruction. Students have typically studied French for 200–400 hours at the commencement of Year 11, and may have experienced some short stays or exchanges in a country where the language is a medium of communication.

### Aims

The ATAR French Second Language course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Listening and responding

Students listen and respond to a range of texts. In achieving this outcome, students:

- use understandings of language, structure and context when listening and responding to texts; and
- use processes and strategies to make meaning when listening.

#### Outcome 2 – Spoken interaction

Students communicate in French through spoken interaction. In achieving this outcome, students:

- use understandings of language and structure in spoken interactions;
- interact for a range of purposes in a variety of contexts; and
- use processes and strategies to enhance spoken interaction.

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

Students view, read and respond to a range of texts. In achieving this outcome, students:

- use understandings of language, structure and context to respond to texts; and
- use processes and strategies to make meaning when viewing and reading.

#### Outcome 4 – Writing

Students write a variety of texts in French. In achieving this outcome, students:

- use understandings of language and structure when writing;
- write for a range of purposes and in a variety of contexts; and
- use processes and strategies to enhance writing.

## Structure of the syllabus

### Unit 1

This unit focuses on **C'est la vie! (That's life!)**. Through the three topics: My Daily Routine, French Sports and Leisure, and Leading a Healthy Lifestyle, students further develop their communication skills in French and gain a broader insight into the language and culture.

### Unit 2

This unit focuses on **Voyages (Travel)**. Through the three topics: My travel Tales and Plans, Australia as a Travel Destination, and Travel in a Modern World, students extend their communication skills in French and gain a broader insight into the language and culture.



# ATAR Japanese Second Language

## Rationale

All students wishing to study a WACE language course are required by SCASA to complete an application form to ensure that they select the course best suited to their linguistic background and educational needs. If you would like to study Japanese in Year 11 and 12 please speak to your Language Teacher to discuss your suitability for the WACE language courses and to get a copy of this application form.

This course is aimed at students for whom Japanese is a second, or subsequent, language. These students have not been exposed to, or interacted in the language outside of the language classroom. They have typically learnt everything they know about the Japanese language and culture, through classroom teaching in an Australian school, or similar environment, where English is the language of school instruction. Students have typically studied Japanese for 200–400 hours at the commencement of Year 11, and may have experienced some short stays or exchanges in a country where the language is a medium of communication.

## Aims

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

### Outcome 1 – Listening and responding

Students listen and respond to a range of texts. In achieving this outcome, students:

- use understandings of language, structure and context when listening and responding to texts; and
- use processes and strategies to make meaning when listening.

### Outcome 2 – Spoken interaction

Students communicate in Japanese through spoken interaction. In achieving this outcome, students:

- use understandings of language and structure in spoken interactions;
- interact for a range of purposes in a variety of contexts; and
- use processes and strategies to enhance spoken interaction.

### Outcome 3 – Viewing, reading and responding

Students view, read and respond to a range of texts. In achieving this outcome, students:

- use understandings of language, structure and context to respond to texts; and
- use processes and strategies to make meaning when viewing and reading.

### Outcome 4 – Writing

Students write a variety of texts in Japanese. In achieving this outcome, students:

- use understandings of language and structure when writing;
- write for a range of purposes and in a variety of contexts; and
- use processes and strategies to enhance writing.

## Structure of the syllabus

### Unit 1

This unit focuses on にちじょうせいかつ 日常生活 (Daily life). Through the three topics: My life せいかつ 私の生活, Home life せいかつ 学校と家での生活, and Daily life せいかつ 生活をくらべて, students further develop their communication skills in Japanese and gain a broader insight into the language and culture.

### Unit 2

This unit focuses on ようこそ ようこそ、私の国へ! (Welcome to my country). Through the three topics: Welcoming a guest ようこそ ようこそ!, Seasonal activities and celebrations しきとイベント しきとイベント, and Healthy lifestyles けんこう けんこう, students extend their communication skills in Japanese and gain a broader insight into the language and culture.





**LEEMING SHS**

HARMONY ~ EXCELLENCE

## **Chapter 5**

# **MATHEMATICS**

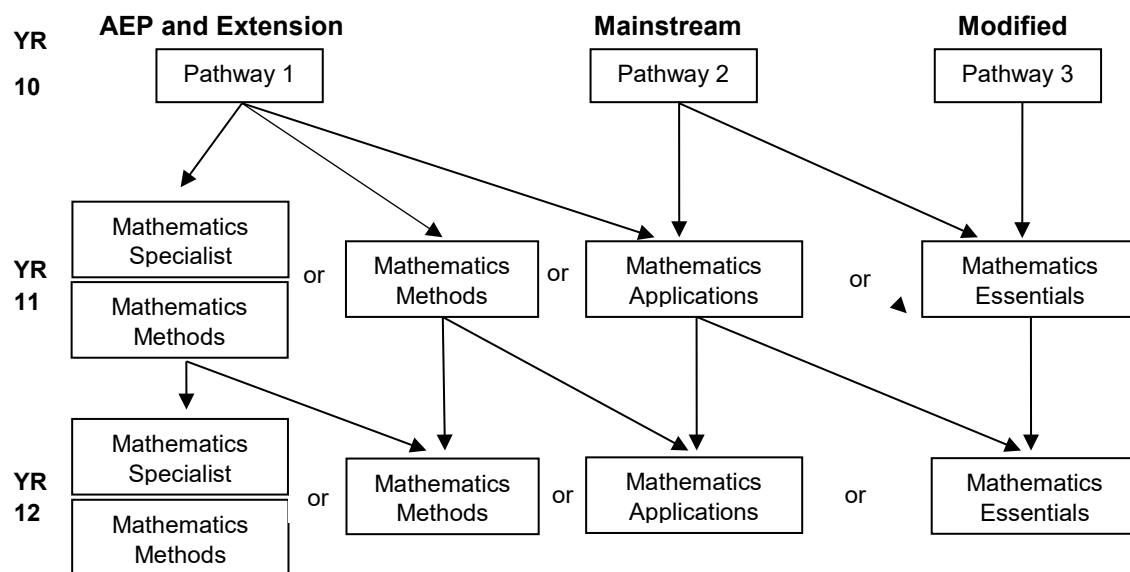
(List B Courses)

- **ATAR Mathematics Specialist**
- **ATAR Mathematics Methods**
- **ATAR Mathematics Applications**
- **General Mathematics Essentials**

NOTE – Students selecting either ATAR Mathematics Specialist or ATAR Mathematics Methods must have successfully completed the 10A content in Year 10 Mathematics. This content has only been covered in the 10.1, 10.4 and 10.5 Mathematics classes.

## Mathematics Guide for Families

### Year 10 Pathways into Year 11 and 12



The Year 10 pathways are designed to provide sound preparation for further Mathematics study in Senior School courses and to ensure that all students have the opportunity to meet the minimum numeracy standard required to achieve a WACE. Mathematics Specialist, Methods and Applications are ATAR courses whereas Mathematics Essentials is a general course.

## ATAR Mathematics Specialist

### Rationale

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

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

For all content areas of the ATAR Mathematics Specialist course, the proficiency strands of the Year 7–10 curriculum continue to be applicable and should be inherent in students' learning of the subject. These strands are Understanding, Fluency, Problem-solving and Reasoning and they are both essential and mutually reinforcing. For all content areas, practice allows students to achieve fluency of skills, such as finding the scalar product of two vectors, or finding the area of a region contained between curves, freeing up working memory for more complex aspects of problem-solving. In the ATAR Mathematics Specialist course, the formal explanation of reasoning through mathematical proof takes on an important role and the ability to present the solution of any problem in a logical and clear manner is of paramount importance. The ability to transfer skills learned to solve one class of problem, for example, integration, to solve another class of problem, such as in biology, kinematics or statistics, is a vital part of mathematics learning in this subject.

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

### Aims

The ATAR Mathematics Specialist course aims to develop students':

- understanding of concepts and techniques drawn from combinatorics, geometry, trigonometry, complex numbers, vectors, matrices, calculus and statistics;
- ability to solve applied problems using concepts and techniques drawn from combinatorics, geometry, trigonometry, complex numbers, vectors, matrices, calculus and statistics;
- capacity to choose and use technology appropriately;
- reasoning in mathematical and statistical contexts and interpretation of mathematical and statistical information, including ascertaining the reasonableness of solutions to problems;
- capacity to communicate in a concise and systematic manner using appropriate mathematical and statistical language; and
- ability to construct proofs.

### Structure of the syllabus

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

### Organisation of content

#### Unit 1 Contains this three topics:

- Functions and graphs
- Trigonometric functions
- Counting and probability

#### Unit 2 Contains this three topics:

- Trigonometry
- Matrices
- Real and complex numbers

# ATAR Mathematics Methods

## Rationale

The major themes of the ATAR Mathematics Methods course are calculus and statistics. They include, as necessary prerequisites, studies of algebra, functions and their graphs, and probability. They are developed systematically, with increasing levels of sophistication and complexity. Calculus is essential for developing an understanding of the physical world because many of the laws of science are relationships involving rates of change. Statistics is used to describe and analyse phenomena involving uncertainty and variation. For these reasons, this course 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. 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.

For all content areas of the ATAR Mathematics Methods course, the proficiency strands of the Year 7–10 curriculum continue to be applicable and should be inherent in students' learning of this course. These strands are Understanding, Fluency, Problem-solving and Reasoning, and they are both essential and mutually reinforcing. For all content areas, practice allows students to achieve fluency in skills, such as calculating derivatives and integrals, or solving quadratic equations, and frees up working memory for more complex aspects of problem solving. The ability to transfer skills to solve problems based on a wide range of applications is a vital part of this course. Because both calculus and statistics are widely applicable as models of the world around us, there is ample opportunity for problem-solving throughout the course.

The ATAR Mathematics Methods course is structured over four units. The topics in Unit 1 build on students' mathematical experience. The topics 'Functions and Graphs', 'Trigonometric Functions' and 'Counting and Probability' all follow on from topics in the Year 7–10 curriculum from the strands Number and Algebra, Measurement and Geometry, and Statistics and Probability. In this course, there is a progression of content and applications in all areas. For example, in Unit 2 differential calculus is introduced, and then further developed in Unit 3, where integral calculus is introduced. Discrete probability distributions are introduced in Unit 3, and then continuous probability distributions and an introduction to statistical inference conclude Unit 4.

## Aims

The ATAR Mathematics Methods course aims to develop students':

- understanding of concepts and techniques drawn from algebra, the study of functions, calculus, probability and statistics;
- ability to solve applied problems using concepts and techniques drawn from algebra, functions, calculus, probability and statistics;
- reasoning in mathematical and statistical contexts and interpretation of mathematical and statistical information, including ascertaining the reasonableness of solutions to problems;
- capacity to communicate in a concise and systematic manner using appropriate mathematical and statistical language; and
- capacity to choose and use technology appropriately and efficiently.

## Structure of the syllabus

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

### Unit 1

The unit contains the three topics:

- Functions and graphs
- Trigonometric functions
- Counting and probability

### Unit 2

The unit contains the three topics:

- Exponential functions
- Arithmetic and geometric sequences and series
- Introduction to differential calculus

# ATAR Mathematics Applications

## Rationale

The ATAR Mathematics Applications course is designed for students who want to extend their mathematical skills beyond Year 10 level but whose future studies or employment pathways do not require knowledge of calculus. The course is designed for students who have a wide range of educational and employment aspirations, including continuing their studies at university or TAFE.

The proficiency strands of the Year 7 to 10 curriculum – Understanding, Fluency, Problem-solving and Reasoning – continue to be relevant and are inherent in all aspects of this course. Each of these proficiencies is essential and are mutually reinforcing. Fluency, for example, might include learning to perform routine calculations efficiently and accurately, or being able to recognise quickly from a problem description the appropriate mathematical process or model to apply. Understanding that a single mathematical process can be used in seemingly different situations helps students to see the connections between different areas of study and encourages the transfer of learning. This is an important part of learning the art of mathematical problem-solving. In performing such analyses, reasoning is required at each decision-making step and in drawing appropriate conclusions. Presenting the analysis in a logical and clear manner to explain the reasoning used is also an integral part of the learning process.

Throughout the course, there is an emphasis on the use and application of digital technologies.

## Aims

The ATAR Mathematics Applications course aims to develop students':

- understanding of concepts and techniques drawn from the topic areas of number and algebra, geometry and trigonometry, graphs and networks, and statistics;
- ability to solve applied problems using concepts and techniques drawn from the topic areas of number and algebra, geometry and trigonometry, graphs and networks, and statistics;
- reasoning and interpretive skills in mathematical and statistical contexts;
- capacity to communicate the results of a mathematical or statistical problem-solving activity in a concise and systematic manner using appropriate mathematical and statistical language; and
- capacity to choose and use technology appropriately and efficiently.

## Structure of the syllabus

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

## Organisation of content

### Unit 1

The unit contains the three topics:

- Consumer arithmetic
- Algebra and matrices
- Shape and measurement

### Unit 2

The unit contains the three topics:

- Univariate data analysis and the statistical investigation process
- Applications of trigonometry
- Linear equations and their graphs

# General Mathematics Essentials

## Rationale

The General Mathematics Essential course focuses on enabling students to use mathematics effectively, efficiently and critically to make informed decisions in their daily lives. 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 offers students the opportunity to prepare for post-school options of employment and further training.

For all content areas of the General Mathematics Essential course, the proficiency strands of understanding, fluency, problem solving and reasoning from the Year 7–10 curriculum continue to be very much applicable and should be inherent in students' learning of the course. Each of these is essential and mutually reinforcing. For all content areas, practice, together with a focus on understanding, allows students to develop fluency in their skills. Students will encounter opportunities for problem solving, such as finding the interest on a sum of money to enable comparison between different types of loans. In the General Mathematics Essential course, reasoning includes critically interpreting and analysing information represented through graphs, tables and other statistical representations to make informed decisions. The ability to transfer mathematical skills between contexts is a vital part of learning in this course. For example, familiarity with the concept of a rate enables students to solve a wide range of practical problems, such as fuel consumption, travel times, interest payments, taxation, and population growth.

The content of the General Mathematics Essential course is designed to be taught within contexts that are relevant to the needs of the particular student cohort. The skills and understandings developed throughout the course will be further enhanced and reinforced through presentation related to areas encountered in vocational education and training (VET).

## Aims

The General Mathematics Essential course aims to develop students' capacity, disposition and confidence to:

- understand concepts and techniques drawn from mathematics and statistics;
- solve applied problems using concepts and techniques drawn from mathematics and statistics;
- use reasoning and interpretive skills in mathematical and statistical contexts;
- communicate in a concise and systematic manner using appropriate mathematical and statistical language; and
- choose and use technology appropriately.

## Structure of the syllabus

### Unit 1

This unit includes the following four topics:

- Basic calculations, percentages and rates
- Using formulas for practical purposes
- Measurement
- Graphs

### Unit 2

This unit includes the following four topics:

- Representing and comparing data
- Percentages
- Rates and ratios
- Time and motion

Throughout each unit, students apply the mathematical thinking process to real-world problems.

- Interpret the task and gather the key information;
- identify the mathematics which could help to complete the task;
- analyse information and data from a variety of sources;
- apply their existing mathematical knowledge and strategies to obtain a solution;
- verify the reasonableness of the solution; and
- communicate findings in a systematic and concise manner.

In Unit 2, students apply the statistical investigation process to real-world tasks.

- Clarify the problem and pose one or more questions that can be answered with data;
- design and implement a plan to collect or obtain appropriate data;
- select and apply appropriate graphical or numerical techniques to analyse the data;
- interpret the results of this analysis and relate the interpretation to the original question; and
- communicate findings in a systematic and concise manner.



# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 6

# HUMANITIES AND SOCIAL SCIENCES

(List A Courses except ATAR and General Psychology)

- ATAR Economics
- ATAR Geography
- ATAR Modern History
- ATAR Politics and Law
- **ATAR Psychology**
- General Career & Enterprise
- **General Psychology**

## ATAR Economics

### Rationale

The ATAR Economics course encompasses the key features which characterise an economist's approach to a contemporary economic event or issue: the ability to simplify the essence of a problem; to collect economic information and data to assist analysis and reasoning; to think critically about the limits of analysis in a social context; and to draw inferences which assist decision-making, the development of public policy and improvement in economic wellbeing.

The ATAR Economics course develops reasoning, logical thinking and interpretation skills demanded by the world of work, business and government. These skills relate to a variety of qualifications in vocational, technical and university education contexts. The learning experiences available through studying this course explore the knowledge, values and opinions which surround the complex range of economic events and issues facing our community, such as unemployment, income distribution, business strategy and international relations.

Economic literacy developed through this course enables students to actively participate in economic and financial decision-making which promotes individual and societal wealth and wellbeing.

### Aims

The ATAR Economics course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Economic inquiry

Students use economic information and data to communicate an understanding of economic events, issues and decisions. In achieving this outcome, students:

- locate, select and organise economic information and data;
- analyse and interpret economic information and data; and
- use economic terms, concepts and models to communicate an understanding of economic events, issues and decisions.

#### Outcome 2 – The operation of the economy

Students understand that economic forces influence the operation of the economy and are affected by the decisions of consumers and businesses. In achieving this outcome, students:

- understand how domestic and international economic forces influence the operation of the economy; and
- understanding the choices, trade-offs and effects of economic decisions made at the local, national and international levels.

#### Outcome 3 – Economic policy and action

Students understand that the policies and actions of the government and other authorities affect the operation of the economy. In achieving this outcome, students:

- understand why economic policies and actions are required to manage the economy;
- understand how policy options are used to address domestic and international economic problems and issues; and
- understand the effects of economic policies and actions of government and other authorities at the local, national and international level.

## Structure of the syllabus

### Unit 1 – Microeconomics

This unit is an introduction to microeconomics and explores the role of the market in determining the wellbeing of individuals and society. Students explore the workings of real world markets with an emphasis on the Australian economy.

### Unit 2 – Macroeconomics

This unit is an introduction to macroeconomics and explores economic growth, inflation and unemployment with an emphasis on the Australian economy. Students learn it is important to measure and monitor changes in these macroeconomic indicators as changes in the level of economic activity affect the wellbeing of individuals and society.



## ATAR Geography

### Rationale

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

The course builds students' knowledge and understanding of the uniqueness of places and an appreciation that place matters in explanations of economic, social and environmental phenomena and processes. It also develops students' knowledge about the interconnections between places. Nothing exists in isolation. Consequently, the subject considers the significance of location, distance and proximity.

Through the study of geography, students develop the ability to investigate the arrangement of biophysical and human phenomena across space in order to understand the interconnections between people, places and environments. As a subject of the humanities and social sciences, geography studies spatial aspects of human culture using inquiry methods that are analytical, critical and speculative. In doing so, it values imagination and creativity. As a science, geography develops an appreciation of the role of the biophysical environment in human life, and an understanding of the effects human activities can have on environments. As a result, it develops students' ability to identify, evaluate and justify appropriate and sustainable approaches to the future by thinking holistically and spatially in seeking answers to questions. Students are encouraged to investigate geographical issues and phenomena from a range of perspectives, including those of Aboriginal and Torres Strait Islander Peoples.

Students learn how to collect information from primary and secondary sources, such as field observation and data collection, mapping, monitoring, remote sensing, case studies and reports. Fieldwork, in all its various forms, is central to geographical inquiries as it enables students to develop their understanding of the world through direct experience.

Students develop a range of skills that help them to understand the physical world, interpret the past, scrutinise the present, and explore sustainable strategies for the future care of places. They are able to understand recent and future developments, such as urban planning, climate change, cultural diffusion, environments at risk, sustainable development practices, and the unequal distribution of resources throughout the world.

The ATAR Geography course promotes students' communication abilities by building their skills of spatial and visual representation and interpretation through the use of cartographic, diagrammatic, graphical, photographic and multimodal forms. In addition, students communicate their conclusions by written and oral means.

### Aims

The ATAR Geography course aims to develop students':

- knowledge and understanding of the nature, causes and consequences of natural and ecological hazards, international integration in a range of spatial contexts, land cover transformations, and the challenges affecting the sustainability of places;
- understanding and application of the concepts of place, space, environment, interconnection, sustainability, scale and change through inquiries into geographical phenomena and issues;
- ability to critically use geographical inquiry methods and skills, and to think and communicate geographically;
- ability to identify, evaluate and justify alternative responses to the geographical challenges facing humanity, and propose and justify actions, taking into account environmental, social and economic factors; and
- understandings, skills, knowledge and values to ensure they are well placed for tertiary study and/or employment.

### Structure of the syllabus

#### Unit 1 – Natural and ecological hazards

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

#### Unit 2 – Global networks and interconnections

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

## ATAR Modern History

### Rationale

Few subjects are as inherently interesting and enjoyable as History. The story of how the world and Australia got to be the way they currently are is indeed a fascinating tale. In addition to being enjoyable to study, History also equips students with a broad range of highly important and useful skills that are transferable to a wide variety of professions and occupations.

By studying History students will become proficient in:

- Written communication
- Research skills
- Analysis and interpretation of a wide variety of different information including written and visual texts and statistics.

All units are taught using extensive audio-visual material to help bring the subject “alive”.

### Aims

The ATAR Modern History ATAR Course aims to develop student’s:

- knowledge and understanding of particular events, ideas and movements that have shaped the modern world;
- ability to apply historical concepts such as evidence, cause and effect, perspective and significance to the analysis of historical sources; and
- research skills including the process of planning and conducting a historical inquiry, evaluating historical sources, synthesising evidence and communicating the findings.

### Structure of the syllabus

The following information lists the electives which students will study in Year 11:

- **Capitalism: The American Experience focuses on:**
  - The nature and development of capitalism in the USA;
  - how capitalisms influenced US involvement in both World War One and World War Two and the significance of this to the Allied victory in both conflicts;
  - the social trends and political developments of the 1920s and their relationship to capitalism;
  - the transition from “boom” to “bust” with the onset of the Great Depression
  - The impact of the Depression on the American people and the government’s response, President Hoover’s “rugged individualism” versus President Roosevelt’s “New Deal”.
- **Nazism in Germany focuses on:**
  - the impact of World War One on Germany;
  - the problems and shortcomings of the post war Weimar government;
  - Hitler’s background and the ideas of Nazism;
  - the rise of the Nazis;
  - life under Nazi rule;
  - the road to World War Two, Hitler’s foreign policy during the 1930s
  - the Holocaust; and
  - the impact of the war on the German people and the legacy of Nazism.
- **Russia and the Soviet Union focuses on:**
  - The transition from autocracy under the Tsars to communism under Lenin and Stalin;
  - The economic, social and political changes involved in this transition and their impact on both the Russian people and the rest of the world.
- **The Changing European World Since 1945 focuses on:**
  - the development and conduct of the Cold War in Europe 1945-1991; and
  - Europe in the Post-Cold War decade including the collapse of communism in Russia, the emergence of the European Union and the reunification of Germany.

## ATAR Politics and Law

### Rationale

The ATAR Politics and Law course aims to develop knowledge and understanding of the principles, structures, institutions, processes, and practices of political and legal systems, primarily in Australia and where appropriate, other systems and/or countries. The course challenges students to critically examine the effectiveness of these political and legal systems and develop skills and values to allow students to become informed, active and effective participants in the political and legal decisions that affect their lives within society. The Politics and Law course aims to provide students with the opportunity to examine and analyse political and legal systems in operation through the use of different learning experiences that will include a visit to the courts in Western Australia, the Electoral Commission and State Parliament. The course provides for both a chronological and contemporary understanding of political and legal issues in society. Students may be given an opportunity to participate in the State-wide Interschool Mock Trial Competition a Community Endorsed Programme recognised by the School Curriculum and Standard Authority.

The study of Politics and Law can be a valuable background to careers in law, political advocacy, public administration, international relations, foreign affairs, community development, teaching, journalism, human resource management, government and commerce.

### Aims

#### Outcome 1 – Political and legal inquiry

Students use inquiry skills to communicate an understanding of the principles, structures, institutions, processes and practices of political and legal systems. In achieving this outcome, students:

- plan ways to collect and organise information for the purpose of a political and legal investigation;
- conduct an investigation using a variety of sources of information;
- process and translate information to make findings and judgements; and
- apply and communicate findings according to purpose and audience.

#### Outcome 2 – Political and legal systems

Students understand the operation of, and the relationship between political and legal systems. In achieving this outcome, students:

- understand the principles, structures, institutions, processes and practices of political and legal systems; and
- understand the relationships between making, applying and enforcing the law.

#### Outcome 3 – Stability and change in political and legal systems

Students understand the nature of stability and change in political and legal systems. In achieving this outcome, students:

- understand that a variety of factors can influence the stability of, and changes to political and legal systems; and
- understand that individuals and groups can influence the stability of, and changes to political and legal systems.

#### Outcome 4 – Citizenship in political and legal systems

Students understand the skills and practices of citizenship and the factors that influence participation in the political and legal system. In achieving this outcome, students:

- understand the skills and practices of citizenship that can allow individuals and groups to participate in the political and legal system; and
- understand that political and legal rights can be influenced by the operation of the political and legal system.

### Structure of the syllabus

#### Unit 1 – Democracy and the rule of law

This unit examines Australia's democratic and common law systems; a non-democratic system; and a non-common law system. This will include a study of the structure of Australia's political and legal system with a focus on parliament as a law-making body, the Australian and WA court system, judge-made laws, civil and criminal trial proceedings in WA.

#### Unit 2 – Representation and justice

This unit examines representation (principles of fair elections), electoral and voting systems in Australia; the analysis of justice in the Western Australian adversarial system and a non-common law system (case studies of past and contemporary trials will be examined).

## ATAR Psychology

### Rationale

This course introduces students to a breadth of knowledge focusing on the psychology of self and others. Psychological knowledge helps us understand factors relating to individuals, such as: cognition, or the way we think; biological bases of behaviour; and personality, the enduring traits that distinguish individuals. Psychological knowledge also helps us understand the way that individuals function within groups. This consists of knowledge associated with socialisation, moral development, the formation of attitudes and also how people relate and communicate. On a larger scale, psychological knowledge can help us to understand how individuals function within different contexts and how this is influenced by culture, shaping people's values, attitudes and beliefs.

### Aims

The ATAR Psychology course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Psychological understandings

Students understand the bases of human behaviour. In achieving this outcome, students:

- understand how human behaviour can be defined, and the relationship between the internal and external factors that influence how humans think, feel and act;
- understand the different theoretical approaches to the various areas or domains of psychology; and
- understand psychology provides scientific explanations of behaviour with particular principles, procedures and approaches to data.

#### Outcome 2 – Investigating in psychology

Students use information gathering methods to explore and answer questions about human thinking, emotion and behaviour. In achieving this outcome, students:

- develop and select questions and ideas or hypotheses and plan and conduct research to test these ideas in a reliable, valid and ethical way;
- collect, record, classify, quantify and process data and information in organised, logical and ethical ways; and
- interpret and evaluate findings in relation to ideas or hypotheses being tested and reflect on the design of the research.

#### Outcome 3 – Applying and relating psychological understandings

Students select and apply knowledge, understandings and skills to the study of human behaviour. In achieving this outcome, students:

- use psychological knowledge and understandings to explain thoughts, feelings and behaviour;
- apply knowledge and understandings reflecting the values of the discipline of psychology; and
- explore and interpret human behaviour in the everyday world using psychological theory and principles.

#### Outcome 4 – Communication in psychology

Students use appropriate skills and processes to communicate their understanding of human behaviour. In achieving this outcome, students:

- use psychological discourse;
- interpret information received and communicate feelings, thoughts and ideas with purpose, understanding and critical awareness; and
- explain psychological understandings to a range of audiences for a range of purposes.

### Structure of the syllabus

#### Unit 1

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

#### Unit 2

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

## General Career and Enterprise

### Rationale

The General Career and Enterprise course aims to provide students with the knowledge, skills and understanding to enable them to plan their future.

The course reflects the importance of career development knowledge, understanding and skills in securing, creating and sustaining work. Work is important in deciding the way we live, relate to others and in determining the opportunities we have throughout life. The world of work is complex and constantly changing and enterprise skills have been identified as a key factor in futures pathways.

### Aims

The General Career and Enterprise course is designed to achievement the following outcomes.

#### Outcome 1 – Career and enterprise concepts

Students understand factors that influence their future. In achieving this outcome, students:

- understand factors that determine personal development and learning opportunities;
- understand how workplace practices and procedures influence career development; and
- understand how personal and external resources are accessed and managed for career development.

#### Outcome 2 – Career and enterprise investigations

Students investigate career development opportunities. In achieving this outcome, students:

- collect and organise information to investigate career development opportunities;
- analyse data and draw conclusions, considering needs, values and beliefs; and
- communicate solutions to career development opportunities.

#### Outcome 3 – Career development in a changing world

Students understand how the changing world impact on career development opportunities. In achieving this outcome, students:

- understand how technologies influence career development opportunities;
- understand how society, government legislation and policy influence career development opportunities; and
- understand how beliefs, values and attitudes influence career development opportunities.

#### Outcome 4 – Being enterprising

Students use career competencies to manage career development opportunities. In achieving this outcome, students:

- use initiative, willingness to learn and problem-solving skills;
- use self-management, self-promotion, planning and organisational skills; and
- use communication, technology, networking and teamwork skills.

This course is delivered with students developing, reviewing and updating individual pathway plan and career portfolios to assist in their personal career development.

## Structure of the syllabus

### Unit 1

This unit enables students to increase their knowledge of work and career choices and identify a network of people and organisations that can help with school to work transitions.

### Unit 2

This unit explores the attributes and skills necessary for employment and provides students with the opportunity to identify their personal strengths and interests and the impact of these on career development opportunities and decisions.

# General Psychology

## Rationale

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

This course introduces students to a breadth of knowledge focusing on the psychology of self and others.

## Aims

The General Psychology course is designed to facilitate achievement of the following outcomes.

### Outcome 1 – Psychological understandings

- Understand how human behaviour can be defined, and the relationship between the internal and external factors that influence how humans think, feel and act;
- understand the different theoretical approaches to the various areas or domains of psychology; and
- understand psychology provides scientific explanations of behaviour with particular principles, procedures and approaches to data.

### Outcome 2 – Investigating in psychology

- Develop and select questions and ideas or hypotheses and plan and conduct research to test these ideas in a reliable, valid and ethical way;
- collect, record, classify, quantify and process data and information in organised, logical and ethical ways; and
- interpret and evaluate findings in relation to ideas or hypotheses being tested and reflect on the design of the research.

### Outcome 3 – Applying and relating psychological understandings

- Use psychological knowledge and understandings to explain thoughts, feelings and behaviour;
- apply knowledge and understandings reflecting the values of the discipline of psychology; and
- explore and interpret human behaviour in the everyday world using psychological theory and principles.

### Outcome 4 – Applying and relating psychological understandings

- Use psychological discourse;
- interpret information received and communicate feelings, thoughts and ideas with purpose, understanding and critical awareness; and
- explain psychological understandings to a range of audiences for a range of purposes.

## Structure of the syllabus

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

### Unit 1

This unit provides a general introduction to personality and intelligence. Students explore a number of influential theories including Freud's psychodynamic approach, Eysenck's trait theory and Spearman's theory of general intelligence. Beyond the individual, the impact of culture and others on behaviour is a key focus. Students examine agents of socialisation and the role of verbal and non-verbal communication in initiating, maintaining and regulating relationships. Students are introduced to qualitative and quantitative methods of data collection and explore fundamental ethical considerations pertinent to psychological research.

### Unit 2

This unit introduces students to the human brain and the impact of factors influencing behaviour, emotion and thought. The scientific study of development is an important component of psychology and students review aspects of development and the role of nature and nurture. Students learn about stages of development and the impact of external factors on personality development. The impact of group size on behaviour and the influence of culture in shaping attitudes is explored. Students interpret descriptive data and apply it to create tables, graphs and diagrams, distinguish patterns and draw conclusions.



# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 7

## SCIENCE

(List B Courses)

- ATAR Biology
- ATAR Aviation Studies
- ATAR Chemistry
- ATAR Human Biology
- ATAR Physics
- General Human Biology
- General Aviation Studies

## Science Guide for Families

### Year 10 Pathways into Year 11 and 12

Expected achievement/background in Year 10	Year 11 Science Courses
<u>Requirement:</u> A or high B grade in the Physical Science understanding. Teacher recommendation. <u>Desired:</u> A or top B grade in Mathematics.	ATAR Aviation Studies
<u>Requirement:</u> A or high B grade in the Biological Science understanding. Teacher Recommendation. <u>Desired:</u> A or top B grade in English.	ATAR Biology
<u>Requirement:</u> A or high B grade in the Chemical Science understanding. Teacher Recommendation <u>Desired:</u> A or top B grade in Mathematics.	ATAR Chemistry
<u>Requirement:</u> A or high B grade in the Biological Science understanding. Teacher recommendation. <u>Desired:</u> A or top B grade in English.	ATAR Human Biology
<u>Requirement:</u> A or high B grade in the Physical Science understanding. Teacher recommendation. <u>Desired:</u> A or high B grade in Mathematics.	ATAR Physics
<u>Requirement:</u> C grade in Science is desirable.	General Human Biology General Aviation Studies



## ATAR Biology

### Rationale

Biology is the study of the fascinating diversity of life as it has evolved and as it interacts and functions. Investigation of biological systems and their interactions, from cellular processes to ecosystem dynamics, has led to biological knowledge and understanding that enable us to explore and explain everyday observations, find solutions to biological issues, and understand the processes of biological continuity and change over time.

Living systems are all interconnected and interact at a variety of spatial and temporal scales, from the molecular level to the ecosystem level. Investigation of living systems involves classification of key components within the system, and analysis of how those components interact, particularly with regard to the movement of matter and the transfer and transformation of energy within and between systems. Analysis of the ways living systems change over time involves understanding of the factors that impact on the system, and investigation of system mechanisms to respond to internal and external changes and ensure continuity of the system. The theory of evolution by natural selection is critical to explaining these patterns and processes in biology, and underpins the study of all living systems.

This course explores ways in which scientists work collaboratively and individually in a range of integrated fields to increase understanding of an ever-expanding body of biological knowledge. Students develop their investigative, analytical and communication skills through field, laboratory and research investigations of living systems and through critical evaluation of the development, ethics, applications and influences of contemporary biological knowledge in a range of contexts.

Studying the ATAR Biology course provides students with a suite of skills and understandings that are valuable to a wide range of further study pathways and careers. Understanding of biological concepts, as well as general science knowledge and skills, is relevant to a range of careers, including those in medical, veterinary, food and marine sciences, agriculture, biotechnology, environmental rehabilitation, biosecurity, quarantine, conservation and eco-tourism. This course will also provide a foundation for students to critically consider and to make informed decisions about contemporary biological issues in their everyday lives.

### Aims

The ATAR Biology course aims to develop students':

- sense of wonder and curiosity about life and respect for all living things and the environment;
- understanding of how biological systems interact and are interrelated; the flow of matter and energy through and between these systems; and the processes by which they persist and change;
- understanding of major biological concepts, theories and models related to biological systems at all scales, from subcellular processes to ecosystem dynamics;
- appreciation of how biological knowledge has developed over time and continues to develop; how scientists use biology in a wide range of applications; and how biological knowledge influences society in local, regional and global contexts;
- ability to plan and carry out fieldwork, laboratory and other research investigations, including the collection and analysis of qualitative and quantitative data and the interpretation of evidence;
- ability to use sound, evidence-based arguments creatively and analytically when evaluating claims and applying biological knowledge; and
- ability to communicate biological understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

### Structure of the syllabus

#### Unit 1 – Ecosystems and biodiversity

In this unit, students analyse abiotic and biotic ecosystem components and their interactions, using classification systems for data collection, comparison and evaluation.

#### Unit 2 – From single cells to multicellular organisms

In this unit, students investigate the interdependent components of the cell system and the multiple interacting systems in multicellular organisms.

## ATAR Aviation Studies

### Rationale

Aviation involves flying by mechanical means, especially with heavier-than-air craft. The study of aviation, therefore, encompasses the application of skills and understandings about the nature of the atmosphere, aerodynamics, and the systems and structures designed to achieve safe and efficient flight.

Aviation has transformed the world in which we live. Efficient and reliable air transport has changed the way people travel, work, communicate and relate to each other. Simultaneously, developments in military aviation and aerospace technology have redefined approaches to national and international security. Aviation contributes significantly to the global economy and both directly and indirectly affects the lives of the world's citizens. The nature and scope of aviation is constantly changing, driven by major developments in technology, science, education and economics. In Australia, aviation has been fundamental to overcoming problems associated with the country's physical size and population distribution.

The Aviation ATAR course draws from such diverse disciplines as science, engineering, environmental science, the social sciences, mathematics, English and information technology. It encompasses a range of mathematical, technological and humanities concepts and draws together a broad variety of skills, processes, understandings and strategies that promote the safe and effective operations of the aviation industry. The course provides students with the opportunity to investigate the importance of aviation to our society and learn the skills and knowledge required to make informed decisions on issues relating to aviation and associated industries.

The Aviation ATAR course caters for those students seeking a career in aviation, science or engineering.

### Aims

The course content is divided into five content areas:

- Aerodynamics
- Performance and operation
- Aviation skills
- Human factors
- Aviation development.

By the end of the course students should be able to

- Understand components of, and interactions between aviation systems;
- apply processes to plan aviation operations;
- apply a range of skills and processes to perform specific aviation operations; and
- understand the influences on aviation developments and their impact on society.

### Structure of the syllabus

#### Unit 1 – Aerodynamics, Performance and Operation, Aviation Skills, Aviation Development

Students investigate the aerodynamic principles associated with lift and drag, and the various types of aircraft stability. Students investigate aircraft controls and identify the six primary flight instruments, examining their purpose, operation and limitations. Students learn the basic principles of meteorology, navigation, maps and time. They are introduced to some human physiology pertinent to aviation.

#### Unit 2 – Performance and Operation, Propulsion, Aviation Law, Aircraft Performance, Aviation Skills, Human Factors, Aviation Development

Students explore the development and principles of the internal combustion aircraft engine, its use, instrumentation and limitations. They investigate fixed pitch propellers and various aircraft systems commonly found on light aircraft, the disposition of forces in specific flight manoeuvres. Students can use take-off and landing performance charts, and weight and balance charts, for a simple light aircraft (Cessna 172). Students understand aviation communications, including radios and radio wave propagation, light signals and ground symbols. They learn about flight rules and airspace classification. Students understand the purpose and necessity of civil aviation publications, and identify specific rules and regulations governing flight in and around controlled and uncontrolled aerodromes.

## ATAR Chemistry

### Rationale

Chemistry is the study of materials and substances and the transformations they undergo through interactions and the transfer of energy. Chemists can use an understanding of chemical structures and processes to adapt, control and manipulate systems to meet particular economic, environmental and social needs. This includes addressing the global challenges of climate change and security of water, food and energy supplies, and designing processes to maximise the efficient use of Earth's finite resources. Chemistry develops students' understanding of the key chemical concepts and models of structure, bonding, and chemical change, including the role of chemical, electrical and thermal energy. Students learn how models of structure and bonding enable chemists to predict properties and reactions and to adapt these for particular purposes.

Students explore key concepts and models through active inquiry into phenomena and through contexts that exemplify the role of chemistry and chemists in society. Students design and conduct qualitative and quantitative investigations both individually and collaboratively. They investigate questions and hypotheses, manipulate variables, analyse data, evaluate claims, solve problems and develop and communicate evidence-based arguments and models. Thinking in chemistry involves using differing scales, including macro, micro and nano-scales; using specialised representations such as chemical symbols and equations; and being creative when designing new materials or models of chemical systems. The study of chemistry provides a foundation for undertaking investigations in a wide range of scientific fields and often provides the unifying link across interdisciplinary studies.

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

### Aims

The ATAR Chemistry course aims to develop students':

- interest in and appreciation of chemistry and its usefulness in helping to explain phenomena and solve problems encountered in their ever-changing world;
- understanding of the theories and models used to describe, explain and make predictions about chemical systems, structures and properties;
- understanding of the factors that affect chemical systems, and how chemical systems can be controlled to produce desired products;
- appreciation of chemistry as an experimental science that has developed through independent and collaborative research, and that has significant impacts on society and implications for decision making;
- expertise in conducting a range of scientific investigations, including the collection and analysis of qualitative and quantitative data and the interpretation of evidence;
- ability to critically evaluate and debate scientific arguments and claims in order to solve problems and generate informed, responsible and ethical conclusions; and
- ability to communicate chemical understanding and findings to a range of audiences, including through the use of appropriate representations, language and nomenclature.

### Structure of the syllabus

#### Unit 1 – Chemical fundamentals: structure, properties and reactions

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

#### Unit 2 – Molecular interactions and reactions

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

## ATAR Human Biology

### Rationale

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.

The course content deals directly and indirectly with many different occupations in fields, such as science education, medical and paramedical fields, food and hospitality, childcare, sport and social work. Appreciation of the range and scope of such professions broadens their horizons and enables them to make informed choices.

### Aims

The ATAR Human Biology course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Science Inquiry Skills

Students investigate questions in human biology, evaluate the impacts of advancements in human biology and communicate scientific understandings. In achieving this outcome, students:

- plan and conduct investigations;
- analyse data, draw conclusions, evaluate investigation design and findings;
- evaluate the impact of advancements in human biology on individuals and society; and
- communicate understandings of human biology.

#### Outcome 2 – Science as a Human Endeavour

Students explore the application of the knowledge and understanding of human biological systems in a wide range of real world contexts. In achieving this outcome, students:

- understand that knowledge of human biological systems has developed over time and continues to develop with improving technology;
- understand how scientists use knowledge of human biological systems in a wide range of applications; and
- understand how knowledge of human biological systems influences society in local, regional and global contexts.

#### Outcome 3 – Science Understanding

Students understand how the structure and function of the human body maintain homeostasis, and the importance of inheritance and its interrelationships with human variability and evolution. In achieving this outcome, students:

- understand structure and function in the body;
- understand inheritance in humans;
- understand how the body maintains homeostasis; and
- understand human variability and evolution.

### Structure of the syllabus

#### Unit 1 – The functioning human body

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

#### Unit 2 – Reproduction and inheritance

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

## ATAR Physics

### Rationale

Physics is a fundamental science that endeavours to explain all the natural phenomena that occur in the universe. Its power lies in the use of a comparatively small number of assumptions, models, laws and theories to explain a wide range of phenomena, from the incredibly small to the incredibly large. Physics has helped to unlock the mysteries of the universe and provides the foundation of understanding upon which modern technologies and all other sciences are based.

The ATAR Physics course uses qualitative and quantitative models and theories based on physical laws to visualise, explain and predict physical phenomena. Models, laws and theories are developed from, and their predictions are tested by, making observations and quantitative measurements. In this course, students gather, analyse and interpret primary and secondary data to investigate a range of phenomena and technologies using some of the most important models, laws and theories of physics, including the kinetic particle model, the atomic model, electromagnetic theory, and the laws of classical mechanics.

Students investigate how the unifying concept of energy explains diverse phenomena and provides a powerful tool for analysing how systems interact throughout the universe on multiple scales. Students learn how more sophisticated theories, including quantum theory, the theory of relativity and the Standard Model, are needed to explain more complex phenomena, and how new observations can lead to models and theories being refined and developed.

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

### Aims

The ATAR Physics course aims to develop students':

- appreciation of the wonder of physics and the significant contribution physics has made to contemporary society;
- understanding that diverse natural phenomena may be explained, analysed and predicted using concepts, models and theories that provide a reliable basis for action;
- understanding of the ways in which matter and energy interact in physical systems across a range of scales;
- understanding of the ways in which models and theories are refined and new models and theories are developed in physics; and how physics knowledge is used in a wide range of contexts and informs personal, local and global issues
- investigative skills, including the design and conduct of investigations to explore phenomena and solve problems, the collection and analysis of qualitative and quantitative data, and the interpretation of evidence;
- ability to use accurate and precise measurement, valid and reliable evidence, and scepticism and intellectual rigour to evaluate claims; and
- ability to communicate physics understanding, findings, arguments and conclusions using appropriate representations, modes and genres.

### Structure of the syllabus

#### Unit 1 – Thermal, nuclear and electrical physics

Students investigate energy production by considering heating processes, radioactivity and nuclear reactions, and investigate energy transfer and transformation in electrical circuits.

#### Unit 2 – Linear motion and waves

Students describe, explain and predict linear motion, and investigate the application of wave models to sound phenomena.

## General Human Biology

### Rationale

In the Human Biology General course, students learn about themselves, relating the structure of the different body systems to their function and understanding the interdependence of these systems in maintaining life. Reproduction, growth and development of the unborn baby are studied to develop an understanding of the effects of lifestyle choices. Students will engage in activities exploring the coordination of the musculoskeletal, nervous and endocrine systems. They explore the various methods of transmission of diseases and the responses of the human immune system. Students research new discoveries that help increase our understanding of the causes and spread of disease in a modern world.

Responsible citizens need to be able to evaluate risks, ethical concerns and benefits to make informed decisions about matters relating to lifestyle and health. Issues such as diet, medical treatments and the manipulation of fertility are examples in which personal choices have an impact on health and wellbeing. Other topics are often the subject of community debate: obesity, effects of drugs and alcohol use during pregnancy, infectious diseases and hygiene.

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

### Aims

The Human Biology General course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Science Inquiry Skills

Students investigate questions in human biology, evaluate the impacts of advancements in science and communicate scientific understandings.

In achieving this outcome, students:

- plan and conduct investigations;
- analyse data, draw conclusions, evaluate investigation design and findings;
- evaluate the impact of advancements in human biology on individuals and society and
- communicate understandings of human biology.

#### Outcome 2 – Science as a Human Endeavour

Students explore the application of the knowledge and understanding of human biological systems in a wide range of real world contexts.

- understand that knowledge of human biological systems has developed over time and continues to develop with improving technology;
- understand how scientists use knowledge of human biological systems in a wide range of applications; and
- understand how knowledge of human biological systems influences society in local, regional and global contexts.

#### Outcome 3 – Science Understanding

Students understand how the structure and function of the human body systems maintain a healthy body, support reproduction, coordinate the body, and provide defence against infectious disease

- understand structure and function of the body systems;
- understand the mechanism of reproduction;
- understand how the body maintains coordination of systems; and
- understand the effect of infectious diseases on humans.

### Structure of the syllabus

#### Unit 1 – Healthy body

This unit explores how the human body systems are interrelated to sustain life.

#### Unit 2 – Reproduction

This unit explores the role of males and females in the process of reproduction.

## General Aviation Studies

### Rationale

Aviation involves flying by mechanical means, especially with heavier-than-air craft. The study of aviation therefore encompasses the application of skills and understandings about the nature of the atmosphere, aerodynamics and the systems and structures designed to achieve safe and efficient flight.

Aviation has transformed the world in which we live. Efficient and reliable air transport has changed the way people travel, work, communicate and relate to each other. Simultaneously, developments in military aviation and aerospace technology have redefined approaches to national and international security.

The Aviation General course draws from such diverse disciplines as science, engineering, environmental science, the social sciences, mathematics, English and information technology. It encompasses a range of mathematical, technological and humanities concepts and draws together a broad variety of skills, processes, understandings and strategies that promote the safe and effective operations of the aviation industry. The Aviation General course provides students with the opportunity to investigate the importance of aviation to our society and learn the skills and knowledge required to make informed decisions on issues relating to aviation and associated industries.

### Aims

The Aviation General course is designed to facilitate achievement of the following outcomes.

#### Outcome 1 – Aviation Systems

- understand the components of aviation systems
- understand the interactions between aviation systems.

#### Outcome 2 – Aviation Operations

- collect, organise and interpret operational information
- plan aviation operations.

#### Outcome 3 – Aviation Applications

- apply operational, organisational and communication skills and processes appropriate to aviation operations
- monitor and evaluate variables in aviation systems
- implement a course of action and manage resources.

#### Outcome 4 – Aviation development

- understand significant aviation developments and their impact on society
- understand that significant aviation development is influenced by the needs of society.

### Structure of the syllabus

#### Unit 1

- Understanding of the types of aircraft and the roles that they perform.
- Aerodynamic principles associated with lift and drag.
- The disposition of forces in specific flight manoeuvres, and the various types of aircraft stability.
- Aircraft controls and identify the six primary flight instruments and magnetic compasses, examining their purpose, operation and limitations.
- The basic principles of meteorology, navigation, maps and time.

#### Unit 2

- Explore the development and principles of operation of the internal combustion aircraft engine, aircraft instrumentation and aircraft systems.
- Use take-off and landing performance charts, and weight and balance charts for a simple light aircraft (Cessna 172).
- Investigate aviation communication systems, including radios and radio wave propagation.
- Flight rules and airspace classification.
- The purpose and necessity of civil aviation publications and identify specific rules and regulations governing flight in and around controlled and uncontrolled aerodromes.
- Introduction to some human physiology pertinent to aviation.





# LEEMING SHS

HARMONY ~ EXCELLENCE

## Chapter 8

### TECHNOLOGY & ENTERPRISE

(List B Courses **except General Business Management and General Children, Family & Community**)

- **ATAR Accounting & Finance**
- **ATAR Applied Information Technology**
- **General Automotive Engineering & Technology**
- **General Building and Construction**
- **General Business Management & Enterprise**
- **General Children, Family & Community**
- **General Design Photography**
- **General Food Science and Technology**
- **General Design Technical Graphics**
- **General Materials, Design & Technology Woodwork**
- **Certificate II Automotive Vocational Preparation**
- **Certificate II Community Services**
- **Certificate II Engineering Pathways**
- **Certificate III Information, Digital Media & Technology**



# ATAR Accounting and Finance

## Rationale

ATAR Accounting and Finance will provide students with an understanding of the concepts and procedures needed to process the financial records of a small business, as well as the ethical social, and environmental issues involved.

Financial literacy gives individuals the ability to make sound financial judgements. In an age when many business practices and ethical standards are being questioned, awareness of the ways financial practices impact on their lives helps students take responsibility for their own financial commitments. It gives them the problem-solving skills to operate at many levels of financial decision making.

Through engagement with the course, students develop an understanding of the fundamentals on which accounting and financial management are based. Many students will find themselves self-employed and there is a high probability they will have to engage in some form of accounting practices. Having an understanding of these practices enables them to analyse their own financial data and make informed decisions based on that analysis. Demand for professionals with an Accounting background is at a premium and can assist in many different career pathways including, but not limited to, management (eg. sports manager, CEO), finance sector, law (eg. forensic accountant), banking, engineering (eg. costing of projects) and also for anyone who would like to own and operate their own small business in the future.

## Aims

The ATAR Accounting and Finance course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Financial conceptual understanding

Students understand the concepts, principles, systems and structures that are fundamental to accounting and other financial processes. In achieving this outcome, students:

- understand the concepts and principles of financial decision making;
- understand the elements of financial systems; and
- understand the relationship between the purpose and structure of financial information.

### Outcome 2 – Factors influencing financial decisions

Students understand the interrelationship between financial decisions and the individual, society and the environment. In achieving this outcome, students:

- understand the influence of values and ethics on financial decisions;
- understand that government policies, legal requirements and other regulations influence financial decisions; and
- understand the impact of societal and environmental factors on financial decisions.

### Outcome 3 – Financial systems

Students explore and apply appropriate financial systems to meet personal and organisational needs. In achieving this outcome, students:

- explore and select an appropriate financial system to meet user needs;
- use a financial system to record and present information; and
- adapt and/or customise a financial system to meet user needs.

### Outcome 4 – Analysis and interpretation of financial information

Students select, use and interpret financial information. In achieving this outcome, students:

- select financial information for analysis and use appropriate techniques;
- draw conclusions from financial information; and
- recommend appropriate action based on financial information analysis.

## Structure of the syllabus

### Unit 1

The focus for this unit is on double entry accounting for small businesses. Students will develop and apply the fundamental principles in accounting to a variety of situations.

### Unit 2

The focus for this unit is on accrual accounting. Students will prepare and analyse various financial statements for business.

# ATAR Applied Information Technology

## Rationale

The development and application of digital technologies impacts most aspects of living and working in our society. Digital technologies have changed how people interact and exchange information. These developments have created new challenges and opportunities in lifestyle, entertainment, education and commerce.

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

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

## Aims

The ATAR Applied Information Technology course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Design process

Students apply a design process when creating or modifying information solutions using digital technologies in response to a client brief. In achieving this outcome, students:

- research ideas considering alternatives; and
- analyse, design, produce, communicate and evaluate proposals in an efficient and appropriate manner.

### Outcome 2 – Understanding digital communication technologies

Students understand the nature and use of computer hardware and software to achieve digital solutions.

In achieving this outcome, students:

- understand the digital concepts, formats and terminology required to select and use appropriate software and hardware to achieve client-driven digital solutions;
- understand procedures, techniques and management skills relevant to the client's needs; and
- produce a quality solution that adheres to the accepted standards and conventions associated with the content relevant to the client brief.

### Outcome 3 – Impacts of technology

Students understand how legal, ethical and social considerations are interconnected in the development of digital solutions. In achieving this outcome, students:

- understand the legal, ethical and social consequences that digital developments have in effectively securing data; and
- understand the legal, ethical and social implications of data distribution.

## Structure of the syllabus

### Unit 1

This unit focuses on the use of digital technologies to create and manipulate digital media. Students use a range of applications to create visual and audio communications. They examine trends in digital media transmissions and implications arising from the use of these technologies.

### Unit 2

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

# General Automotive Engineering & Technology

## Rationale

The General Automotive Engineering and Technology course is a practical course that is delivered in the Leeming SHS Automotive Trade Training Centre. This course exposes students to the component parts, accessories, systems and technologies of the automotive vehicle. They learn the principles underpinning the operation of vehicle systems and sub systems. They also develop the knowledge and skills needed to service, maintain, and repair these systems. Workshop activities provide them with opportunities to learn about the range of components and materials used in the manufacture of automotive vehicles.

Students plan for, and manage the repair, assembly and manipulation of vehicle systems using computer-assisted technology and adhere to occupational safety and health (OSH) practices and procedures. They also develop effective communication and teamwork skills when developing solutions to the planning and managing of automotive vehicle systems. The course offers consumer guidance in the areas of car ownership, insurance, buying, financing, maintenance and running costs, as well as career and vocational information related to the automotive vehicle industry.

## Aims

The General Automotive Engineering and Technology course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Automotive technology process

Students apply a technology process to create or modify products, processes, systems, services or environments to meet human needs and realise opportunities. In achieving this outcome, students:

- investigate information, needs and opportunities related to automotive design and manipulation of automotive systems;
- devise methods to analyse and test automotive systems;
- produce solutions and prepare production proposals to manipulate automotive systems; and
- evaluate the usefulness of the automotive system for the end user.

### Outcome 2 – Automotive understandings

Students understand the automotive scientific theory and interrelationships of automotive systems. In achieving this, students:

- understand the automotive scientific theory and principles of components;
- understand the automotive operation of components associated with automotive systems; and
- understand interactions between automotive vehicle components and subsystems in relation to the manufacture of vehicles, plant and equipment.

### Outcome 3 – Automotive technology skills

Students apply organisational, operational and technological skills appropriate to the automotive industry. In achieving this, students:

- apply the initiative and organisational skills required to manage work activities in a team environment;
- apply the operations necessary to achieve solutions to automotive challenges; and
- select and use tools and equipment safely.

### Outcome 4 – Automotive technology in society

Students understand the relationship between automotive technology and the environment. In achieving this, students:

- understand the impact of automotive technologies on society and the environment; and
- understand the strategies used for the safety and sustainability of automotive technology in society.

## Structure of the syllabus

### Unit 1

In this unit, students develop an understanding of automotive vehicles and the basic principles and systems around which automotive vehicles function. Under guidance, they study the different systems of an automotive vehicle, and follow basic rules associated with automotive workshops. They develop skills to check and maintain the safe operation of an automotive vehicle, using the correct selection of tools and safe workshop practices. They examine how the different uses of automotive vehicles have affected our society and the environment.

### Unit 2

In this unit, students develop knowledge and skills involved with servicing automotive vehicles for purposes of maintenance and repair, in combination with an understanding of automotive engineering principles. Students develop knowledge and skills involved with the different systems and sub-systems in automotive vehicles for purposes of maintenance and repair. They use occupational safety and health (OSH) rules and regulations to plan and manage safe working practices. Students develop an understanding of the different influences automotive technologies have on the society and environment.

# General Building and Construction

## Rationale

The Building and Construction General course develops students' knowledge and practical appreciation of building technologies. The course provides students with a context in which to practise and integrate their knowledge and apply it to meet community and environmental responsibilities. It allows them to apply and extend strategies for problem solving, and develops their skills in planning and management. In achieving the course outcomes, students learn and practise building processes and technologies, principles of design, planning and management and social considerations.

Building Construction course promotes the importance of further ongoing learning, it develops interaction and communication skills with varied audiences and fosters an understanding of teamwork. It prepares students to appreciate the continually changing conditions and expectations within building professions and encourages innovation and creativity. In dealing with issues, such as quality assurance, duty of care, time management, contract management.

## Aims

The Building and Construction General course is designed to facilitate achievement of the following outcomes.

### Outcome 1 – Building and construction processes

Students use processes to meet human needs in building and construction.

### Outcome 2 – Building and construction understanding

Students understand concepts relating to materials, structures and locations required for compliance in building and construction projects.

### Outcome 3 – Building and construction technology

Students apply organisational, operational and manipulative skills appropriate to using, developing and adapting building and construction technologies.

### Outcome 4 – Building and construction in society

Students understand how societal expectations, cultural values, beliefs and ethical positions are interconnected in the building and construction industries.

## Structure of the Syllabus

### Unit 1

This unit introduces students to the considerations required in building design and explores properties of common, natural or pre-made construction materials, their mechanical properties and use in construction. Students realise differences in structure and materials used. Basic plan drawing and reading is practised with application in building, in addition to the skills in areas of content, such as working with construction materials, spatial perception and computation and levelling. The unit explores processes drawn from building projects. Students work with a variety of materials and develop a range of practical skills.

### Unit 2

This unit explores properties of common, natural and premade construction materials, their production, mechanical properties under direct loads (tension or compression) and use in construction. Concepts in space and computation are developed. Basic plan reading is practised with application in building, as well as skills in areas of content, such as working with materials, spatial perception and computation and levelling. The unit explores processes in contexts drawn from building projects.

# General Business Management and Enterprise

## Rationale

This course gives students the opportunity to understand how vital business is to individuals and society, and how it impacts on many aspects of our lives. Business has a complex and dynamic organisational structure that requires a combination of skills, ability, creativity, initiative and enterprise to operate effectively. This course focuses on the development of these skills within the business cycle, day-to-day running, continuing viability and expansion of a business. Exposure to a wide range of business activities, management strategies and an understanding of enterprise will help students to appreciate the significance of their role as both participants and consumers in the business world.

The General Business Management and Enterprise course aims to prepare all students for a future where they will need to identify possibilities and create opportunities within a business environment. This course provides students with the ability to make sound and ethical business decisions based on critical thinking, in line with their own and societal values.

The first unit will focus on how to establish a small business in Australia by looking at identifying business opportunities, identifying the range and diversity of businesses operating in Australia, marketing, examine the operations of a small business, legal requirements to establish a small business in Australia, and examine the management of human resources with a focus on employer and employee obligations. The second unit focuses on the running of a small business in Australia. The concepts of innovation, marketing and competitive advantage and the key factors that influence consumer decision-making are introduced. An examination of the role and requirements of management and the people who work in business will be covered in this unit. To achieve unit outcomes, the course will provide opportunities for students to meet entrepreneurs, participate in practical activities, visit and interact with business enterprises where possible.

## Aims

The Business Management and Enterprise General course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Business concepts

Students understand the concepts, structures and factors underpinning business performance. In achieving this outcome, students:

- understand marketing;
- understand how leadership and management function; and
- understand how organisational practices, procedures and structures function.

### Outcome 2 – Business in society

Students understand the interrelationships between business and society. In achieving this outcome, students:

- understand the impact of beliefs and values on business activity;
- understand the impact of economic environments, government policies and legal requirements on business activity; and
- understand the impact of technologies on business activity.

### Outcome 3 – Innovation and operations

Students demonstrate knowledge, skills and processes required to manage business operations. In achieving this outcome, students:

- apply business skills, tools and processes;
- process and translate information required for effective business operations;
- demonstrate interpersonal skills required for effective business operations; and
- investigate and evaluate innovative and enterprising opportunities.

## Structure of the syllabus

### Unit 1

Establishing a small business in Australia.

### Unit 2

Operating a small business in Australia.

## General Children, Family and Community

### Rationale

This General course caters for students seeking career pathways in areas, such as education, nursing, community services, childcare and health. Students develop an understanding of the social, cultural, environmental, economic, political and technological factors which have an impact of the ability of individuals and families to develop skills and lead healthy lives. Through the study of developmental theories, students develop an understanding of human growth and the domains of development. Students explore products, services and systems that address issues to meet the needs of individuals, families and communities.

### Aims

#### Outcome 1 – Exploring human development

Students understand factors that optimise human growth and development. In achieving this outcome, students:

- understand growth and development of individuals;
- understand factors that impact on growth and development; and
- understand strategies designed to promote growth and development.

#### Outcome 2 – Applying the technology process

Students apply the technology process to meet human needs. In achieving this outcome, students:

- investigate issues, values, needs and opportunities;
- generate ideas when devising production proposals;
- organise, implement and adjust production processes;
- produce a product, service or system; and
- evaluate intentions, plans and actions.

#### Outcome 3 – Self-management and interpersonal skills

Students apply self-management and interpersonal skills. In achieving this outcome, students:

- apply self-management skills to meet human needs;
- apply interpersonal skills to establish and maintain relationships; and
- communicate information for a range of purposes and audiences.

#### Outcome 4 – Society and support systems

Students understand the interrelationships between individuals, families and societies. In achieving this outcome, students:

- understand the relationship between beliefs and values and the management and use of resources and support systems;
- understand that social issues and trends result from social, cultural, environmental, economic and political forces; and
- understand that political and legal systems are shaped by the rights and responsibilities of individuals, families and communities.

## Structure of the syllabus

### Unit 1 – Families and relationships

Students examine the role of families and the relationships between individuals, families and their communities.

Through an understanding of growth and development, students recognise the characteristics of individuals and families and that development is affected by biological and environmental influences. They identify roles and responsibilities of families, and examine their similarities and differences, the issues that arise from family interactions and the influence of attitudes, beliefs and values on the allocation of resources to meet needs and wants.

Students make decisions, examine consequences and develop skills to accommodate actions that impact themselves or others. Skills, processes, understandings and knowledge are developed through individual and group experiences. Students design and produce products and services that meet the needs of individuals, families and communities.

### Unit 2 – Our community

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

Students examine the roles and responsibilities of particular groups, networks, and services, and the impact of attitudes, beliefs and values on the management of resources. Students engage in shared research practice, communicate information, use decision-making, goal setting, self-management and cooperation skills when creating products, services or systems that will assist individuals, families and communities to achieve their needs and wants.

# General Food Science & Technology

## Rationale

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

## Aims

The General Food Science and Technology course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Understanding food

Students understand foods are used and processed to meet identified needs. In achieving this outcome, students:

- understand the properties of foods and related equipment used to meet needs;
- understand foods are used to meet the body's needs; and
- understand the nature and operation of food-related systems.

### Outcome 2 – Developing food opportunities

Students apply the technology process to develop food-related products, services or systems. In achieving this outcome, students:

- investigate issues, values, needs and opportunities;
- devise and generate ideas and prepare production proposals;
- organise, implement and manage production processes in food-related environments;
- produce food products, services or systems; and
- evaluate plans, results and actions.

### Outcome 3 – Working in food environments

Students apply skills and operational procedures to work in productive food-related environments. In achieving this outcome, students:

- apply self-management and communication skills in food-related environments;
- apply organisational skills when undertaking food-related challenges and activities; and
- apply operational procedures and practical skills to safely meet defined standards.

### Outcome 4 – Understanding food in society

Students apply skills and operational procedures to work in productive food-related environments. In achieving this outcome, students:

- understand that beliefs and values of consumers and producers impact on food-related technologies;
- understand that resource management decisions affect developments in food-related industries; and
- understand the importance of safe, sustainable practices when developing and using food-related technologies.

## Structure of the syllabus

### Unit 1 – Food choices and health

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

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

### Unit 2 – Food for communities

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



# General Design Photography

## Rationale

Design involves the strategic development, planning and production of images for visual communication. It deals with the effective and efficient communication of ideas, values, beliefs, attitudes, messages and information to specific audiences for specific purposes and with specific intentions.

In the context of Photography, design solutions are produced using digital photographic systems. In these practically based units Nikon digital SLR cameras in both DX and FX format are used for image capture. Images are created in both studio and field locations. Field assignments are photographed at locations away from the school to offer the students a greater variety of environments and opportunities in image capture for their design solutions. It is expected that students will capture images out of school using either loaned school or personal cameras. Without ongoing capture of images students will not be able to complete the course work. The images are processed using a variety of software applications including Adobe Photoshop.

Design projects allow students to demonstrate their skills, techniques and application of design principles and processes. The tasks build to produce a folio of work in both digital and printed form. The folio may be used to assist the student to gain employment or entrance to further education courses at both vocational and tertiary level.

There is potential for students to develop transferable skills and vocational competencies while devising solutions to design briefs.

## Aims

The General Design course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Design understandings

Students understand that design theory, audience response, and design principles are reflected in design. In achieving this outcome, students:

- understand that communication theories are demonstrated in design; and
- understand that design and audience behaviours are related.

### Outcome 2 – Design process

Students apply the design process to develop design solutions. In achieving this outcome, students:

- generate ideas to develop design solutions; and
- refine the development of design solutions.

### Outcome 3 – Application of design

Students use skills, techniques and methods to plan, construct and produce design creations. In achieving this outcome, students:

- use interpretative skills when constructing design creations;
- use design skills, techniques and methods to construct creations; and
- use planning and production methodologies to construct design creations.

### Outcome 4 – Design in society

Students understand the relationship between design, society and culture. In achieving this outcome, students:

- understand how values, beliefs and attitudes are communicated and learned through design;
- understand responsibilities and issues in developing design; and
- understand relationships between social practices and design.

## Structure of the syllabus

### Unit 1 – Design fundamentals

The focus of this practically based unit is to introduce design process and practice. Students learn that design can be used to provide solutions to design problems and communication needs.

### Unit 2 – Personal design

In this practically based unit the medium of photography is used to explore personal design. Students learn that they visually communicate aspects of their personality, values and beliefs through their affiliations and their manipulation of personal surroundings and environments.



# General Design Technical Graphics

## Rationale

The goals of the General Design course are to facilitate a deeper understanding of how design works; and how ideas, beliefs, values, attitudes, messages and information are effectively communicated to specific audiences with specific intentions or purposes via visual media forms. This course aims to achieve these goals by exposing students to a variety of communication forms and a thorough exploration of design through Technical Graphics.

In the General Design course in the context of Technical Graphics, students will develop skills using traditional equipment, computer aided design and 3D modelling software. Design projects will allow students to use these skills to explore and solve design problems culminating in a design folio and prototype solutions produced on a large format printer, a vinyl cutting plotter and/or a 3D printer.

In this course, students develop an understanding of contemporary skills required for current and future industry and employment markets. This course also emphasises the scope of design in professional and trade based industries allowing students to maximise future pathways.

## Aims

The General Design course is designed to facilitate achievement of the following outcomes:

### Outcome 1 – Design understandings

Students understand that design theory, audience response, and design principles are reflected in design. In achieving this outcome, students:

- understand that communication theories are demonstrated in design; and
- understand that design and audience behaviours are related.

### Outcome 2 – Design process

Students apply the design process to develop design solutions. In achieving this outcome, students:

- generate ideas to develop design solutions; and
- refine the development of design solutions.

### Outcome 3 – Application of design

Students use skills, techniques and methods to plan, construct and produce design creations. In achieving this outcome, students:

- use interpretative skills when constructing design creations;
- use design skills, techniques and methods to construct creations; and
- use planning and production methodologies to construct design creations.

### Outcome 4 – Design in society

Students understand the relationship between design, society and culture. In achieving this outcome, students:

- understand how values, beliefs and attitudes are communicated and learned through design;
- understand responsibilities and issues in developing design; and
- understand relationships between social practices and design.

## Structure of the syllabus

### Unit 1 – Design fundamentals

The focus of this unit is to introduce design process and practice. Students learn that design can be used to provide solutions to design problems and communication needs.

### Unit 2 – Personal design

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

Technical Graphics uses conventions of technical drawing, computer-aided design and graphic design to create designs that deal with two and three dimensional subjects, usually of an industrial nature.

# General Materials, Design & Technology Woodwork

## Rationale

The General Design Woodwork course is a practical course, focused on learning and producing well designed projects in a safe learning environment. Design and construction skills are developed by exercises and projects leading students into designing and making a major furniture piece of their own choice.

This course is outcomes based and involves the combination of theory and practice. The theory develops knowledge and understanding that helps students make good decisions on the design, selection of materials and construction methods. A variety of machines, appropriate jigs, tools and processes are introduced to demonstrate a range of production techniques in furniture.

## Aims

### Outcome 1 – Technology process

Students apply a technology process to create or modify products, processes or systems in order to meet specific needs. In achieving this outcome, students:

- investigate issues, values, needs and opportunities;
- devise and generate ideas and prepare production ideas;
- produce solutions and manage the construction process; and
- Evaluate intentions, plans and actions.

### Outcome 2 – Understanding the use of materials

Students understand how the nature of materials influences design, development and use. In achieving this outcome, students:

- understand the structure of materials;
- understand the relationship between the structure and properties of materials; and
- Understand how to select appropriate materials based on their structure and properties, and understand how these characteristics influence design, development and usage.

### Outcome 3 – Using technology skills

Students create material products safely and efficiently to specified standards. In achieving this outcome, students:

- plan and manage resources to create products within specified limits;
- select and apply appropriate techniques and procedures ; and
- Manipulate equipment and resources safely to meet DOSHWA standards.

### Outcome 4 – Understanding materials, society and the environment

Students understand the relationship between people, the environment and the use of materials. In achieving this outcome, students:

- understand how values and beliefs influence materials selection, design and technology;
- understand the impact and consequences on society and the environment when selecting and using materials, designs and technologies; and
- Understand strategies for safe and sustainable practices when developing and using materials, designs and technologies.

## Structure of the syllabus

### Unit 1

Throughout the process, students learn about the 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.

## Certificate II Automotive Vocational Preparation AUR20716

Accelerate your career in the automotive industry. This exciting program focuses on the trade area of mechanical and is an ideal transition from school to employment in the automotive industry. Employment in the automotive industry is projected to remain strong into the future.

By successfully completing this two-year program you will greatly increase your chances of gaining an apprenticeship in the automotive and associated industries as you will have gained a National Australian Qualification. This course is based on nationally endorsed training packages and will take place onsite within the Leeming Automotive Trade Training Centre. The qualification is auspiced through the Motor Trades Association (MTA).

This course enables students to achieve dual accreditation. In Year 11 and 12 students can complete Certificate II in Automotive as well as completing four units towards their WACE. It is also strongly suggested that students complete work place learning.

**Parents/Guardians must also be aware that students will be removed from this qualification if:**

- There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.
- A student has not obtained a Unique Student Identifier (USI) by December 2021.

The units of competency listed below are those that will be completed across both Years 11 and 12 within the Certificate II in Automotive Vocational Preparation at Leeming Senior High School.

Year 11	
Unit Code	Unit Title
AURAEA002	• Follow environmental and sustainability best practice in an automotive workplace
AURASA002	• Follow safe working practices in an automotive workplace
AURTTA003	• Remove and tag engine system components
AURTTK002	• Use and maintain workplace tools and equipment
AURTTK001	• Use and maintain measuring equipment
AURTTA003	• Remove and tag engine system components
AURTTK002	• Use and maintain workplace tools and equipment
AURTTE004	• Inspect and service engines
Unit Code	Unit Title
AURAF004	• Resolve routine problems in an automotive workplace
AURETR003	• Identify automotive electrical systems and components
AURET006	• Soldering electrical wires and circuits
AURETR015	• Inspect and service batteries

## Certificate II Community Services CHC22015

This two-year qualification at Leeming Senior High School provides the skills and knowledge for an individual to be competent to undertake Community Services work. Students will be able to provide support and assistance in a variety of areas including childcare, the elderly and the disability sector. This qualification is auspiced through IVET.

This qualification is suitable for General and ATAR students. It is appropriate for students who:

- Have a desire to follow a career path involving working in the Community Sector.
- Are also interested in further studies at a TAFE Certificate III or direct Diploma entry.
- Can also use it as a pathway to University Entrance after the Diploma.
- Are interested in careers such as Early Childhood and Primary School Teaching.

**As the theoretical components of the Certificate II Community Services are completed using web based learning tools, it is compulsory that students interested in enrolling in this qualification have their own school approved device (see Leeming Senior High School Bring Your Own Device information on this link [Policies](#) ) Without a device, students will not be able to complete the theoretical components of this qualification.**

**Parents/Guardians must also be aware that students will be removed from this qualification if:**

- **There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.**
- **A student has not obtained a Unique Student Identifier (USI) by December 2021.**

Requirements of the Certificate II Community Services qualification include:

- Optional (encouraged) work experience. These days of work experience will be at Child Care Centres during the exam breaks.
- Completing a First Aid Certificate which will be provided at Leeming Senior High School. This qualification will be delivered within a partnership with IVET.

The Units of Competency listed below will be completed over Year 11 and 12.

Unit Code	Unit
CHCCOM001	• Provide first point of contact
CHCCOM005	• Communicate and work in health or community services
CHCORG201C	• Work with diverse people
HLTWHS001	• Participate in workplace health and safety
BSBWOR202	• Organise and complete daily work activities

HLTAID002	• Provide basic emergency life support
CHCVOL001	• Be an effective volunteer
WG323 FSKOCM07	• Interact effectively with others at work
CHCGROUP302D	• Support group activities

## Certificate II Engineering Pathways MEM20413

Are you looking for a career in the engineering/mining/marine industry?

This diverse skill based program is an ideal transition from school to employment.

By successfully completing this two-year qualification, you will greatly increase your chances of gaining an apprenticeship/employment in the engineering and associated industries as you will have gained a National Australian Qualification. This qualification is auspiced through Cartec Training.

This qualification enables students to achieve dual accreditation with WACE. It is strongly suggested that students complete work experience in a relevant workplace to enhance their understanding of the engineering/mining/marine industry. Employers look for students who are proactive in preparing themselves for a career. Work experience is highly recommended and can be conducted during the exam breaks.

Employment in the engineering/mining/marine industry is booming and destined to remain strong into the future.

**Parents/Guardians must also be aware that students will be removed from this qualification if:**

- There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.
- A student has not obtained a Unique Student Identifier (USI) by December 2021.

### Units of competency

Unit code	Unit title
MEM13014A	<ul style="list-style-type: none"> <li>• Apply principles of occupational health and safety in the work environment</li> </ul>
MEMPE005A	<ul style="list-style-type: none"> <li>• Develop a career plan for the engineering and manufacturing industry</li> </ul>
MEMPE006A	<ul style="list-style-type: none"> <li>• Undertake a basic engineering project</li> </ul>
MSAENV272B	<ul style="list-style-type: none"> <li>• Participate in environmentally sustainable work practices</li> </ul>

MEM16006A	<ul style="list-style-type: none"> <li>• Organise and communicate information</li> </ul>
MEM16008A	<ul style="list-style-type: none"> <li>• Interact with computing technology</li> </ul>
MEM18001C	<ul style="list-style-type: none"> <li>• Use hand tools</li> </ul>
MEM18002B	<ul style="list-style-type: none"> <li>• Use power tools/hand held operations</li> </ul>
MEMPE001A	<ul style="list-style-type: none"> <li>• Use engineering workshop machines</li> </ul>
MEMPE002A	<ul style="list-style-type: none"> <li>• Use electric welding machines</li> </ul>
MEMPE003A	<ul style="list-style-type: none"> <li>• Use oxy-acetylene and soldering equipment</li> </ul>
MEMPE004A	<ul style="list-style-type: none"> <li>• Use fabrication equipment</li> </ul>
MEMPE007A	<ul style="list-style-type: none"> <li>• Pull apart and re-assemble engineering mechanisms</li> </ul>

MSAPCI101A	<ul style="list-style-type: none"> <li>• Adapt to work in industry</li> </ul>
MSAPMSUP106A	<ul style="list-style-type: none"> <li>• Work in a team</li> </ul>

## Certificate III Information, Digital Media and Technology ICT30115

This two-year qualification at Leeming Senior High School provides the skills and knowledge for an individual to be competent in a wide range of general information and communications technology (ICT) technical functions and to achieve a degree of self-sufficiency as an advanced ICT user. Persons working at this level will support information technology activities in the workplace across a wide range of ICT areas, including technical support, network administration, web technologies, software applications and digital media technologies. This qualification is auspiced through IVET.

The Certificate III Information, Digital Media & Technology qualification as a subject selection is appropriate for students that:

- Have a desire to follow a career pathway within the information technology pathway
- Are seeking a pre-apprenticeship qualification and vocational training pathway (post- secondary schooling) within the TAFE sector.
- Are following an ATAR (University) pathway with their enrolment at Leeming Senior High School but also have a keen interest in the computing industry.
- Wish to further develop or enhance their ICT knowledge for personal or professional reasons (eg career pathway, to assist with university assignments).

**Parents/Guardians must also be aware that students will be removed from this qualification if:**

- **There has not been a financial commitment of 50% to the full fee attributed to this qualification by December 2021.**
- **A student has not obtained a Unique Student Identifier (USI) by December 2021.**

Unit Code	Unit Title
BSBEBU401	<ul style="list-style-type: none"> <li>• Review and maintain a website</li> </ul>
BSBSUS401	<ul style="list-style-type: none"> <li>• Implement and monitor environmentally sustainable work practices</li> </ul>
BSBWHS304	<ul style="list-style-type: none"> <li>• Participate effectively in WHS communication and consultation processes</li> </ul>
BSBWOR301	<ul style="list-style-type: none"> <li>• Organise personal work priorities and development</li> </ul>
ICTICT202	<ul style="list-style-type: none"> <li>• Work and communicate effectively in an ICT environment</li> </ul>
ICTICT203	<ul style="list-style-type: none"> <li>• Operate application software packages</li> </ul>
ICTICT301	<ul style="list-style-type: none"> <li>• Create user documentation</li> </ul>
ICTICT302	<ul style="list-style-type: none"> <li>• Install and optimise operating system software</li> </ul>
ICTSAS303	<ul style="list-style-type: none"> <li>• Care for computer hardware</li> </ul>
ICTSAS305	<ul style="list-style-type: none"> <li>• Provide ICT advice to clients</li> </ul>
ICTSAS306	<ul style="list-style-type: none"> <li>• Maintain equipment and software</li> </ul>
ICTSAS307	<ul style="list-style-type: none"> <li>• Install, configure and secure a small office or home office network</li> </ul>
ICTSAS308	<ul style="list-style-type: none"> <li>• Run standard diagnostic tests</li> </ul>
ICTWEB201	<ul style="list-style-type: none"> <li>• Use social media tools for collaboration and engagement</li> </ul>
ICTWEB301	<ul style="list-style-type: none"> <li>• Create a simple mark-up language document</li> </ul>
ICTWEB302	<ul style="list-style-type: none"> <li>• Build simple websites using commercial programs</li> </ul>
ICTWEB303	<ul style="list-style-type: none"> <li>• Produce digital images for the web</li> </ul>