



Boonah State High School

Year 9 to 10

Subject Selection

for 2023

All contents of this handbook are correct at the time of publication but are subject to change. Subjects will only be offered based on demand and timetabling constraints.

(Correct as at 22 July 2022)

TABLE OF CONTENTS

| | |
|--|---|
| Year 10 and the Senior Phase of Learning | 3 |
| Some things to do | 4 |
| How to choose subjects | 4 |
| Subjects offered by Boonah SHS | 5 |
| Assistance for Students with Special Needs..... | 5 |
| Relationships between Year 10 and Senior Phase of Learning Subjects..... | 6 |

CORE SUBJECTS

| | |
|---|----|
| ENGLISH (ENG) | 7 |
| HEALTH AND PHYSICAL EDUCATION (HPE) | 9 |
| HISTORY/GEOGRAPHY (HIS) | 11 |
| MATHEMATICS (MAT) | 13 |
| SCIENCE (SCI) | 15 |

ELECTIVE SUBJECTS

| | |
|---|----|
| AGRICULTURE (AGR) | 17 |
| ART (ART)..... | 19 |
| FASHION AND DESIGN (FAD) | 21 |
| FOOD TECHNOLOGY (FDT) | 23 |
| GRAPHICS & DESIGN (GAD)..... | 25 |
| JUNIOR ENGINEERING (JEN)..... | 27 |
| JUNIOR TIMBER (JTI) | 29 |
| MIND YA BUSINESS (MYB)..... | 31 |
| ROBOTS, PROGRAMMING AND GAMES (RPG) | 33 |
| SPORT & EXCERSISE (SES)..... | 35 |
| STEM (STE)..... | 37 |

NB. Low enrolment numbers in a subject will result in:

1. Class is a composite class with Year 9 (if timetable allows)
2. Subject will not run at Boonah State High School in 2023

Year 10 and the Senior Phase of Learning

What is the Senior Phase of Learning?

- ? Why am I choosing subjects for Year 10?
- ? How is Year 10 different from Year 9?
- ? What is ATAR and QCE?

What decisions do you have to make?

- ? What subjects should I choose to study next year?
- ? When do I select subjects for Year 10?

What questions should you ask?

- ? How will I know what subjects to choose?
- ? What subject choices do I have at Boonah State High School?
- ? What is the relationship between subjects studied in Years 8 and 9 and the Senior Phase of Learning subjects?

Some things to do

Read this booklet carefully. If you require any further information or clarification on a particular subject, make an appointment to see the subject co-ordinator. The Deputy Principals or Guidance Officer are also available for appointments to discuss any problems you may have in choosing subjects.

Choose subjects carefully according to your level of achievement both generally and in particular subjects, any future aspirations (what you would like to do in the future) and general interest.

Some things to think about

Choosing subjects for Years 11 and 12 is very important and requires you to give full consideration in order to adequately prepare you for your future. The choices you make now will guide you towards what options are available to you at the end of Year 12.

You may choose to go straight to University or TAFE or you may choose to enter the workforce with the option of undertaking further study or training later. There are many Vocational Educational pathways including traineeships and apprenticeships open to students in their senior years of education.

It is important to choose senior subjects carefully as your decisions may affect your success at school, your feelings about school, and also your level of preparedness or eligibility for particular training or tertiary study after school. Even though there are many factors to consider, choosing your program of study can be made easier if you go about the task logically, and follow a set of planned steps.

OVERALL PLAN

As an overall plan, it is suggested that you choose subjects:

- you enjoy
- you have achieved in or feel confident of achieving good results
- that reflect your interests and abilities
- that help you reach your career and employment goals
- that will develop skills, knowledge and attitudes useful throughout your life

FIND OUT ABOUT JOB PATHWAYS

It is helpful if you have a few career ideas in mind before choosing subjects. If you are uncertain about this at present, then select subjects that will keep several career options open to you. Your Guidance Officer will be able to help you get started.

You also need to find out about the various pathways you can take to obtain qualifications you need to get a job in the areas in which you are interested. Once you know about the different pathways, you can select the most appropriate one for you.

The following resources are available online or at school and give you information about occupations and the subjects and courses needed to gain entry to these occupations:

- Australia's national career information service, called mypath: <http://www.qtac.edu.au/atar-my-path/my-path>
- The Job Guide: <http://www.jobguide.thegoodguides.com.au/Study-work-and-career-support/State-Info/QLD>
- Brochures from industry groups provide information on the various pathways to jobs within these industries – start with the Industry Skill Councils: <http://www.isc.org.au/>
- Queensland Government Employment & Jobs website: <https://www.qld.gov.au/jobs/>
- The Queensland Studies Authority Jobs and Careers page: <https://studentconnect.qsa.qld.edu.au/careers.html>
- The QTAC Guide available from your Guidance Officer, is useful for information on tertiary courses offered through the Queensland Tertiary Admissions Centre (QTAC).
- The Tertiary prerequisites book, provided by QTAC to all Year 10 students, provides information on subjects required for entry to tertiary courses offered through QTAC in the year they will begin study.
- The Queensland TAFE Handbook is available at <http://www.tafe.qld.gov.au/>

Students should remember that success in any form of study requires a high degree of commitment and hard work. Learning is a lifelong process.

FIND OUT ABOUT and INVESTIGATE EACH SUBJECT OFFERED AT SCHOOL

- Read subject descriptions and course outlines provided by your school in the subject selection handbook.
- Attend the school Subject Expo.
- Talk to Heads of Department & teachers of each subject.
- Look at books & materials used in the subject.
- Listen carefully at subject selection talks.
- Talk to students already studying the subject.

TRAPS TO AVOID

- Do not select subjects simply because someone told you that they “will help you get a better ATAR”.
- Consider other people's opinions of the subjects but do not make your decision on these only. Check the subjects out for yourself.

Reviewing your choices

During Year 11, it is worthwhile reviewing how you are going to assess whether the choices made in Year 10 have been the right ones for you. To do this you need to consider your attitude and results. It is worth looking again at the course you have chosen. Remember, you may be able to make some subject changes at the end of each semester if needed.

There is no point in continuing on with a course of study if it is obvious that it has been incorrect or inappropriate.

For most students it is to their advantage to continue on and complete the courses they started in Year 11. For those who decide that their initial choices were incorrect, they need to consider other options. The best means of making sound alternate choices is to consult with our **Guidance Officer**.

Subjects offered by Boonah SHS

The range of subjects offered for students in Year 10 has been designed to provide a balanced program of general education. It has been our experience that students are able to make more informed educational decisions when they have had the opportunity to experience a wide variety of subject choices. This program of study is designed to prepare students as they move from Year 10 toward Year 11 and to the Senior Phase of Learning.

All Year 10 students will study **five core** subjects for two semesters each and **two elective** subjects. The **core** subjects are:

English
Health and Physical Education
Mathematics

Science
History/Geography

The **elective** subjects from which students will make their choices include:

Agriculture

Junior Engineering

Art

Junior Timber

Mind Ya Business

Sport & Exercise

Food Technology

Robots, Programming & Games

Graphics & Design

Fashion & Design

STEM

In some instances, the subjects offered may not proceed due to insufficient student numbers. If this occurs, you may be required to choose another subject.

In some subjects, such as Junior Construction, Junior Engineering and Junior Furnishing facilities available may limit the number of classes we are able to offer.

Students must study **2 elective subjects for the year**. Students are asked to choose 2 electives from the lines provided, but must NOT choose any subject twice.

We will do our best to ensure that all students receive **as many of their first preferences as possible**.

Assistance for students with Special Needs

At Boonah State High School we focus on the inclusion education model with students learning with their peers in a supported safe environment in mainstream classes wherever possible.

Students who need extra support have access to the Flexible Learning Centre. Here specialist staff, adaptive technologies and alternate programs such as communication, life skills, and functional, academic and personal/interpersonal skills is available. These programs are designed to increase students' self-concept and self-esteem, which in turn assist them in participation in mainstream classes with their peers, to the best of their ability.

Every student enters the Flexible Learning Centre with a unique range of experiences and skills. We develop these skills and individualise the educational programs of students to best fit their future needs. Our vision is to give our students the skills and strategies to assist them in becoming lifelong learners.

Relationships between Year 10 and Senior Phase of Learning Subjects

Some Year 11 subjects cannot be attempted without an appropriate subject background in the Junior School. In other subjects, appropriate studies at a Junior level are highly recommended. However, there are some Year 11 subjects that have associations with Junior level subjects, but you should be able to begin these subjects at Year 11 level without previous study and not be seriously disadvantaged.

The relationship between subjects studied in the Junior and Senior Secondary years is shown below:

| Year 8 Learning Area | Year 9 Learning Area | Year 10 Learning Area | Years 11 & 12 Learning Area |
|--|---|--|---|
| English | English | English | English Essential English* |
| Mathematics | Mathematics | Mathematics | General Mathematics Mathematical Methods Specialist Mathematics Essential Mathematics* |
| Science | Science | Science Agriculture | Biology Chemistry Physics Agricultural Practices* |
| Humanities History and Geography | Humanities History and Geography | Humanities History and Geography | Geography Modern History Certificate II in Tourism* |
| Health & Physical Education | Health & Physical Education Sport & Exercise | Health & Physical Education Sport & Exercise | Physical Education Sport and Recreation* |
| The Arts Art Drama | The Arts Visual Art Drama | The Arts Visual Art Drama | Visual Arts Visual Arts in Practice* Drama |
| Languages German | Languages German | Languages German | German |
| Technology Design & Technologies | Technology Graphics & Design Industrial Design & Technology | Technology Graphics & Design Junior Engineering Junior Timber | Design Building & Construction* Certificate II in Engineering Pathways* Furnishing Skills* |
| Information Communication & Technology | Digital Technology & Modelling | Robots, Programs & Games | Digital Solutions Information Communication Technology* |
| Textiles & Food | Business is Fun Food Technology Fashion & Design | Mind Ya Business Food Technology Fashion & Design | Business Fashion* Certificate II in Hospitality* |

An asterix (*) indicates that these subjects are Applied / VET subjects.

| | | | | |
|--------------------------------|---------|--------------------------|-----|-------------|
| English | | Email: lcoll50@eq.edu.au | | Core |
| Head of Department: Lyn Colley | | | | |
| QCAA Subject Category | General | Timetable Code | ENG | |

| Prerequisites | Equipment |
|--|---------------------------------|
| This is a core subject which all students will undertake | Laptop |
| | Stationery |
| | Flash drive for digital storage |
| | Costs |
| | Excursions |

Pathways

The ability to communicate in the written, oral and visual mediums is essential in the world today. Communication is critical to every field of human endeavour. The workforce and further study require effective communication skills. Being able to understand and interpret the written, oral and visual media that surrounds us every day is a basic survival skill.

Aims

This course aims to expose students to a range of literature and language practices. The first semester aims to develop further skills and knowledge addressed in Year 9 English. We will be following the National Curriculum. In second semester, units will lay some foundation for both Applied subject English and Essential English.

Australian Curriculum Objectives

Receptive modes (listening, reading and viewing)

By the end of Year 10, students evaluate how text structures can be used in innovative ways by different authors. They explain how the choice of language features, images and vocabulary contributes to the development of individual style.

They develop and justify their own interpretations of texts. They evaluate other interpretations, analysing the evidence used to support them. They listen for ways features within texts can be manipulated to achieve particular effects.

Productive modes (speaking, writing and creating)

Students show how the selection of language features can achieve precision and stylistic effect.

They explain different viewpoints, attitudes and perspectives through the development of cohesive and logical arguments. They develop their own style by experimenting with language features, stylistic devices, text structures and images.

Students create a wide range of texts to articulate complex ideas. They make presentations and contribute actively to class and group discussions, building on others' ideas, solving problems, justifying opinions and developing and expanding arguments. They demonstrate understanding of grammar, vary vocabulary choices for impact, and accurately use spelling and punctuation when creating and editing texts.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|--|--|--|
| <p>Understanding & analysing satire in Texts Students read, view and analyse the techniques used in satire. Students examine how poetry can be used to develop social, moral and ethical perspectives. They examine stylistic features, text structures and language features in poetry and consider how these elements combine to privilege perspectives.</p> | <p>Australian novel Students read and respond to a contemporary novel that explores issues relevant to Australian society. They examine narrative viewpoint, characterisation and plot structures in literature. Students consider the links between values, beliefs, assumptions and the social, moral and ethical positions of authors.</p> | <p>Reading and interpreting Shakespeare: <i>Romeo & Juliet</i> Students read and interpret a Shakespearean tragedy. They evaluate an extended interpretation of the play, analysing arguments and accompanying evidence to support or refute ideas.</p> | <p>Evaluating representations in News and Media texts Students read, view, listen to and discuss a variety of news texts. They examine how text structures, language features and the arrangement of information within news texts position audiences to respond to issues.</p> |

Assessment

| Unit 1 | Unit 2 |
|--|---|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Written assignment – satirical cartoon <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Spoken – poetry | <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Written – Imaginative text <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Written exam |
| Unit 3 | Unit 4 |
| <p>Assessment Item 5:</p> <ul style="list-style-type: none"> Exam – Analytical essay | <p>Assessment Item 6:</p> <ul style="list-style-type: none"> Spoken – compare and contrast news texts |

General Capabilities

English helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Health and Physical Education

Head of Department: Jai Yong Gee

Email: jyong6@eq.edu.au

Core

QCAA Subject Category

General

Timetable Code

HPE

| Prerequisites | Equipment |
|--|---|
| This is a core subject which all students will undertake | Laptop Stationery Correct uniform, sports shoes (that must have laces) and a hat to all practical lessons |
| | Costs |
| | Nil |

Pathways

Students who enjoy and excel in this subject can select Sport & Recreation and Physical Education in Years 11 and 12. Senior Physical Education is a highly desirable subject for future studies at Universities and TAFE and these studies can lead to careers in allied health, youth leaders, sport promotional officers, sports development officers, sports administrators, managers of fitness leisure community centres and teaching.

Aims

In Health and Physical Education, students develop the skills, knowledge, and understanding to strengthen their sense of self, and build and manage satisfying, respectful relationships. They learn to build on personal and community strengths and assets to enhance safety and wellbeing. They critique and challenge assumptions and stereotypes. Students learn to navigate a range of health-related sources, services and organisations.

Australian Curriculum Objectives

Access, evaluate and synthesise information to take positive action to protect, enhance and advocate for their own and others' health, wellbeing, safety and physical activity participation across their lifespan.

Develop and use personal, behavioural, social and cognitive skills and strategies to promote a sense of personal identity and wellbeing and to build and manage respectful relationships.

Acquire, apply and evaluate movement skills, concepts and strategies to respond confidently, competently and creatively in a variety of physical activity contexts and settings.

Engage in and enjoy regular movement-based learning experiences and understand and appreciate their significance to personal, social, cultural, environmental and health practices and outcomes.

Analyse how varied and changing personal and contextual factors shape understanding of, and opportunities for, health and physical activity locally, regionally and globally.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|-------------------|----------------------------|--------------------|--------------|
| Swimming Survival | Tactics in Touch Rugby 7's | Sustainable Health | Fit for Life |

Assessment

| Unit 1 | Unit 2 |
|---|---|
| Assessment Item 1: <ul style="list-style-type: none">• Performance Assessment Item 2: <ul style="list-style-type: none">• Examination | Assessment Item 3: <ul style="list-style-type: none">• Project |
| Unit 3 | Unit 4 |
| Assessment Item 4: <ul style="list-style-type: none">• Investigation- Report | Assessment Item 5: <ul style="list-style-type: none">• Project |

General Capabilities

HPE helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

| | | | |
|-----------------------------------|---------|-----------------------|-----|
| History/Geography | | Core | |
| Head of Department: Adam Sinclair | | | |
| QCAA Subject Category | General | Timetable Code | HIS |

| Prerequisites | Equipment |
|--|---|
| This is a core subject which all students will undertake | Laptop Stationery Flash drive for digital storage |
| | Costs |
| | Excursions |

Pathways

This course is designed to prepare students for the workforce and senior studies in Modern History, Geography and Tourism.

Aims

Studies of History and Geography are an essential part of the school curriculum. Through these subjects, students gain an understanding of our world, its diversity and how, in different times and localities, people have adjusted to impacts on their environment. Using investigative processes, SOSE allows students to construct a framework in which to analyse, interpret and make judgements about their world. It also gives students the opportunity to strengthen essential research skills, as well as practical, written and oral skills that are essential for those that wish to participate fully in an active society.

Australian Curriculum Objectives

| History - The modern world and Australia |
|--|
| <p>By the end of Year 10, students refer to key events, the actions of individuals and groups, and beliefs and values to explain patterns of change and continuity over time. They analyse the causes and effects of events and developments and explain their relative importance. They explain the context for people's actions in the past. Students explain the significance of events and developments from a range of perspectives. They explain different interpretations of the past and recognise the evidence used to support these interpretations.</p> <p>Students sequence events and developments within a chronological framework, and identify relationships between events across different places and periods of time. When researching, students develop, evaluate and modify questions to frame a historical inquiry. They process, analyse and synthesise information from a range of primary and secondary sources and use it as evidence to answer inquiry questions. Students analyse sources to identify motivations, values and attitudes. When evaluating these sources, they analyse and draw conclusions about their usefulness, considering their origin, purpose and context. They develop and justify their own interpretations about the past. Students develop texts, particularly explanations and discussions, incorporating historical argument. In developing these texts and organising and presenting their arguments, they use historical terms and concepts, evidence identified in sources, and they reference these sources.</p> |
| Geography - 'Environmental change and management' and 'Geographies of human wellbeing' |
| <p>By the end of Year 10, students explain how interactions between geographical processes at different scales change the characteristics of places. Students identify, analyse and explain significant interconnections between people, places and environments and explain changes that result from these interconnections and their consequences. They predict changes in the characteristics of places and environments over time, across space and at different scales and explain the predicted consequences of change. They evaluate alternative views on a</p> |

geographical challenge and alternative strategies to address this challenge using environmental, economic, political and social criteria and draw a reasoned conclusion.

Students use initial research to develop and modify geographically significant questions to frame an inquiry. They critically evaluate a range of primary and secondary sources to select and collect relevant, reliable and unbiased geographical information and data. Students record and represent multi-variable data in of the most appropriate digital and non-digital forms, including a range of graphs and maps that use suitable scales and comply with cartographic conventions. They use a range of methods and digital technologies to interpret and analyse maps, data and other information to make generalisations and inferences, propose explanations for significant patterns, trends, relationships and anomalies across time and space and at different scales, and predict outcomes. They analyse and synthesise data and other information to draw reasoned conclusions, considering alternative perspectives. Students present findings, arguments and explanations using relevant geographical terminology and graphic representations and digital technologies in a range of selected and appropriate communication forms. They evaluate their findings and propose action in response to a contemporary geographical challenge, taking account of environmental, economic, political and social considerations. They explain the predicted outcomes and consequences of their proposal.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|-------------------------------|---------------------------------------|--|
| Geography Environmental Management | History World War 2 | History Rights and Freedoms | Elective Units based on senior subjects – Modern History, Geography, Business, Tourism |

Assessment

| Unit 1 | Unit 2 |
|---|---|
| Assessment Item 1: <ul style="list-style-type: none"> Examination – Short Response | Assessment Item 2: <ul style="list-style-type: none"> Independent Source Investigation |
| Unit 3 | Unit 4 |
| Assessment Item 3: <ul style="list-style-type: none"> Examination - Extended Response | Assessment Item 4: <ul style="list-style-type: none"> Geography (portfolio) Tourism (itinerary) History (source analysis) Business (skills report) |

General Capabilities

HIS helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Mathematics (Core or Extension)

Core

Head of Department: Amanda Mathewson

Email: asmit641@eq.edu.au

QCAA Subject Category

General

Timetable Code

MAT

| Prerequisites | Equipment |
|--|---|
| This is a core subject which all students will undertake | Laptop Stationery Cannon Scientific calculator (can be purchased from school office). |
| | Costs |
| | Nil |

Pathways

Students who complete Extension Mathematics at an A or B+ standard in Year 10 are recommended to study Mathematical Methods and/or Specialist Mathematics in Year 11/12.

Students who complete Extension Mathematics at a B or lower standard OR Core Mathematics at an A or B+ standard in Year 10 are recommended to study General Mathematics in Year 11/12.

Students who complete Core Mathematics at a B or lower standard in Year 10 are recommended to study Essential Mathematics in Year 11/12.

Aims

This course of study provides students with the essential skills to become confident, creative users and communicators of mathematics that will allow them to investigate, represent and interpret situations in their personal and work lives, and as active citizens. This course of study provides students with opportunities to consolidate fundamental skills learnt in junior classes and, where appropriate, to further extend these skills in complex and non-routine situations.

This course is divided into 2 streams: Extension and Core. Teachers recommend students for these 2 streams based on their results and effort in Year 9 Mathematics.

Australian Curriculum Objectives

By the end of Year 10, students recognise the connection between simple and compound interest. They solve problems involving linear equations and inequalities. They make the connections between algebraic and graphical representations of relations. Students solve surface area and volume problems relating to composite solids. They recognise the relationships between parallel and perpendicular lines. Students apply deductive reasoning to proofs and numerical exercises involving plane shapes. They compare data sets by referring to the shapes of the various data displays. They describe bivariate data where the independent variable is time. Students describe statistical relationships between two continuous variables. They evaluate statistical reports. Students expand binomial expressions and factorise monic quadratic expressions. They find unknown values after substitution into formulas. They perform the four operations with simple algebraic fractions. Students solve simple quadratic equations and pairs of simultaneous equations. They use triangle and angle properties to prove congruence and similarity. Students use trigonometry to calculate unknown angles in right-angled triangles. Students list outcomes for multi-step chance experiments and assign probabilities for these experiments. They calculate quartiles and inter-quartile ranges.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|---|---|---|
| Extension: Number and Power Data Algebra Core: Number and Power Data Algebra | Extension: Measurement Geometry Functions and Equations Core: Measurement Geometry Functions and Equations | Extension: Financial Mathematics Trigonometry/Pythagoras Probability Core: Financial Mathematics Pythagoras/Trigonometry Probability | Extension: Quadratic equations & functions Core: Coordinate Geometry |

Assessment

| Unit 1 | Unit 2 |
|--|--|
| Assessment Item 1: <ul style="list-style-type: none"> Short Response Test - Number and Algebra Assessment Item 2: <ul style="list-style-type: none"> Problem Solving and Modelling Task – Data | Assessment Item 3: <ul style="list-style-type: none"> Problem Solving & Modelling Task - Measurement Assessment Item 4: <ul style="list-style-type: none"> Short Response Test - Geometry, Functions and Equations |
| Unit 3 | Unit 4 |
| Assessment Item 5: <ul style="list-style-type: none"> Problem Solving and Modelling Task - Financial Mathematics Assessment Item 6: <ul style="list-style-type: none"> Examination - Short Response Test (Trigonometry/Pythagoras and Probability) | Assessment Item 7: <ul style="list-style-type: none"> Examination - Short Response (CORE – Coordinate Geometry, EXTENSION – Quadratic equations and functions) |

General Capabilities

MAT helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

| | | | |
|---------------------------------|---------|-----------------------|-----|
| Science | | Core | |
| Head of Department: Jason Smith | | | |
| QCAA Subject Category | General | Timetable Code | SCI |

| | |
|--|--|
| Prerequisites | Equipment |
| Nil - This is a core subject which all students will undertake | Laptop Stationery Two (2) 5mm grid books (A4 is preferable, but quarto size is acceptable) |
| | Costs |
| | Nil |

Pathways

Students who achieve good results in Year 10 science can choose from a range of science subjects in the senior school. These subjects lead to opportunities in tertiary study and in many trades.

Aims

Students explore systems at different scales and connect microscopic and macroscopic properties to explain phenomena. Students explore the biological, chemical, geological and physical evidence for different theories, such as the theories of natural selection and the Big Bang. Students develop their understanding of atomic theory to understand relationships within the periodic table. They understand that motion and forces are related by applying physical laws. They learn about the relationships between aspects of the living, physical and chemical world that are applied to systems on a local and global scale and this enables them to predict how changes will affect equilibrium within these systems.

Australian Curriculum Objectives

| |
|--|
| <p>Students analyse how the periodic table organises elements and use it to make predictions about the properties of elements. They explain how chemical reactions are used to produce particular products and how different factors influence the rate of reactions. They explain the concept of energy conservation and represent energy transfer and transformation within systems. They apply relationships between force, mass and acceleration to predict changes in the motion of objects. Students describe and analyse interactions and cycles within and between Earth's spheres.</p> <p>They evaluate the evidence for scientific theories that explain the origin of the universe and the diversity of life on Earth. They explain the processes that underpin heredity and evolution. Students analyse how the models and theories they use have developed over time and discuss the factors that prompted their review. Students develop questions and hypotheses and independently design and improve appropriate methods of investigation, including field work and laboratory experimentation. They explain how they have considered reliability, safety, fairness and ethical actions in their methods and identify where digital technologies can be used to enhance the quality of data. When analysing data, selecting evidence and developing and justifying conclusions, they identify alternative explanations for findings and explain any sources of uncertainty. Students evaluate the validity and reliability of claims made in secondary sources with reference to currently held scientific views, the quality of the methodology and the evidence cited. They construct evidence-based arguments and select appropriate representations and text types to communicate science ideas for specific purposes.</p> |
|--|

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|--|--|--|--|
| Chemical Sciences Chemical Reactions and Rate of reaction | Biological Sciences Genetics and Evolution | Physical Sciences Conservation of Energy and Motion | Earth & Space Sciences Astronomy and Global Systems |

Assessment

| Unit 1 | Unit 2 |
|--|--|
| Assessment Item 1: <ul style="list-style-type: none"> Student Experiment - reaction rate | Assessment Item 2: <ul style="list-style-type: none"> Examination |
| Unit 3 | Unit 4 |
| Assessment Item 3: <ul style="list-style-type: none"> Data Test Assessment Item 4: <ul style="list-style-type: none"> Student Experiment | Assessment Item 5: <ul style="list-style-type: none"> Research Investigation – Space Assessment Item 6: <ul style="list-style-type: none"> Examination - Earth |

General Capabilities

SCI helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Agriculture

Head of Department: Jason Smith

Email: jsmit375@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

AGR

| Prerequisites | Equipment |
|--|---|
| Students enrolling in this subject should possess a liking for and gain pleasure from hands on practical work with plants and animals. | Full leather shoe (including tongue) Hat Any additional safety items or clothing deemed necessary to adhere to safe work practices. Laptop Stationery |
| | Costs |
| | Nil |

Pathways

Skills gained in Year 10 Agricultural Studies prepare students for the Applied subject of Agriculture in the Senior school.

Aims

This subject is aimed at individuals entering the agriculture, horticulture and conservation and land management industries. It allows individuals to develop basic skills and knowledge to prepare for work.

Australian Curriculum Objectives

Students investigate and make judgements on the ethical and sustainable production and marketing of food and fibre. They develop questions and hypotheses and independently design and improve appropriate methods of investigation, including field work. They explain how they have considered reliability, safety, fairness and ethical actions in their methods and identify where digital technologies can be used to enhance the quality of data. When analysing data, selecting evidence and developing and justifying conclusions, they identify alternative explanations for findings and explain sources of uncertainty.

Students evaluate the validity and reliability of claims made in secondary sources with reference to currently held views in agriculture, the quality of the methodology and the evidence cited. They construct evidence-based arguments and select appropriate representations and text types to communicate ideas for specific purposes.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|-------------------------|-------------------------|-------------------|---------------|
| Horticultural Practices | Agricultural Industries | Plant propagation | Animal Health |

Assessment

| Unit 1 | Unit 2 |
|--|---|
| Assessment Item 1: <ul style="list-style-type: none">• Research Report - Agricultural Industries | Assessment Item 2: <ul style="list-style-type: none">• Investigation - Fertiliser |
| Unit 3 | Unit 4 |
| Assessment Item 3: <ul style="list-style-type: none">• Multi-modal Presentation – Asexual and sexual reproduction project | Assessment Item 4: <ul style="list-style-type: none">• Investigation - Animal Health |

General Capabilities

AG helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

| | | | |
|---|---------|---------------------------|-----|
| Art | | Elective | |
| Head of Department: Cassandra Harradine | | Email: charr333@eq.edu.au | |
| QCAA Subject Category | General | Timetable Code | ART |

| Prerequisites | Equipment |
|---|---|
| Students need to have a willingness to experiment with art forms and to explore and develop their own abilities in this area. | Full leather shoe (including tongue) Any additional safety items or clothing deemed necessary to adhere to safe work practices. Laptop Stationery (specifically 2B pencils and an A4 visual diary) |
| | Costs |
| | Excursions |

Pathways

Skills gained in Year 10 Art will be essential for a smooth transition into Senior Art courses. **It is strongly recommended that students planning on studying Visual Art and/or Visual Arts in Practice complete Year 10 Art.**

The career opportunities for art students are very broad and increasing quickly. The creative industry of art is growing constantly and students could look towards careers in industrial or commercial design, animation, illustration, curating, graphic design or indeed as a professional artist.

Aims

Year 10 Art is a yearlong course that aims to allow students to further explore media and develop skills in working with and appreciating Visual Art in many of its forms. This is done through investigating and experimenting with a variety of 2D and 3D techniques, including drawing, painting, printmaking, ceramics, assemblage and mixed media.

Australian Curriculum Objectives

| |
|--|
| |
| Students evaluate how representations communicate artistic intentions in artworks they make and view. They evaluate artworks and displays from different cultures, times and places. They analyse connections between visual conventions, practices and viewpoints that represent their own and others' ideas. |
| They identify influences of other artists on their own artworks. Students manipulate materials, techniques and processes to develop and refine techniques and processes to represent ideas and subject matter in their artworks. |

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|--|--|--|
| <u>Observation</u> Students will explore concepts and processes of observation in the context of the individual, object and place. They will investigate how art offers viewpoints and perspectives and explore various ways of observing and communicating | <u>Sensation</u> Students will explore expression and non-representation (abstraction) in the context of the artist's inner life. They will experiment with a variety of media and making techniques in response to the investigation of | <u>Opinion</u> Students will explore social issues which have been critically commented on in artworks throughout history as artists respond to the social context of their time. Students will investigate a selection of contemporary artists from a variety of cultures and | <u>Inquiry</u> Students will explore how the everyday can inspire arts practice and has done so through modern and contemporary art. They will respond to an individual stimulus box and use the inquiry process to help guide their self-directed artworks in |

| | | | |
|---|---|--|---|
| visually. They will explore ways to develop intent and represent their own ideas in response to these investigations and manipulate media and processes to build a folio in 2D mediums. | relevant artists' artworks, art movements from 20th and 21st Century, modern, post modern and contemporary eras. Students will build a folio of 2D artworks that explore expression and non-representation. | these will be used to research how visual language is used to communicate personal responses and views to current social issues. Specifically, students will explore this through their application of sculptural media and processes, using mixed media and light to create an artwork. | response to their experience, interpretation and connection to found objects inside their stimulus box. Students will experiment with various media and techniques of their choice as they deem appropriate for their intended meaning. |
|---|---|--|---|

Assessment

| Unit 1 | Unit 2 |
|--|---|
| Assessment Item 1: <ul style="list-style-type: none"> 2D folio of work with accompanying visual diary Assessment Item 2: <ul style="list-style-type: none"> Short response booklet | Assessment Item 3: <ul style="list-style-type: none"> 2D folio of work with accompanying visual diary Assessment Item 4: <ul style="list-style-type: none"> Examination - Extended Response |
| Unit 3 | Unit 4 |
| Assessment Item 5: <ul style="list-style-type: none"> Project: <ol style="list-style-type: none"> 3D folio of works Multimodal PowerPoint explaining inquiry process & reflective statement | Assessment Item 6: <ul style="list-style-type: none"> Project: <ol style="list-style-type: none"> Experimental folio Multimodal PowerPoint explaining inquiry process & reflective statement |

General Capabilities

ART helps develop the following skills:

- Literacy
- Numeracy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Fashion and Design

Head of Department: Cassandra Harradine

Email: charr333@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

FAD

| Prerequisites | Equipment |
|--|--------------------------------------|
| A passion for fashion and creativity. Self-discipline to productively manage their time to complete practical tasks on time. | Full leather shoe (including tongue) |
| | Fabric for projects |
| | Laptop |
| | Stationery |
| | Costs |
| | Nil |

Pathways

- Skills gained would enable students to manipulate fabrics and acquire the necessary knowledge to further their studies in textiles and fashion
- The subject has a direct link the Applied Subject Fashion in Years 11 & 12.

Aims

The textile component aims to stimulate creative thinking and develop practical skills regarding fabric construction. It also aims to further develop textile knowledge.

Australian Curriculum Objectives

Students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described.

When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts.

Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities. They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes. They create and connect design ideas and processes of increasing complexity and justify decisions.

Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, adjusting plans when necessary.

They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|--|---|---|
| <p>Back to Basics</p> <p>Learning the basics of pattern making and the elements and principles of Design with analysis of clothing needs in the interest of sustainable practices. In the interests of slow fashion, students will create a classic piece of clothing (skirt or shorts) which matches their existing wardrobe and be able to worn for a variety of purposes.</p> | <p>Wool for School</p> <p>Wool for School is an annual Student Fashion design competition run by the Australian Woolmark company encouraging budding fashion designers to use wool as the main fibre in their drawn designs. This unit of work is based on the competition promoting wool as a sustainable fibre with many functions.</p> | <p>Calico on the Cat Walk</p> <p>Fashion Design Competition – Boonah Arts Festival. Students learn more marketing and promotion in the Fashion Industry by using the Boonah Arts Festival Calico on the Catwalk Competition to design and sew a garment suitable for the category of their choice.</p> | <p>Sewing for others</p> <p>Students research, present and choose a community service sewing project which the whole class then participates in.</p> |

Assessment

| Unit 1 | Unit 2 |
|--|--|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Design and Sew – fashion classic (skirt/shorts) | <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Design and Sew – designer bag |
| Unit 3 | Unit 4 |
| <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Design and Sew – Calico on the Cath Walk (outfit) | <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Research assignment and oral <p>Assessment Item 5:</p> <ul style="list-style-type: none"> Design and Sew – community sewing project |

General Capabilities

FAD helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Food Technology

Head of Department: Cassandra Harradine

Email: charr333@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

FDT

| Prerequisites | Equipment |
|--|--|
| Students need to have a passion for cooking and an interest in health, nutrition and sustainability. They also need the ability to work co-operatively with others and the self-discipline to work individually when required. | Full leather shoe (including tongue) Any additional safety items or clothing deemed necessary to adhere to safe work practices. Laptop Stationery Ingredients for cooking. Container to take food home in, a tea towel and jars will for the Edible Gifts unit. |
| | Costs |
| | Nil |

Pathways

This subject will prepare students for the theoretical and practical components of Certificate II in Hospitality as well as for further studies in Food and Nutrition at a Tertiary Level.

Aims

The aim of this subject is to build student knowledge and understanding of food on a global scale – this includes food diversity, the evolving food needs of people, food preservation and workplace health and safety. Food preparation skills are further developed with various focal points throughout the year, based upon the unit of work being studied. The practical lessons are aimed at allowing students to explore, adapt and develop recipes for topics relating to the theoretical components with an overall focus on healthy eating habits and the nutritional value of foods.

Australian Curriculum Objectives

Students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described.

When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts. Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities.

They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes.

They create and connect design ideas and processes of increasing complexity and justify decisions. Students communicate and document projects, including marketing for a range of audiences.

They independently and collaboratively apply sequenced production and management plans when producing designed solutions, adjusting plans when necessary.

They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|--|--|---|---|
| <p>Cultural Cuisine</p> <p>Students will undergo an exploration of multicultural foods, contemporary food trends, and the fusion of traditional cuisine in Australia.</p> | <p>Cooking for Global Needs</p> <p>Students will investigate food intolerances and allergies, diverse dietary requirements within the community and have the opportunity to create suitable dishes using alternative ingredients.</p> | <p>Edible Gifts</p> <p>Students will explore waste prevention, sustainable packaging and food options, preservation methods and the impact these have on quality and nutritional value of food. Students will also investigate food packaging and labelling laws in Australia.</p> | <p>Masterclass</p> <p>Develop students' knowledge, understanding and skill set, preparing students for the Senior Hospitality pathway. Students will begin to look at the Hospitality industry and the workplace health and safety standards required within. Students will have the opportunity to produce industry quality products throughout the unit.</p> |

Assessment

| Unit 1 | Unit 2 |
|---|--|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Design Brief – Fusing Cultural Diversity | <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Feature Article – Evolving Food Needs of our Population Design Brief – Dining Out Challenges |
| Unit 3 | Unit 4 |
| <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Design Brief – Edible Hamper | <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Design Brief – Function of Eggs |

General Capabilities

FDT helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Graphics & Design

Head of Department: Cassandra Harradine

Email: charr333@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

GAD

| Prerequisites | Equipment |
|---|--|
| <ul style="list-style-type: none"> C standard or better in Year 9 Graphics | Laptop Stationery (specifically 2H and H pencils, Eraser, 45° and 60°/30° set squares (size 10)). |
| | Costs |
| | Nil |

Pathways

Skills gained in Year 10 Graphics will be essential for a smooth transition into Year 11 and 12 Design.

Aims

This program of study aims to provide students with a range of learning experiences in technology education through contexts of graphical communication. It also aims to develop in students, the basic knowledge, understanding and skills required to form the foundation for further study in Design at a higher level.

Australian Curriculum Objectives

Students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described.

When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts. Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities.

They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes.

They create and connect design ideas and processes of increasing complexity and justify decisions. Students communicate and document projects, including marketing for a range of audiences.

They independently and collaboratively apply sequenced production and management plans when producing designed solutions, adjusting plans when necessary.

They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|---|--|--|
| <p>Pinball prototype - part A Students investigate how technology has evolved and what features contribute to successful designs. They design components for a prototype, establish criteria for success and construct a carcass using hand tools and woodwork machines.</p> | <p>Pinball prototype - part B Students design the graphics and complete the construction of their prototype. They use conventional technologies and 3D printing to create an original design solution. They test and refine their design, and evaluate the finished product against the design criteria.</p> | <p>Graphic design Students use sketching, drawing and computer aided design (CAD) to create and manipulate images. They explore different forms of graphical representations, elements and principles of design, audience needs and wants, to create a range of graphical products.</p> | <p>Sustainable design Students use plan view, elevation and perspective drawing to represent objects. They use CAD software to create low fidelity prototypes of built environment objects. Students investigate factors that influence sustainability and incorporate these into their designed solutions.</p> |

Assessment

| Unit 1 | Unit 2 |
|--|---|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Design project - design and construct an artefact to specifications | <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Design project - annotated design folio and assemble a prototype |
| Unit 3 | Unit 4 |
| <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Design folio - create promotional material for outdoor activities | <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Examination – response to stimulus |

General Capabilities

GRD helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Junior Engineering

Head of Department: Cassandra Harradine

Email: charr333@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

JEN

| Prerequisites | Equipment |
|--|--|
| Students should possess a liking for and gain pleasure from hands on practical work with metal and its related products. | Full leather shoe (including tongue) Any additional safety items or clothing deemed necessary to adhere to safe work practices. Laptop Stationery |
| | Costs |
| | Nil |

Pathways

Skills gained in Junior Engineering will be essential for a smooth transition into the Year 11 subject of Certificate II in Engineering Pathways.

Aims

Junior Engineering aims to develop in students:

- The basic knowledge and practical expertise that will be of benefit to those considering undertaking Engineering Manufacturing in Years 11 and 12
- A sense of personal satisfaction and achievement through the successful completion of metal projects

Australian Curriculum Objectives

Students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described.

When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts. Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities. They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes. They create and connect design ideas and processes of increasing complexity and justify decisions.

Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, adjusting plans when necessary.

They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|--|---|---|---|
| <p>Safety and Metal Work Students will access workplace health and safety training via an online course (Onguard). Students will study graphical drawing interpretation and marking/setting out to drawing specification. The unit will also introduce students to metal working hand tools, basic static workshop machinery.</p> | <p>Design and Metal Work This unit will further develop students understanding of the design elements and processes. Students will use decorative metalworking skills, drawing interpretation and fitting exercises.</p> | <p>Graphics and Metal Work Students explores basic graphical construction processes. Students will be introduced to complex static metal working machinery and undertake a complex fitting exercise.</p> | <p>Graphics and Metal Work Students will be required to use their graphical drawing interpretation skills already developed. Students will also be introduced to static/fixed sheet metal working machinery and complete sheet metal working activities.</p> |

Assessment

| Unit 1 | Unit 2 |
|--|--|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Design brief - Drill Bit Measuring Tool | <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Design brief - Decorative Art Metal Working |
| Unit 3 | Unit 4 |
| <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Design brief - External Door Hardware | <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Design brief - Functional Storage Cabinet |

General Capabilities

JEN helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Junior Timber

Head of Department: Cassandra Harradine

Email: charr333@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

JTI

| Prerequisites | Equipment |
|---|--|
| Students should possess a liking for and gain pleasure from hands on practical work with timber and its related products. | Full leather shoe (including tongue) |
| | Any additional safety items or clothing deemed necessary to adhere to safe work practices. |
| | Laptop |
| | Stationery (HB pencils) |
| | Costs |
| | Nil |

Pathways

Skills gained in Furnishing will be essential for a smooth transition into the Year 11 senior Applied subject of Furnishing.

Aims

Junior Furnishing aims to develop in students:

- The basic knowledge and practical expertise that will be of benefit to those considering undertaking Furniture Manufacturing in Years 11 and 12
- A sense of personal satisfaction and achievement through the successful completion of timber projects
- An understanding of the design process required to achieve a successful outcome in practical work

Australian Curriculum Objectives

Students explain how people working in design and technologies occupations consider factors that impact on design decisions and the technologies used to produce products, services and environments. They identify the changes necessary to designed solutions to realise preferred futures they have described.

When producing designed solutions for identified needs or opportunities, students evaluate the features of technologies and their appropriateness for purpose for one or more of the technologies contexts. Students create designed solutions for one or more of the technologies contexts based on a critical evaluation of needs or opportunities. They establish detailed criteria for success, including sustainability considerations, and use these to evaluate their ideas and designed solutions and processes. They create and connect design ideas and processes of increasing complexity and justify decisions.

Students communicate and document projects, including marketing for a range of audiences. They independently and collaboratively apply sequenced production and management plans when producing designed solutions, adjusting plans when necessary.

They select and use appropriate technologies skilfully and safely to produce high-quality designed solutions suitable for the intended purpose.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|--|--|--|--|
| <p>Speaker Box</p> <p>Explores the processes of planning, designing and creating a speaker box to amplify music on mobile phones.</p> <p>Students will personalise their speaker box to maximise the aesthetic appeal of the product to the target market. They will also design the phone insertion slot to suit their brand of mobile phone. They will evaluate the finished speaker in terms of form and function.</p> | <p>Jewellery Box</p> <p>Students will extend their skills to plan, design and craft a jewellery box from pine and local hardwoods. They will develop a design solution sympathetic to the jewellery box to create their preferred decorative bases.</p> | <p>Basketball Hoop</p> <p>Explores the planning, design and creation of a miniature basketball hoop and stand made from pine, acrylic and wire. If time allows, students will design and paint the backboard to personalise their work.</p> | <p>Timber Bi-Plane & Baseball Bat</p> <p>Explores the crafting of a model bi-plane and is designed in part to introduce students to machining in preparation for Senior Engineering or Furnishing.</p> <p>Students will plan, design and create a wooden bi-plane and machine a miniature baseball bat from pine.</p> |

Assessment

| Unit 1 | Unit 2 |
|---|--|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Design brief – Speaker Box | <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Design brief – Jewellery Box |
| Unit 3 | Unit 4 |
| <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Design brief – Basketball Hoop | <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Design brief – wooden bi-plane and miniature baseball bat |

General Capabilities

JTI helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Mind Ya Business

Head of Department: Adam Sinclair

Email: ajsin1@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

MYB

| Prerequisites | Equipment |
|---------------|----------------------|
| Nil | Laptop Stationery |
| | Costs |
| | Nil |

Pathways

This subject develops foundation knowledge of all business and technology subjects that students might choose in Senior and Tertiary Subjects.

Aims

This subject aims to provide students the opportunity to further develop their understanding and knowledge in a variety of Business topics. Throughout MYB, students will build on prior business foundations and expand their knowledge of the following Business topics: Australian Economics, Entrepreneurship, Event Management and Agribusiness. Students will have the opportunity to explore each of these topics in depth, as they address the different contexts (personal, local, national, regional and global) in order to meet the needs of each individual student.

Australian Curriculum Objectives

Students explain why and how governments manage economic performance to improve living standards. They give explanations for variations in economic performance and standards of living within and between economies. They analyse factors that influence major consumer and financial decisions and explain the short- and long-term effects of these decisions. They explain how businesses respond to changing economic conditions and improve productivity.

Students evaluate the effect of organisational and workforce management on business performance. When researching, students develop questions and formulate hypotheses to frame an investigation of an economic or business issue or event. They gather and analyse reliable data and information from different sources to identify trends, explain relationships and make predictions. Students generate alternative responses to an issue, considering multiple perspectives. They use cost-benefit analysis and appropriate criteria to propose and justify a course of action. They apply economics and business knowledge, skills and concepts to familiar, unfamiliar and complex hypothetical problems.

Students develop and present evidence-based conclusions and reasoned arguments incorporating different points of view. They use appropriate texts, subject-specific language, conventions and concepts. They analyse the intended and unintended effects of economic and business decisions and the potential consequences of alternative actions.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---|---|---|--|
| <p>Australian Economics Students will look at various components of the Australian economy, focusing on economic performance, how governments manage the economy to benefit living standards and factors which influence major consumer and financial decisions. Students will apply economics and business knowledge, skills and concepts in both familiar and new situations to demonstrate their knowledge and understanding of Australian economics.</p> | <p>Plan Your Own Enterprise Students will engage with practical, real world skill focused lessons which are intended to promote group learning with authentic assessment. <i>Plan Your Own Enterprise</i> empowers students to combine their financial capacity and creativity skills to create innovative and inventive enterprises. Students will enjoy working together to complete the scaffolded tasks, culminating in the completion of their assessment proposal. This unit will allow students to explore the nature of innovation and discuss how businesses seek to create and maintain a competitive advantage in the market.</p> | <p>Event Management Students will delve into many facets of event management including logistics, organisation, administration and proposal writing. This unit will require students to evaluate the effect of organisational and workforce management on overall performance.</p> | <p>Agribusiness Students will be empowered to combine their economic knowledge and understanding of agriculture in Australia to analyse and evaluate current market trends and propose solutions for maintaining business feasibility. This unit will allow students to explore the nature of Agribusiness and discuss how businesses seek to maintain a competitive advantage in the local and global market – considering the current global climate.</p> |

Assessment

| Unit 1 | Unit 2 |
|---|---|
| <p>Assessment Item 1:</p> <ul style="list-style-type: none"> Examination – Australian Economics | <p>Assessment Item 2:</p> <ul style="list-style-type: none"> Project – Plan Your Own Enterprise |
| Unit 3 | Unit 4 |
| <p>Assessment Item 3:</p> <ul style="list-style-type: none"> Project – Event Management | <p>Assessment Item 4:</p> <ul style="list-style-type: none"> Investigation - Agribusiness |

General Capabilities

MYB helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Robots, Programming and Games

Head of Department: Jason Smith

Email: jsmit375@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

RPG

| Prerequisites | Equipment |
|---------------|----------------------|
| Nil | Laptop Stationery |
| | Costs |
| | Nil |

Pathways

With an increasing number of professional occupations requiring digital competences, including programming, a student who is keen to develop a wide range of technology and engineering skills will be able to apply learning from this unit to future study at this school, University and TAFE as well as in industry. Digital Solutions and Information and Communications Technology in Years 11 and 12 offer differing opportunities for IT literate students. Students may also transfer their skills to other courses which require strong STEM skills.

Aims

This subject aims to allow Year 10 students to develop higher-order Technology and Engineering skills by designing, building, programming and testing robots using Lego Mindstorms™ and by developing games using commercially viable programming languages.

Australian Curriculum Objectives

By the end of Year 10, students explain the control and management of networked digital systems and the security implications of the interaction between hardware, software and users. They explain simple data compression, and why content data are separated from presentation.

Students plan and manage digital projects using an iterative approach. They define and decompose complex problems in terms of functional and non-functional requirements. Students design and evaluate user experiences and algorithms. They design and implement modular programs, including an object-oriented program, using algorithms and data structures involving modular functions that reflect the relationships of real-world data and data entities. They take account of privacy and security requirements when selecting and validating data.

Students test and predict results and implement digital solutions. They evaluate information systems and their solutions in terms of risk, sustainability and potential for innovation and enterprise. They share and collaborate online, establishing protocols for the use, transmission and maintenance of data and projects.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|------------------------|----------------|-----------------------------|-----------------|
| Introduction to Robots | Games - Python | Robotics – EV3 Mindstorm | Databases – SQL |

Assessment

| Unit 1 | Unit 2 |
|---|--|
| Assessment Item 1: <ul style="list-style-type: none">Research and Presentation- Multimodal | Assessment Item 2: <ul style="list-style-type: none">Project – Produce a game |
| Unit 3 | Unit 4 |
| Assessment Item 3: <ul style="list-style-type: none">Project – Lego EV3 Mindstorm | Assessment Item 4: <ul style="list-style-type: none">Project – Designing a Database |

General Capabilities

RPG helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

Sport & Exercise Studies

Head of Department: Jai Yong Gee

Email: jyong6@eq.edu.au

Elective

QCAA Subject Category

General

Timetable Code

SES

| Prerequisites | Equipment |
|--|---|
| <ul style="list-style-type: none"> B standard or better in Year 9 HPE B standard for Effort in Year 9 HPE Standards will be used if numbers for the class become too high | Correct uniform, sports shoes (that must have laces) and a hat to all practical lessons Laptop Stationery |
| | Costs |
| | Nil |

Pathways

Year 10 Sport & Exercise Studies directly prepares students for entry into Senior Physical Education in Year 11/12.

Aims

This subject is aimed towards students who have excelled in the core subject of HPE in Year 9 and intend to study Senior Physical Education in Year 11/12 or have an interest in the topics of Sports and Exercise sciences. Students will study a range of subject specific topics from Senior PE and Sport in Semester 1 and then move more towards the Senior PE style topics for Semester 2. This is so that students engage in additional theory and practical lessons that will prepare them for the group work, sports and practical skills required in the senior years.

Australian Curriculum Objectives

Access, evaluate and synthesise information to take positive action to protect, enhance and advocate for their own and others' health, wellbeing, safety and physical activity participation across their lifespan.

Develop and use personal, behavioural, social and cognitive skills and strategies to promote a sense of personal identity and wellbeing and to build and manage respectful relationships.

Acquire, apply and evaluate movement skills, concepts and strategies to respond confidently, competently and creatively in a variety of physical activity contexts and settings.

Engage in and enjoy regular movement-based learning experiences and understand and appreciate their significance to personal, social, cultural, environmental and health practices and outcomes.

Analyse how varied and changing personal and contextual factors shape understanding of, and opportunities for, health and physical activity locally, regionally and globally.

Course Structure

| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|---------------------------------------|-------------------------------|---|--------|
| Officiating & Coaching Minor Games | Energy Systems Team Sports | Fitness & Training Programs/ Excellence in Sports Touch & Netball | |

Assessment

| Unit 1 | Unit 2 |
|---|---|
| Assessment Item 1: <ul style="list-style-type: none"> Group Project | Assessment Item 2: <ul style="list-style-type: none"> Examination Assessment Item 3: <ul style="list-style-type: none"> Performance |
| Unit 3 | Unit 4 |
| Assessment Item 4: <ul style="list-style-type: none"> Performance | Assessment Item 5: <ul style="list-style-type: none"> Project - Multimodal |

General Capabilities

SES helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking

STEM

Head of Department: Jason Smith

Email: jsmit375@eq.edu.au

Elective

| | | | |
|-----------------------|---------|----------------|-----|
| QCAA Subject Category | General | Timetable Code | STE |
|-----------------------|---------|----------------|-----|

| Prerequisites | Equipment |
|---|--|
| <ul style="list-style-type: none"> C standard or better in Year 9 Science, Mathematics and English | Full leather shoe (including tongue) Any additional safety items or clothing deemed necessary to adhere to safe work practices. Laptop Stationery |
| | Costs |
| | Nil |

Pathways

This subject develops further knowledge and skills related to Science and STEM subject areas that prepare students for the Senior Science subjects (Physics, Chemistry and Biology) and other Senior subjects within the STEM field.

Aims

This subject is about developing a curiosity to find out how the world around us works. Human society has made monumental scientific discoveries and advancements, especially in the last 500 years. This subject will be looking at just some of these concepts, such as ‘How do we land humans on Mars?’, ‘How does our brain process the world and allow us to function?’ and ‘How can Science be used to improve a professional athlete’s performance?’. Through these topics (and more), students will develop Scientific knowledge and skills relating to data analysis and interpretation. Science experiments and investigations will occur throughout each unit to strengthen and expand students’ knowledge of the topics.

Australian Curriculum Objectives

Students develop questions and hypotheses and independently design and improve appropriate methods of investigation, including field work and laboratory experimentation.

They explain how they have considered reliability, safety, fairness and ethical actions in their methods and identify where digital technologies can be used to enhance the quality of data.

When analysing data, selecting evidence and developing and justifying conclusions, they identify alternative explanations for findings and explain any sources of uncertainty. Students evaluate the validity and reliability of claims made in secondary sources with reference to currently held scientific views, the quality of the methodology and the evidence cited.

They construct evidence-based arguments and select appropriate representations and text types to communicate science ideas for specific purposes.

Course Structure

| | | | |
|--------|--------|--------|--------|
| Unit 1 | Unit 2 | Unit 3 | Unit 4 |
|--------|--------|--------|--------|

| | | | |
|--|--|--|---|
| <p>Connections Everywhere We Look</p> <p>Gain an understanding of key human systems and their structural and functional interrelationships. These concepts of anatomy and physiology will be applied to contexts such as sports performance and identifying the pattern between heart rate, breathing and level of intensity.</p> | <p>It's Just Rocket Science</p> <p>Explore the history of the human race's venture into space, including the main space missions and their findings. They will investigate the many aspects of rocket science. Evaluate the use of satellites and space probes and the possible negative impacts of the space race, including the overpopulation of satellites above Earth and space debris. Investigate how microgravity and time in space effects the human body.</p> | <p>The Ultimate 'Whodunnit' Mystery</p> <p>Explore the field of forensic science and the use of scientific method and analysis techniques and apply these in an experimental context to investigate crimes or examine evidence. They will delve in to topics such as Crime Scene Protocol (searching for evidence), Human Identification (through fingerprint, DNA and blood analysis) and Evidence Analysis including microscopy of hair and fibres, the use of chemical tests to determine unknown compounds, photographical techniques to compare samples, and the use of physics concepts to analyse flight paths. CSI – lookout!</p> | <p>Part 1: Curious Careers Part 2: MythBusters 2.0</p> <p>Part 1: Explore various less commonly known STEM careers and the types of work they entail. They will investigate STEM careers such as artificial intelligence engineer, venom scientist, Formula 1 engineer, volcanologist, and nuclear engineer. Part 2: Design and conduct experiments to uncover the truth of commonly believed myths.</p> |
|--|--|--|---|

Assessment

| | |
|---|---|
| <p style="text-align: center;">Unit 1</p> <p>Assessment Item 1:</p> <ul style="list-style-type: none"> • Examination – Data test | <p style="text-align: center;">Unit 2</p> <p>Assessment Item 2:</p> <ul style="list-style-type: none"> • Assignment – Student Experiment |
| <p style="text-align: center;">Unit 3</p> <p>Assessment Item 3:</p> <ul style="list-style-type: none"> • Assignment – Research Investigation | <p style="text-align: center;">Unit 4</p> <p>Assessment Item 4:</p> <ul style="list-style-type: none"> • Assignment – Design project |

General Capabilities

STE helps develop the following skills:

- Literacy
- ICT capability
- Intercultural Understanding
- Personal and Social Capability
- Ethical Understanding
- Critical and Creative Thinking