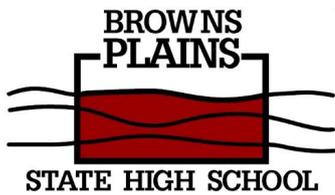


Junior Secondary

Year 9, 2017

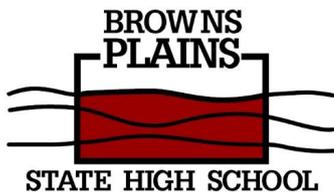
Subject Selection Guide

All Year 9 students will study: English, Mathematics, Science, Humanities, and Health and Physical Education. Students are required to choose 2 elective subjects in addition to the 5 core subjects.



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ENGLISH DEPARTMENT

Year 9 English

Subject Type: Core Compulsory

Head of Department: Mrs Jean Vos
jvos2@eq.edu.au

Subject Description: The English course in Year 9 is heavily literacy-based. It provides an opportunity for students to improve their language, comprehension and writing skills. At the same time, it allows students to access both literary and non-literary texts designed to give them a broader view of the world in which they live. The embedding of Indigenous and Asian perspectives ensures that the curriculum is varied and inclusive.

English is a compulsory subject for students from Year 7 to 12. A pass in this subject remains an essential prerequisite for the literacy component of the Queensland Certificate of Education (QCE), as well as entry into most tertiary institutions and apprenticeship courses.

The analytical and writing skills acquired throughout the English course are highly beneficial to all career pathways.

Units of Work:

Unit One:	The Australian Identity
Unit Two:	Let's Write
Unit Three:	Speculative Fiction
Unit Four:	A Sense of Belonging
Unit Five:	Twelve Angry Men
Unit Six:	Looking at Literature

Assessment Mode: Spoken and Written Tasks.



MATHEMATICS DEPARTMENT

Year 9 Mathematics

Subject Type: Core Compulsory

Head of Department: Mr Tomasz Dolecki
tdole1@eq.edu.au

Subject Description: Mathematics is an integral part of a general education. It enhances understanding of our world and the quality of our participation in a changing society. Mathematics is involved in so many aspects of everyday life that a sound knowledge is essential for informed citizenship. Through an enhanced understanding of mathematics, individuals can become better informed economically, socially and politically in an increasingly data driven society.

Mathematics is a compulsory subject for students from Year 7 to 12. A pass in this subject remains an essential prerequisite for the numeracy component of the Queensland Certificate of Education (QCE), as well as entry into many mathematics-based tertiary institution and apprenticeship courses.

The numerical skills acquired throughout the Mathematics course is highly beneficial to all career paths.

Units of Work:

Unit One:	Real Numbers – Introduction, Rates, Ratio, Direct Proportion
Unit Two:	Using Units of Measurement to Design a Rainwater Storage System
Unit Three:	Patterns and Algebra
Unit Four:	Pythagoras and Trigonometry
Unit Five:	Exploring Techniques for Collecting Data
Unit Six:	Using the Product Law
Unit Seven:	Exploring Population Statistics
Unit Eight:	Real Numbers

Assessment Mode: Written Examinations, Assignments and Investigations.



SCIENCE DEPARTMENT

Year 9 Science

Subject Type: Core Compulsory

Head of Department: Mr John Sagner
jsagn1@eq.edu.au

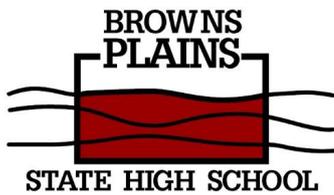
Subject Description: In Science students will use their scientific knowledge, curiosity and intuition to test and confirm their understandings, and to investigate the world. Students will be taught that Science is a body of knowledge, developed through human observations and inferences that may reflect diverse values and beliefs. They will become aware that scientific knowledge is dynamic, and that theories are reviewed in the light of new evidence. Students will discover that Science is a way of thinking and working, and they can apply their scientific knowledge to make responsible and informed decisions about real-world issues. Students will recognise that Science has a rich history and has evolved into a large number of increasingly overlapping fields that provide career opportunities.

Units of Work:

- Unit One: Chemistry - Chemical Patterns and Nuclear Technology
- Unit Two: Physics - Energy on the Move and Making Waves
- Unit Three: Biology - Life in Balance and Responding to Change
- Unit Four: Geology/Chemistry - The Changing Earth and Food Chemistry

Assessment Mode: Assessment is through a combination of Practical Reports, Research Assignments and Exams.

Further information: Science is beneficial for students interested in the following career pathways: Nursing and Medicine, Engineering, Environmental or Ecological careers.



HEALTH AND PHYSICAL EDUCATION DEPARTMENT

Year 9 Health and Physical Education

Subject Type: Core Compulsory

Head of Department: Mr Dan Klaer
dklae3@eq.edu.au

Subject Description: Browns Plains SHS is highly regarded as a school for quality physical education classes which have a strong focus on fitness, health and wellness. In the Year 9 Health and Physical Education class, students learn a foundation in a variety of both individual and team sports, as well as develop an understanding of good physical health through the study of theoretical units that relate to important life skills.

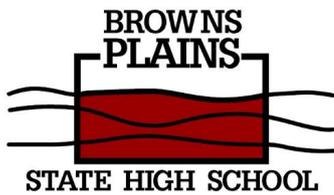
Units of Work:

Unit One:	Sport Specific Fitness
Unit Two:	Athletics
Unit Three:	Sports Performance Nutrition
Unit Four:	Life Skills

Assessment Mode: Students are assessed on physical performance and theoretically through written pieces. In order to meet the standards required in Year 9 Health and Physical Education, students are expected to participate to the best of their ability in both practical and theoretical units.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Senior Physical Education, Certificate II in Sport and Recreation, Certificate III in Fitness.

Health and Physical Education is also beneficial for students interested in the following career pathways: Career in Health, Fitness, Coaching, Science, and Nutrition.



HUMANITIES AND LANGUAGES DEPARTMENT

Year 9 Humanities

Subject Type: Core Compulsory

Head of Department: Mrs Natasha Lyndon
nlynd2@eq.edu.au

Subject Description: Students will develop skills and use their knowledge about the complex interactions between people, and between people and their environments, to investigate social, political, economic, environmental and cultural ideas and issues. They clarify their personal values and acknowledge others' values and world views in a range of contexts and settings. They develop their capacity for effective community participation and meaningful responses to social and environmental issues.

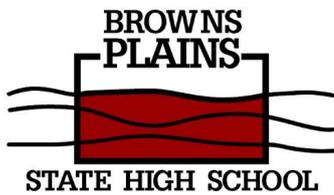
Units of Work:

- Unit One: Biomes and Food Security
- Unit Two: Movement of People
- Unit Three: Making a Nation
- Unit Four: World War I
- Unit Five: Geographies of Interconnection

Assessment Mode: Response to Stimulus Exams, Spoken Tasks, Research Essays, Environmental Reports.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Ancient History, Modern History, Geography, and Tourism.

Humanities and Social Sciences is also beneficial for students interested in the following career pathways: Teacher, Lawyer, Journalist, Writer, Environmental Planner, Landscape designer, Architect Tour guide, Travel Consultant.



HUMANITIES AND LANGUAGES DEPARTMENT

Year 9 Bahasa Indonesia

Subject Type: Elective

Head of Department: Mrs Natasha Lyndon
nlynd2@eq.edu.au

Subject Description: The study of Indonesian language develops our students' ability to understand and use the language of our closest neighbour, but also develops skills in understanding other cultures. The studying of Indonesian has never been more relevant for young Australians than it is today and for the future. The course aims to:

- enable students to become competent and confident speakers of the Indonesian language
- develop an understanding and appreciation of the culture, way of life, and the peoples of Indonesia, thus becoming aware of how different cultures view the world
- equip students with the skills and knowledge required to operate in an increasingly linguistically and culturally diverse, global workplace
- prepare students who wish to participate in the School Study Tour to our sister schools in Central Java, Indonesia.

Units of Work:

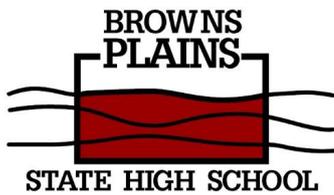
Unit One:	Kehidupan Sehari-hari - Everyday Life
Unit Two:	Olahraga and Hiburan - Sport and Entertainment, Film, Television and Music
Unit Three:	Ayo! Berlibur di Indonesia - Let's go on Holiday to Indonesia
Unit Four:	Perayaan and Upacara - Celebrations and Ceremonies

Assessment Mode: Indonesian languages assess across the four macro skills of listening, speaking, reading and writing, and each semester an assignment will be set which will use one or more of these skills.

Entry Requirements: In order to meet the standards required in Bahasa Indonesia, it is recommended but not a requirement that students would have completed Bahasa Indonesia in Year 8 and have developed foundational knowledge from previous years of study.

Further Information: This subject provides a good foundation for students interested in exploring Senior Indonesian.

Bahasa Indonesia is also beneficial for students interested in the following career pathways: Business, Engineering, Media and Entertainment, Tourism and Hospitality, Fashion and Design, Travel, Health, Education, Environmental Sciences, Defence Forces, Aid Agencies, National and International Security, Diplomacy, Customs and Immigration, Disaster and Aid Relief and International Relations, Research and Teaching.



ARTS DEPARTMENT

Year 9 Visual Art

Subject Type: Elective

Head of Department: Mrs Keryn Clark
kdora16@eq.edu.au

Subject Description: Visual Art aims to build on the fundamental practical and visual literacy components studied in Year 8 Visual Art, focusing on 2D and 3D art making skills. Units one, three and four focus on fundamental drawing, painting and printing skills in conjunction with the elements of design: line, tone, shape, texture and colour. In unit two the students learn to design and construct a 3D clay sculpture. This unit broadens student knowledge of shape, form, texture and decorative design elements.

Units of Work:

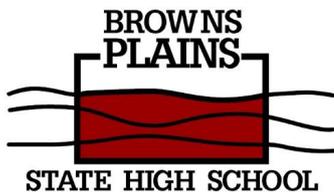
Unit One:	Drawing (line, tone, perspective, portraits)
Unit Two:	Sculpture (shape, form, harmony, contrast)
Unit Three:	Painting (colour, emphasis, focal point, unity)
Unit Four:	Printing (texture, space, balance)

Assessment Mode: Practical, Theoretical, Written, Composition.

Entry Requirements: There are no entry requirements for this subject, but in order to meet the standards required in Year 9 Visual Art it is recommended that students have some foundational knowledge or a strong interest in basic art technique.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Media Studies, Senior Visual Art, and Visual Art Studies.

Visual Art is also beneficial for students interested in the following career pathways: Creative Arts Industry; Media; Design; Commercial Artist; Teaching; Graphic Design; Illustration; Fashion; Arts Curator; Photographer; Draftsman; Artist.



ARTS DEPARTMENT

Year 9 Dance

Subject Type: Elective

Head of Department: Mrs Keryn Clark
kdora16@eq.edu.au

Subject Description: Dance examines how to use the body as an instrument of communication, involving gesture and motion to capture and convey ideas, images and feelings. Studying Dance is more than just learning dances or how to perform dance. It includes reading, writing and responding to dance. It also includes studying the anatomy of the body, dance elements, and choreographic devices. Students are encouraged to develop movement skills, creative expression and self-discipline. Students will be exposed to a variety of dance forms such as jazz, contemporary, hip hop and various world dance styles.

Units of Work:

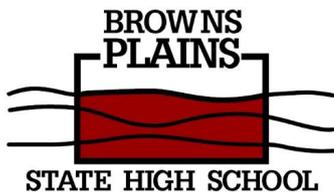
Unit One:	Dance Moves
Unit Two:	World Moves
Unit Three:	The Evolution of Dance

Assessment Mode: Written, Appreciation, Choreographic, Performance.

Entry Requirements: There are no entry requirements for this subject, but in order to meet the standards required in Dance it is recommended that students have some foundational knowledge or a strong interest in basic dance technique.

Further Information: This subject provides a good foundation for students interested in exploring Senior Dance. Dance teaches creative and critical thinking and supports careers that require leadership, self-management and networking.

Dance is also beneficial for students interested in the following career pathways: Dancer; Independent Artist; Choreographer; Director; Dance Teacher; Stage/Set/Costume Design; Lighting and Sound Design; Stage Manager; Arts Administrator; Community Liaison for art projects; Popular Entertainer; Public Relations Officer; Media Relations Co-ordinator.



ARTS DEPARTMENT

Year 9 Drama

Subject Type: Elective

Head of Department: Mrs Keryn Clark
kdora16@eq.edu.au

Subject Description: Drama is a social art form that integrates visual, aural and physical elements to communicate and explore the human experience. The subject of Drama develops a range of personal resources such as communication skills, self-esteem, imagination, self-discipline and movement skills. Furthermore, Drama improves intrapersonal skills allowing students to work in groups to achieve a combined goal.

Units of Work:

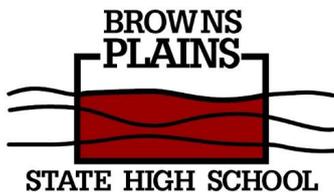
Unit One:	The Voice as a Tool
Unit Two:	Elements of Drama
Unit Three:	Rituals
Unit Four:	The Art of Improvisation

Assessment Mode: Presenting, Forming and Responding through both Practical and Theory.

Entry Requirements: There are no entry requirements for this subject, but in order to meet the standards required in Drama it is recommended that students have some foundational knowledge or a strong interest in basic drama technique.

Further Information: This subject provides a good foundation for students interested in exploring Senior Drama.

Drama is also beneficial for students interested in the following career pathways:
Actor/Actress; Director; Drama Teacher; Theatre technician; Stage Design; Set, Costume, Lighting and Sound Design; Playwright; Stage Manager; Arts Administrator; Dramaturge; Television production assistant; Television producer; Radio Presenter; Popular Entertainer; Motivational Speaker; Speech Therapist; Public Relations Officer; Media Relations Co-ordinator.



ARTS DEPARTMENT

Year 9 Music

Subject Type: Elective

Head of Department: Mrs Keryn Clark
kdora16@eq.edu.au

Subject Description: Music is a course that provides students with the foundational skills in music. Each student will learn how to use the musical elements, as well as discover rock music through the ages. Students will be assessed in three fields – performance, composition and analysis. These assessment tasks provide students with a greater appreciation and understanding of the music industry and the manipulation of music.

Units of Work:

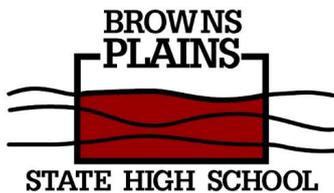
Unit One:	Break it Down!
Unit Two:	Remix it
Unit Three:	We Will Rock You

Assessment Mode: Examination, Performance, Composition and Analysis through Spoken and/or Written Tasks.

Entry Requirements: There are no entry requirements for this subject, but in order to meet the standards required in Music it is recommended that students have foundational knowledge in basic music concepts including music reading, notation and performance.

Further Information: This subject provides a good foundation for students interested in exploring Senior Music and Music Extension.

Music is also beneficial for students interested in the following career pathways: Musician; Art Management; Recording Studio Technician; Popular Entertainer; Composer; Music Teacher.



BUSINESS EDUCATION AND INFORMATION TECHNOLOGY DEPARTMENT

Year 9 Business Adventures

Subject Type: Elective

Head of Department: Mrs Catherine Cole
cgard4@eq.edu.au

Subject Description: The purpose of this subject is to give students an insight into what is involved in operating and maintaining a successful business. It will also include managing their personal finances for now and in the future.

During Semester 1, students will be exposed to business structures, and reasons for success and/or failure in business and marketing. The students will be expected to participate in, and manage, a business venture, which involves designing, creating and selling a product.

During Semester 2, students will be given an introduction to the importance of managing personal and business finance. This will be taught through basic financial planning, personal budgeting skills, spending money wisely, accessing and keeping control of personal finances.

Students will use computer technology throughout the course to research information and create promotional aids using a range of software applications.

Units of Work:

Semester 1 - Business

Unit One: Business Structures
Unit Two: Essential Business Records
Unit Three: Planning to Succeed
Unit Four: Business Venture

Semester 2 - Finance

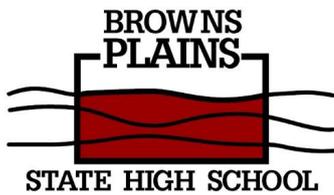
Unit One: Money
Unit Two: Financial Planning
Unit Three: Budgeting and Spending Income
Unit Four: Saving and Investing Money
Unit Five: Tracking Finances

Assessment Mode: Examination (theoretical and practical), Written Assignment and Group Project (Trade Display).

Entry Requirements: There are no entry requirements for this subject, nor is prior knowledge or skills required to complete this subject.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Year 10 – Enterprise.com, Law and Civics, and Making Millions; Year 11 - Accounting, Business, Business Communication and Technologies, Legal Studies

Business Adventures is also beneficial for students interested in the following career pathways: Accounting, Entrepreneurship and Innovation, Finance, Human Resource Management, International Business, Management Information Systems, Marketing and Operations Management.



BUSINESS EDUCATION AND INFORMATION TECHNOLOGY DEPARTMENT

Year 9 Citizenship and the Law

Subject Type: Elective

Head of Department: Mrs Catherine Cole
cgard4@eq.edu.au

Subject Description: Law and order is needed when people in any given society or community live together and interact on a daily basis. Throughout this course, students will be better informed citizens (legal position, rights and responsibilities) and will develop an understanding of the impact of laws, the legal system, and legal processes in their daily lives.

During Semester 1, students will investigate Police and the Courts, Forensic Investigations and E-Crime.

During Semester 2, students will investigate controversial issues in relation to the laws dealing with young people, sport, consumer protection laws and the Government.

Units of Work:

Semester 1 - Crime

Unit One: Police and Courts
Unit Two: Forensic Investigation
Unit Three: E-Crime

Semester 2 - Justice

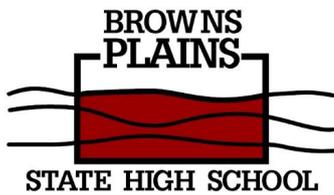
Unit One: Controversial Issues – Youth and the Law
Unit Two: Controversial Issues – Sport and the Law
Unit Three: Consumer Protection Laws and the Government

Assessment Mode: Examination (theoretical and practical), Written Assignment and Multimodal Presentation.

Entry Requirements: There are no entry requirements for this subject, nor is prior knowledge or skills required to complete this subject.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Year 10 – Enterprise.com, Law and Civics, and Making Millions; Year 11 - Accounting, Business, Business Communication and Technologies, Legal Studies

Citizenship and the Law is also beneficial for students interested in the following career pathways: Barristers, Lawyer, In-house Counsel, Community Legal Service (immigration, rental disputes, consumer rights, family conflict etc), Judge, Criminologist, Politician, Public Relations and Diplomat.



BUSINESS EDUCATION AND INFORMATION TECHNOLOGY DEPARTMENT

Year 9 Society and Technology

Subject Type: Elective

Head of Department: Mrs Catherine Cole
cgard4@eq.edu.au

Subject Description: The purpose of this subject is to provide a theoretical and practical approach to understanding the impact and role computers and technology play in society.

During Semester 1, students will learn about the development of technology, research the latest, new and upcoming technology, utilise a range of software applications, and create visual imagery (photos, editing, graphics etc).

During Semester 2, students will learn about the current social and ethical implications of technology, as well as technology and its use in crime. Students will also utilise a range of software applications and technology to design and develop a 2D and 3D animation.

Units of Work:

Semester 1 – Imagery

Unit One: Essential Concepts of IT
Unit Two: Latest Technology
Unit Three: Graphics (Design-Develop-Evaluate)

Semester 2 - Animation

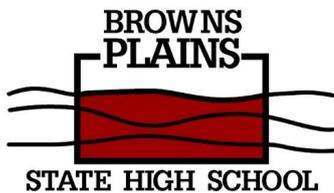
Unit One: Social and Ethical use of IT
Unit Two: History of Animation
Unit Three: 2D Animation
Unit Four: 3D Animation
Unit Five: Animation (Design-Develop-Evaluate)

Assessment Mode: Examination (theoretical and practical), Oral Presentation and Project.

Entry Requirements: There are no entry requirements for this subject, nor prior knowledge or skills required to complete this subject.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Year 10 – IT Solutions; Year 11 – Information Communications Technology (ICT), Information Processing and technology (IPT) and Information Technology Systems (ITS).

Society and Technology is also beneficial for students interested in the following career pathways: Project Manager, Game Designer, Programmer, Tester, Web Developer, Graphic Designer, System Analyst, Technician, Network Engineer, Helpdesk operation, Database Administration and Client support.



HOME ECONOMICS DEPARTMENT

Year 9 Home Economics – Food and Textiles

Subject Type: Elective

Head of Department: Mrs Leanne Warner
lwarn2@eq.edu.au

Subject Description:

Home Economics (Food) includes the application of nutrition principles and knowledge about the characteristics and properties of food, food selection and preparation, and contemporary technology-related food issues. Students will learn the importance of a variety of foods, sound nutrition principles and food preparation skills when making food decisions to help better prepare them for their future lives.

Home Economics (Textiles) includes the application of textile technologies, production and processes to create textile solutions for design challenges. Students will investigate factors including social, ethical and sustainability considerations to create textile products.

Units of Work:

Semester 1 – Just Make Real Food

- Designing solutions for healthy eating by developing processes through production skills to create quality, healthy food products.

Semester 2 – Creating Fashion

- Creating textile solutions, making choices and applying textile production skills and processes to produce quality textile products.

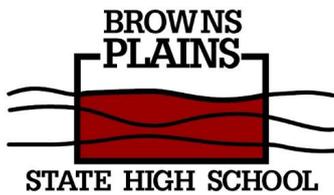
Assessment Mode: Folio (Project)
Practical (Processes and Production Skills)
Written Examination

Entry Requirements: There are no entry requirements for this subject. However, students must have demonstrated safe work habits in practical areas during Year 8.

Further Information: This subject provides a foundation for students interested in exploring the following Senior subject options: Year 10 – Home Economics or Health and Nutrition; Year 11 – Home Economics, Hospitality, Certificate II in Kitchen Operations.

Home Economics (Food) is beneficial for students interested in the following career pathways: Dietician, nutritionist, teacher, health scientist, food scientist, nurse, restaurateur, chef, food stylist, food technologist, function manager, public health educator, food critic, food journalist, animal nutritionist. Home Economics (Textiles) is beneficial for students interested in the following career pathways: Fashion designer, tailor, textile engineer, fashion purchaser, fabric development, fashion sales, machinist, embroiderer.

Cost: Parents/caregivers must be prepared to supply ingredients on a weekly basis in Semester 1 and equipment in Semester 2. As students have chosen this elective, no student is exempt from practical activities.



INDUSTRIAL TECHNOLOGY AND DESIGN DEPARTMENT

Year 9 ITD Metal Bias

Subject Type: Elective

Head of Department: Mr Andrew McDowell
amcdo46@eq.edu.au

Subject Description: Students will develop a range of introductory skills, processes and safety associated with manual handling and manipulation of materials and tools within a workshop environment. Design is in everyday life; students will gain an appreciation of design by using a range of elements that will scaffold their learning. This will give them basic concepts of how materials and tools can be used in conjunction with graphical communication and mathematics to gain required outcomes.

There are three main materials that the students will work with as a bias towards their projects: sheet metal, solid metal and plastics. Within this bias, the students will learn there are also three main categories of tools and machinery used: marking, cutting and finishing. Overall, the purpose of our program is to introduce students to a range of practical and theoretical experience at which they can use in everyday life and or further into the working environment.

Units of Work:

Semester one: Folios included with every unit

Unit One: Safety in the workshop with tools, machines, materials and handling
Acrylic cake slice, plastics manipulation and finishing

Unit Two: Sheet metal tool box with single lid, sheet metal manipulation.

Semester two: Folios included with every unit

Unit Three: Metal structure, material development
Three burr puzzle, acrylic fitting exercise

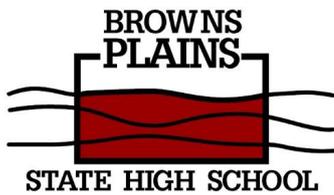
Unit Four: Steam boat, material manipulation and engineering basics
Steam and alternative propulsions.

Assessment Mode: Response to Folio, Projects, Research, Safety, Graphical Communication, Numeracy and Literacy.

Entry Requirements: There are no entry requirements for this subject, nor is prior knowledge or skills required to complete this subject.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Manufacturing, Construction, Engineering or Furnishing.

ITD Metal Bias is also beneficial for students interested in the following career pathways: Architect, Engineer, Trades, Education, Environmental Planner, Landscape designer, or any other built environment.



INDUSTRIAL TECHNOLOGY AND DESIGN DEPARTMENT

Year 9 ITD Timber Bias

Subject type: Elective

Head of Department: Mr Andrew McDowell
amcdo46@eq.edu.au

Subject Description: Students will develop a range of introductory skills, processes and safety associated with manual handling and manipulation of materials and tools within a workshop environment. Design is in everyday life; students will gain an appreciation of design by using a range of elements that will scaffold their learning. There are three main materials that the students will work with as a bias towards their projects: timber, plastics and electronics. Within this bias, the students will learn there are also three main categories of tools and machinery used: marking, cutting and finishing. Overall, the purpose of our program is to introduce students to a range of practical and theoretical experience at which they can use in everyday life and or further into the working environment.

Units of Work:

Semester one: Design folios included with every unit
Unit One: Safety in the workshop with tools, machines, materials and handling;
Board Design, Butt and Biscuit Joint
Unit Two: Serving Tray, Dovetail and Carcase Construction

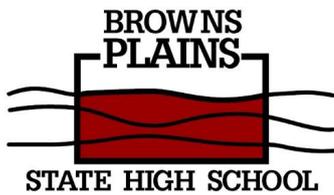
Semester two: Design folios included with every unit
Unit Three: Timber Structure, Material Development, Trinket Box, Finger Joints
Unit Four: Cup Holder Stand Design, Shaping of Material, Through Mortice and Tenon,
Doweling Joints

Assessment Mode: Response to Folio, Projects, Research, Safety, Graphical Communication, Numeracy and Literacy.

Entry Requirements: There are no entry requirements for this subject, nor is prior knowledge or skills required to complete this subject.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Manufacturing, Construction, Engineering or Furnishing.

ITD Timber Bias is also beneficial for students interested in the following career pathways: Architect, Engineer, Trades, Education, Environmental Planner, Landscape Designer, or any other built environment related career.



INDUSTRIAL TECHNOLOGY AND DESIGN DEPARTMENT

Year 9 Design Technology and Graphics

Subject type: Elective - Specialised Program (entry into this subject is based on academic results)

Head of Department: Mr Andrew McDowell
amcdo46@eq.edu.au

Subject Description: Design Technology and Graphics is different from normal ITD subjects as this subject requires a more academic approach catering for students planning to pursue further studies at university. Design technology allows students the opportunity to solve three dimensional problems using the most appropriate material, process, technical knowledge, and skill that is available. Graphics allows students to gain knowledge in graphical design associated in all forms of built environment and design.

Design is the core principle of this subject, acting as the process in which we think out the solution to a problem. This leads on to finding out all the background information about the problem, and factors that affect it by using research techniques.

Students will learn how to recognise a situation that is problematic, analyse the situation, and research a range of methods, materials and mechanisms. They will write a specification for the solution, work out possible solutions, select preferred solutions, draw and plan ahead, construct a prototype, test and evaluate the design, redesign, modify, and write a small report.

Units of Work include:

- Graphics, 3D Modelling, 2D Drawing and Sketching
- The design process
- Production (make)
- Aesthetics and ergonomics
- Materials - properties and uses
- Structures and forces
- Mechanisms, cams, gears, counter weights and linkages
- Pneumatics
- Robotics
- 2D and 3D visual communication design
- 3D printing and scanning
- Environmental designs
- Electronics
- Renewable energy

Assessment Mode: Response to Design Folio, Projects, Research, Safety, Graphical Communication, Numeracy and Literacy.

Entry Requirements: C or higher in Mathematics and English in Year 8.

Further Information: This subject provides a good foundation for students interested in exploring the following Senior subject options: Design Technology and Engineering (OP Eligible students).