Semester One Year 10

Subject Information Booklet

2025

Table of Contents

Semester One Year 10

Subject Information Booklet

A WORD FROM THE PRINCIPAL

The decision to choose particular subjects is important educationally in that it sets the foundation for further education and also points towards possible careers. It is necessary to consider factors in two general areas:

A. the student; *B. the subject.*

A. THE STUDENT

Parents and students should consider the following:

a) ***Past Achievement**. Is the student's past record a good indication of future success? Has the student worked to maximum ability? If the results in Year 8 have not been satisfactory, it may mean the student has not worked, it may mean the student has not liked particular subjects or it may mean the student may not be capable of higher academic results. The staff at the school will be happy to give advice in this area if needed.*

b) ***Aptitude**. Does the student have special talents in areas such as art, music, technology?*

c) ***Ambition**. What does the student hope to do, to achieve, to become? If there are specific career aspirations it would be worth discussing with the Guidance Officer what subjects would best lead to that career. If there are no specific career goals the best idea is to choose subjects that keep most options open.*

d) ***Interests**. Success in a subject is highly correlated with interest in a subject. A look through the Year 8 subjects that the student did best in often indicates those in which they were most interested.*

B. THE SUBJECT

- *There are five 'key' subjects that are compulsory for all students entering Year 9 i.e. English, Health and Physical Education, Humanities - Geography/History, Mathematics and Science. These subjects will ensure students will be developing the essential skills needed as a foundation for further studies.*
- *One elective remains to be chosen, in semester 1 Yr. 10 as well as your English and Maths level.*
- *The information in this booklet will give students and parents a clear idea of content and requirements in each subject available in Semester 1 Yr. 10. Where a student has difficulty in deciding between two subjects, and the factors in "A" have been considered, then a detailed look at the assessment and requirements of each subject may sway the decision one way or another. It is important that all the relevant subject descriptions be read thoroughly by both parents and students before any subject choice is made.*

I wish students an enjoyable and valuable experience in Year 10.

ROSS MCNICHOL
PRINCIPAL

SEMESTER ONE YEAR 10 SUBJECTS

Year 10 Semester 1 students' study six subjects as well as Wednesday afternoon sport. Also in Year 10, students can select their level of English and Maths.

The five compulsory subjects are:	English Health and Physical Education Humanities - Geography/History Mathematics Science
The elective subjects available in 2025 are:	Art Business Venture Creative Design and Technology Dance Design and Graphics Digital Solutions (Interactive Web Design & Programming) Drama Food Technology and Design Physical Education (Extension) Fitness and Recreation Industrial Design and Technology Japanese Media Music **Note: the viability of a subject is based on level of interest and available staff expertise**

BUSINESS

COURSE OUTLINE

Business provides students with a wide variety of opportunities enabling a competitive advantage in business and entrepreneurship across all aspects of business, including business management, legal and accounting in many types of industries, both locally and internationally.

It is critical that students are equipped with the understanding, skills and knowledge that will empower them in the face of real-world challenges. Business will inspire students to shape their business acumen and entrepreneurial skills that contribute to the development of Australian and global societies. Students will be exposed to a number of real-world experiences through the courses below. A number of excursions are required for the courses and students should be aware that these will form a part of assessment.

In Year 10 students can choose to continue their Business Studies from Year 9 (Marketing and Finance) by engaging in Business Finance.

Units of Study:

Business – Venturing into Business

Topics of study

- Innovation vs invention of your own product
- Planning and conducting the annual Market Day
- Concept of business, types of business, records management
- Dynamic efficiencies, risk and rewards

Assessment: Analytical reflection exam and project sales pitch

Excursion: Eat St Markets

PREREQUISITES: *nil*

REQUIREMENTS

- A4 exercise book and general stationery items

Creative Arts ART

COURSE OUTLINE

Art plays a role in the development of the individual. It nurtures critical thinking skills, complex problem solving and the ability to analyse and interpret the work of self and others. Students will experience the following throughout their course of study:

- photography
- drawing
- painting
- printmaking
- sculpture
- study of artists and their respective works within a cultural, contemporary, formal and personal context
- computer manipulations.

PREREQUISITES

Study of Art in Year 8 (and 9) is desirable, but not mandatory.

ASSESSMENT

Each unit will include:

1. Practical body of work for each unit of work undertaken
2. Written assignment

REQUIREMENTS

- 1 x 2B pencil
- 1 x soft eraser
- 1 x A4 Visual Art diary
- 1 x USB
- 1 x headphones or ear buds

Excursions to art galleries may incur a small fee for transport and admission.

WHY STUDY DANCE?

Dance is a human activity of ancient tradition and an evolving form of expression. Different cultures throughout history have refined and manipulated movement to communicate meaning through the symbol systems of dance. As an aesthetic means of ordering movement into an expressive code, dance involves structuring gesture and motion to capture and convey ideas, images and feelings, and use the human body as the instrument of communication. In this syllabus, the major focus is on dance as art while also promoting an understanding of the social and ritual functions.

PREREQUISITES

An understanding that it is a practical based subject and therefore students must enter the subject with a willingness to perform and communicate with and in front of others.

COURSE CONTENT

The study of Dance is enriched by experiences in making and responding. Through the creative process of making (*Choreography),* students learn how patterns of movement are combined and structured in space with dynamics to create meaning, to express personal or social ideas and to tell stories. The skills of communication, improvisation, personal problem-solving, group decision-making, and planning and organising are fostered in this process.

In making (*Performance),* unique technical and expressive demands of dance are developed. Students develop their personal expressive power to convey meaning through dance to an audience. They are rewarded by a sense of achievement and satisfaction through the physical expression of a creative idea. Students can build self-confidence and physical capabilities through experiencing a variety of dance techniques.

Responding to dance involves understanding how and why dance is made, the techniques used in its design and the stylistic elements that place it in a particular context. The student learns to value their own and others' aesthetic responses to dance.

ASSESSMENT

Assessment techniques may include the following:

- The creation of dance works, section or movement sequences (devised individually and in pairs or groups) which may be a combination of improvised and prepared material, or adapted from an existing dancework.
- The performance of dance works, sections or movement sequences (individually and in pairs or groups) which may be an adapted repertoire, a technique class or a teacher or student-choreographed sequence.
- Written and oral tasks such as critiques and reviews of live and video performances, research assignments and written responses.

REQUIREMENTS

- Dance apparel – black tights and black singlet for girls. Black shorts and black singlet for boys.
- 48-page exercise book or A4 lecture pad
- 64-page scrapbook
- Students are expected to rehearse both in and out of lesson time and to provide any extra basic costumes and props that are not available through the department.
- At times, students may be required to attend performances and workshops at an extra cost.
- Class work will be performed at school events e.g., Parade, PAN, Dance Night (Term 4) etc.

Creative Arts DRAMA

Drama is one of the oldest art forms. It is the making and communicating of meaning involving performers and audiences, engaging people in a suspension of disbelief in order for them to enter a fictional world. Drama offers students a unique means of inquiry that contributes to the knowing and understanding of themselves and the world.

PREREQUISITES

An understanding that it is a practical based subject and therefore students must enter the subject with a willingness to perform and communicate with and in front of others.

COURSE OUTLINE

Students who study Drama are actively participating in an experiential mode of learning that blends intellectual and emotional experience.

Whether a student selects Drama once, or multiple times over Years 9 and 10, they will experience a different and engaging course of study. **Units of study will be a mixture of the follow topics.** This is dependent on the number of students and classes.

Units of Study

- Drama On Screen
- Enter a Character (directing, acting, stagecraft)
- What's Your Story (devising and improvisation)
- Physical Theatre

ASSESSMENT

Assessment includes a variety of instruments; improvisations, polished student-devised or scripted drama, written analysis, and practical demonstrations.

Practical assessment will occur in small groups and pairs.

REQUIREMENTS

- Students are expected to rehearse both in and out of lesson time and to provide any extra basic costumes and props
- At times, students may be required to attend outside performances or workshops and an extra cost will apply
- Students may engage in additional out-of-hours rehearsals in preparation for performance.

WHY STUDY MEDIA?

Media is forever evolving and has a crucial impact on consumers. Media is the making and communicating of meaning involving film, television, newspapers, computers, mobile devices and the ever-changing internet. Media provides a medium for social criticism, entertainment and is explored through the dimensions of *designing, producing* and *critiquing.*

Students who undertake Media are actively participating in a mode of learning that blends intellectual and emotional experience, offering students a unique means of enquiry that contributes to the knowing and understanding of themselves and the world.

PREREQUISITES

An understanding that it is a theory and practical based subject and therefore students must enter the subject with a willingness to spend their own time for editing and filming tasks. These aspects of the course can be time-consuming due to the technical proficiency required.

COURSE OUTLINE

This course is designed to:

(a) provide opportunities to assist each student to achieve his/her unique potential through the various methods of assessment – designing, producing and critiquing;
(b) develop learners' knowledge and understanding of scriptwriting, editing, storyboarding, and developing multi-modal presentations;
(c) foster confidences and self-discipline in social interaction;
(d) develop skills in interpersonal relationships and teamwork;
(e) create a bridge for students wishing to undertake *Film, Television and New Media* in Years 10, 11 and 12.

Current units of study in the Media course include: exploring the history of media; examining the genres of reality TV, analysing film genre conventions and; applying filming and editing techniques.

ASSESSMENT

Students will complete practical and written assessment in the areas of ***Making and Responding*** (e.g., scriptwriting, storyboarding); ***Producing*** (filming and editing a mini-movie montage); and ***Critiquing*** (e.g., multi-modal presentations, biography, persuasive speech, spoken critique).

Assessment will occur in small groups, pairs and individually.

REQUIREMENTS

- 1 x 48-page A4 exercise book and USB
- Students are expected to rehearse both in and out of lesson time and to provide any extra basic costumes and props for any productions.

Creative Arts MUSIC

COURSE OUTLINE

Music is an integral part of our lives and is an important part of any student's educational development, whether they undertake the course for enjoyment and developing their music appreciation or aim for further study. This course is designed to develop the ability and knowledge of students at all standards of music experience through the study of two dimensions:

1. Making – singing or playing an instrument and creating original music
2. Responding – analysis and evaluation

This course focuses on students creating and performing music and developing the ability to think and express themselves through sound. This is achieved through real-life learning experiences, with a strong emphasis on technology-based skills using specialised applications, software and recording equipment.

In Year 10 students continue to build on and develop their skills through the study of three units: *Music For Film and Television, Earworms and Music To Move To. Note* – If Year 10 Music runs for one semester, only Music for Film and Television will be offered.
Practical areas which students may study include: guitar, keyboard, voice or another instrument of own choice.

PREREQUISITES

While it is advantageous for students to have completed, enjoyed and been successful at Year 7, 8 and 9 Music, it is not necessary to have studied Music before Year 10.

ASSESSMENT

Music students are assessed in all three dimensions listed above. Assessment includes a variety of performance, composition, listening and written tasks.

RECOMMENDATIONS

Generally, students wishing to take Music in Years 11 and 12 should have studied Music in Years 8, 9 and 10. Music teaches students many lifelong skills and is recommended for various fields of employment such as music teacher, performer, musician, sound mixer or editor, composer, music therapy, primary and early childhood teaching, instrument repairer and child-care worker.
Classroom Music students are encouraged to participate in the school's ensembles including Concert Bands, String Ensembles, Stage Bands and Vocal Ensembles.

REQUIREMENTS

- 1 x 96-page music exercise book (including manuscript)
- USB (minimum 8GB), headphones, adapter for connecting phone to laptop, 20-page display folder.

DIGITAL TECHNOLOGIES

Digital Technologies is a subject designed to give students an opportunity to use computer technology in practical, engaging and, most of all, enjoyable ways. Units are focused on providing students with tangible products that they can design and develop. In Digital Technologies we focus on using Industry Standard software (such as Unity and Unreal Engine for Game Design and the Adobe Creative Suite Web Applications) to create products of increasing complexity. In Year 9, we explore the future of technology through topics such as Game Design, Virtual Reality, Smart phone applications, Web Design and Electronics.

Units of Study

Digital Solutions (Interactive Web Design & Programming)

- Designing and developing interactive web applications
- Creating and styling web pages using HTML, CSS and JavaScript
- Creating dynamic web forms with form validation
- Working with databases to store and retrieve data for web applications
- Creating dynamic web pages using server-side scripting (e.g., PHP, Python, Node.js)

ASSESSMENT: Assessment will be largely practical projects that are completed during class time and focus on the particular computer software program and emerging technology being studied for that unit.

PREREQUISITES for all Digital Technology Subjects

Students entering Digital Technologies will be given every chance to perform at his or her best in the use of the various packages. No prior knowledge is needed but it could be advantageous.

REQUIREMENTS for all Digital Technology subjects

A positive attitude centred on engaging in all tasks presented, focussing on meeting and overcoming all challenges. All students should have a USB for backup purposes.

ENGLISH

INTRODUCTION

In Years 11 and 12 students are able to choose an English course that is aligned with their future pathway and interests. The English choices in Year 11 are:

- Essential English
- General English
- English as an Additional Language
- English Literature

In year 10, students are able to study a course in any of the first three choices. Each of these courses will continue to cover the P-10 Australian Curriculum and the topics within each course have been aligned to prepare students for the respective course in Years 11 and 12. English Literature is available in Year 11 and 12 and **only** to students who achieve a B result or above in General English.

The intention is for students to be totally prepared for their senior studies and to be aware of all options available to them, to make the appropriate subject choices for Years 11 and 12.

Students entering Year 10 must select an English subject from the following list:

- Essential English
- General English
- English as an Additional Language

Health Sciences HEALTH AND PHYSICAL EDUCATION

COURSE OUTLINE

Health and Physical Education is a core subject for Year 10.

The **Health and Physical Education Program (HPE)** is designed to develop a positive attitude to one's health, fitness and a lifelong enjoyment of sport. It exposes students to a variety of popular 'Physical Activities' enjoyed in the wider community. The accompanying theory units of work address *broad* 'Health' and 'Personal Development' issues.

Year 10 Health and Physical Education			
Year 10		**Semester 1**	
	Theory	Community Health	Sport First Aid & CPR
	Practical	Ultimate Disc	Flag Football

PREREQUISITES

Students must be prepared to participate in all areas of the course - both physical and theoretical elements. Students are also expected to demonstrate skills learned in class by participating in intra-school activities as a member of a House.

ASSESSMENT

Assessment in Health and Physical Education will consist of class exams, written assignments and oral/multimodal presentations. In practical areas students are assessed within simple and complex performance environments.

REQUIREMENTS

- Health and Physical Education has a theory component and students will require their laptop, a notebook and writing equipment. Homework and assignments will be set and it is advisable for students to manage their time to complete these tasks.
- Each student will be required to wear the correct PE uniform to practical lessons. This uniform is outlined in the school uniform guide and includes the ***school cap*** or ***bucket hat***.
- Students who are injured/sick or out of uniform **must** provide a note from home explaining the circumstances.
- Fees for outside venues may be incurred

Health Sciences PHYSICAL EDUCATION (EXTENSION)

COURSE OUTLINE

Students will be able to select **Health and Physical Education (Extension)** in Semester 1 Year 10. Once students have chosen this, they will be asked to choose which strand they wish to study that being either Physical Education (Extension) or Fitness and Recreation. Each strand is designed to meet the needs of students who have previously displayed potential in physical and theoretical performance in Year 7 to 9 HPE. These courses will be aligned with Semester 2 electives and Year 11 and 12 pathways in either Health Education, Sport and Recreation, Physical Education and Certificate III in Fitness.

STRAND 1

The **Physical Education** strand is a physically and academically challenging subject. Students will experience *specific* units aimed at developing improved individual performance and achievement. The subject will serve to further develop each student's learning potential with a view to preparation for Senior Physical Education and a possible career in the Health/Medical Science, Sports Science and Sporting Industries.

The subject's emphasis is on the integration of both physical and theoretical units enabling student's learning to take place *in* and *through* physical activities. The program differs from the Year 8 and 9 core HPE program through its *specialised* physical activities and core subject matter.

The unit overview is as follows:

Semester 1 Year 10			
		Term 1	**Term 2**
Year 10	**Theory**	Energy Systems	Equity and Access
	Practical	Basketball	AFL

STRAND 2

Fitness and Recreation strand includes both **physical and academic** aspects of the recreation and fitness industries. Students will experience specific units aimed at developing the student's knowledge of the human body in different exercise contexts and the role of recreational pursuits in maintaining an active lifestyle. The subject will serve to further develop each student's learning potential with a view to preparation for Senior Recreation applied subject and Certificate III in Fitness subjects and a possible career as a Group Fitness Instructor, Personal Trainer, Coach and Physical Education teacher.

The physical activity aspect of the subject covers both gym-based training sessions and programs as well as recreational individual and team activities. The theoretical aspect of the subject introduces students to topics relevant to the fitness and recreation industries. The program differs from the Year 10 core HPE program through its range of physical activities and core subject matter specifically related to the senior phases of aforementioned subjects.

The course overview is as follows:

Semester 1 Year 10			
		Term 1	**Term 2**
Year 10	**Theory**	Anatomy and Fitness Components	The Recreation Industry
	Practical	Individual Fitness Programs	Various physical activities

PREREQUISITES

Students must be prepared to participate in all areas of the course - both physical and theoretical elements.

ASSESSMENT

Assessment occurs in both the theory and physical areas. Each unit of work will comprise of a practical and theoretical component. These components are integrated and are of equal value. There will be one piece of theoretical assessment per term. Assessment instruments include written assignments, oral/multimodal presentations, and written exams.

REQUIREMENTS

- HPE Extension has a theory component and students will require their laptop, a notebook and writing equipment. Homework and assignments will be set and it is advisable for students to manage their time to complete these tasks.
- Each student will be required to wear the correct PE uniform to practical lessons. This uniform is outlined in the school uniform guide and includes the ***school cap*** or ***bucket hat***.
- Students who are injured/sick or out of uniform **must** provide a note from home explaining the circumstances.
- Fees for outside venues may be incurred.
- Students in this subject for year 10 will need a mouthguard for AFL.

HUMANITIES - GEOGRAPHY/HISTORY

GEOGRAPHY

Geography provides students with opportunities for critical and higher order thinking. Students are required to developing an understanding of both simple and complex situations which impact on all of us as citizens. These are looked at, at local, national and global levels. Through the study of Geography, students will come to recognise, interpret and understand how natural processes and human activities shape our world. Geography essentially focuses on examining why things are located where they are and how this then influences human development.

Some of the topics covered are:

- Biomes and food security
- Global connections
- Health and wellbeing
- Migration of people

HISTORY

History is the study of people, events and place over time. A strong emphasis is made in this course in linking events from the past with issues and developments of the present. Following on from Year 7 there is a continuation on building historical skills. These include: use of historical terms and concepts, comprehending, analysing and evaluating primary and secondary sources and synthesising information from a variety of sources and perspectives

Some of the units studied include:

- The Industrial Revolution
- World War 1
- Human Rights and Freedoms

PREREQUISITES

Nil - essential subject.

ASSESSMENT

Assessment for both subjects reflect those which are required in the Senior School. The skills for these assessment types are taught and practiced throughout the two years. A wide variety of assessment types are used to cover a variety of learning styles. These can include; in class exams, extended written responses, research pieces, multimodal and non-written responses.

REQUIREMENTS

- A4 exercise book with ring-binder folder and plastic pocket sleeves for holding worksheets and materials.
- General stationery items

INDUSTRIAL DESIGN AND TECHNOLOGY

COURSE OUTLINE

Industrial Design and Technology is designed to develop in students, an appreciation and positive attitude towards some of the many construction methods used to build and finish practical projects. It encourages students to consider the type of techniques that are used to construct ideas and designs from wood, steel and plastic.

There are also a number of projects embedded in the course which teach students the design process. Participants are required to consider the impact that construction methods and material may have on the environment. Students will engage in technologies such as the laser cutter, vacuum former and electronics during the course. The course is designed to provide students with both practical and design skills. Students who are not looking for a future in the 'Trade' aspect of the course, may wish to participate for the sole purpose of improving their practical skills to use later in life. Examples of units covered in the elective course may include:

Possible Units of Study

Industrial design and Technology: Furnishing

COURSE OUTLINE: Units covered may include the following:
Camp Chair
Ottoman

Industrial design and Technology: Electronics

COURSE OUTLINE: Units covered may include the following:
Docking station
Eco LED Lamp

Industrial design and Technology: Engineering

COURSE OUTLINE: Units covered may include the following:
Utility trolley
Junior hacksaw

ASSESSMENT

Assessment will consist of the completion of the designated Design Folios for each project. This requires the student to use the relevant subject technologies.

PREREQUISITES

Students must be prepared to participate in all areas of the course - both practical and theoretical elements. A positive and determined attitude is the best prerequisite.

REQUIREMENTS

- Each student will be required to wear the personal protective equipment which can be purchased from the uniform shop. PPE consists of clear safety glasses and an apron.
- 1 x A4 note book, HB pencil with eraser

Industrial Design and Technology

CREATIVE DESIGN AND TECHNOLOGY

COURSE OUTLINE

Creative Design and Technology is designed to develop an appreciation and positive attitude towards some of the many interesting skills and finishes students may use when building a functional, yet decorative item. This course provides students with an insight into the experiences and materials they may encounter in interior design.

This course is suited to those students who enjoy 'soft furnishings' and is a popular subject providing greater access to our workshops for students who enjoy an alternative to the traditional IDT subject. Students may wish to participate for the sole purpose of improving their practical skills to use later in life. Examples of units covered in the elective course may include:

Possible Units of Study

Creative Design and Technology – Coasters/Cutting Board and Trivet

COURSE OUTLINE: Units covered may include the following:

Unit 1A - Drink Tile Coasters

Unit 1B - Cutting Board and Trivet for the kitchen

Creative Design and Technology – Shadow Box/LED Clock

COURSE OUTLINE: Units covered may include the following:

Unit 2A - Shadow Box

Unit 2B - LED Clock

Creative Design and Technology – Jewellery/Jewellery Box

COURSE OUTLINE: Units covered may include the following:

Unit 3A - Personal Jewellery

Unit 3B - Jewellery Box

Creative Design and Technology – Picture Frames/Pinboard

COURSE OUTLINE: Units covered may include the following:

Unit 4A - Mirrored Picture Frames

Unit 4B - Pinboard - Fabric and ribbon display

PREREQUISITES

Students must be prepared to participate in all areas of the course – both practical and theoretical elements. Students will be required to provide some materials for each project. A positive and determined attitude is the best prerequisite.

ASSESSMENT

Assessment in Creative Design and Technology will consist firstly of the completion of the practical construction of the item, then secondly the completion of the accompanying theoretical unit of work for each term.

REQUIREMENTS

- HB Pencil with eraser. Each student will be required to wear the personal protective equipment. This can be purchased from the uniform shop. PPE consists of safety glasses and an apron. This is compulsory.

Industrial Design and Technology

DESIGN AND GRAPHICS

The Design and Graphics course is designed to develop in students an appreciation and positive attitude towards the design process. It also encompasses an appreciation of some of the many areas in which the design process is used to solve a design problem. Students use a variety of presentational technologies. These include: annotated hand drawings, computer graphics programs, model construction, laser cutting and 3D Printing.

Participants are required to consider the impact that their design solutions have on the environment. The course is designed for those who have an interest in solving design problems. This course is of benefit to students wishing to pursue careers or interests in architecture, engineering, industrial design, interior design, graphic design or any of the trades. Examples of units covered in the elective course may include:

Possible Units of Study

Design and Graphics: Architecture

COURSE OUTLINE: Units covered may include the following:

- Revit House Model using CAD (Revit)
- Re-design of a post war home using CAD (Revit)
- Design a technology lab extension on an existing building using CAD (Revit)

Design and Graphics: Product Design

COURSE OUTLINE: Units covered may include the following:

- Toy Design using CAD (Inventor)
- Packaging design using CAD (Inventor)

Design and Graphics: Digital Manufacturing

COURSE OUTLINE: Units covered may include the following:

- Modelling and making Fidget Spinner using CAD (Inventor) and 3D Printer
- Modelling and making Miniature Model Furniture using CAD (Inventor), 3D Printer

Design and Graphics: Reverse Engineering/Redesign

COURSE OUTLINE: Units covered may include the following:

- Reverse engineering and redesign of Pencil Sharpener using the CAD (Inventor)
- Reverse engineering and redesign of Jockey Wheel using CAD (Inventor)

ASSESSMENT

Assessment will consist of the completion of the designated Design Folios for each project. This requires the student to use the relevant subject technologies.

PREREQUISITES for all Design and Graphics Subjects

Students must be prepared to participate in all areas of the course - this includes hand drawing and design, computer graphics and related technologies, which include laser cutting and 3D printing on occasions. A positive and determined attitude is the best prerequisite.

REQUIREMENTS for all Design and Graphics subjects

- A4 notebook
- HB pencil with eraser and ruler
- School laptop device for homework

Industrial Design and Technology

FOOD TECHNOLOGY AND DESIGN

COURSE OUTLINE

The emphasis of each elective unit in Food Technology and Design is the elements and principles of cookery. Students will experience the world of contemporary food production where they will apply knowledge to practical food situations. The components of units are both practical and theoretical and the students will be required to participate in weekly take home cookery depending upon the theme of the unit. Students will be responsible for bringing their own ingredients to school to complete the set cookery challenges. Examples of units covered in the elective course may include:

Possible Units of Study

Food Technology and Design: Kids in the kitchen

COURSE OUTLINE: Units covered may include the following:

- Knife skills, kitchen management, interpreting and altering recipes, technology in the kitchen
- Cooking with carbohydrates, emphasis on pasta and rice cooking, perfecting sauces

Food Technology and Design: Food to you

COURSE OUTLINE: Units covered may include the following:

- Meal planning for families, development of recipe cards, production of a cookery video
- Production of gourmet gift baskets focusing on food preservation, label design

Food Technology and Design: All about baking

COURSE OUTLINE: Units covered may include the following:

- Pastries, batters and yeast doughs with emphasis on the production and preparing baked goods
- Basic piping techniques

Food Technology and Design: Sew it up

COURSE OUTLINE: Units covered may include the following:

- Textiles design with the emphasis on design and production of items to be used for personal use and items that can be used in the kitchen if selecting a cooking elective.

ASSESSMENT

The students will complete practical design projects that incorporate a combination of practical and theoretical components. Students will be assessed on textile production and continuous cookery, set practical tasks and a written assignment.

PREREQUISITES for all Food Technology and Design subjects

No prior knowledge is needed but it could be advantageous.

REQUIREMENTS for all Food Technology and Design subjects

Students should have a named bag large enough to carry cooked items. Students will be required to supply their own cookery ingredients and a non-stick brownie slice tray and a round spring form pan 25 cm

Students selecting textiles will be given a list of requirements once their project has been selected.

LOTE JAPANESE

WHY STUDY LANGUAGES?

There is more to studying a foreign language than being able to speak it. Learning an additional language helps you to live and learn as part of our *global community*. It gives *you insights into other cultures*, as well as the *language and communication skills* to interact with members of local and international communities. The ability to speak an additional language can help you gain a competitive edge in the job market and is valued in areas such as tourism and hospitality, business, international relations and diplomacy, education and communications. This ability also opens up opportunities to study abroad, and to travel and live-in parts of the world that would not have been possible without the local language.

UNITS

Learning a language also involves learning about people and culture. You will study a wide variety of topics drawn from key themes across Year 9 and Year 10 developing essential vocabulary, grammar, script knowledge and cultural understanding.

Year 10 Japanese		
Year 10	**Term 1**	**Term 2**
	Homestay	Shopping

LEARNING ACTIVITIES

Learning a language requires communicating in meaningful and realistic situations. You will use the skills of listening, reading, speaking and writing in activities such as:

- Listening to radio broadcasts, television programs, webcasts and podcasts
- Viewing videos and films
- Communicating with students in other schools and countries
- Holding debates or participating in discussions
- Reading articles, cartoons, short stories, poems and song lyrics

ASSESSMENT

Your ability to communicate is what is being assessed. You will need to show that you can understand and convey meaning in the spoken and written language. You may be assessed, for example, by:

- Answering questions about Japanese spoken and written texts
- Engaging in conversations and interviews
- Writing letters, emails, diary entries, stories, etc.
- Application of language mechanics (spelling, conjugations, kanji reading, etc.)

SUPPORT

Your parent/s or guardian/s can help you by:

- Discussing the culture and related current events with you
- Attending cultural events with you
- Encouraging students to use their skills whenever possible (eating at a Japanese restaurant, watching a foreign film)
- Encouraging student exchange or participation in the video chats with students in Japan
- Showing interest in what you are learning and by providing a supportive home environment

RECOMMENDATION

Japanese is a **continuous curriculum**. To keep your senior options open and for the best pathway for success in Japanese, it is advisable that you **complete two semesters (preferably consecutive) of Japanese study over the next 18 months.**

REQUIREMENTS

- 1 x 96 page A4 notebook
- 2 x A4 display folders
- Head phones

MATHEMATICS

INTRODUCTION

In Years 11 and 12 students are able to choose a Mathematics course that is aligned with their future pathway and interests. The mathematics choices available are:

- Essential Mathematics
- General Mathematics
- Mathematical Methods
- Specialist Mathematics*

In Year 10, students must choose to study an introductory course for each of these subjects (* not including Specialist Maths). Each of these courses will continue to cover the P-10 Australian Curriculum but the emphasis, on each of the topics in the curriculum, has been modified to prepare students for the respective course in Years 11 and 12. For example, the Introduction to Mathematical Methods course contains a greater emphasis on algebraic skills. In addition to this students' choosing Mathematical Methods will be extended to include skills necessary for Specialist Maths in Year 11 and 12. Students will also be exposed to the variety of skills necessary to successfully complete assessment for each of the subjects.

The goal is to better prepare students for their senior studies and also to assist students in making appropriate subject choices for Years 11 and 12.

Students who intend to study Mathematical Methods in Years 11 and 12, must study Introduction to Mathematical Methods in Year 10 and achieve a C+ or better. This is because the introductory course provides intensive study of the prerequisite skills for Mathematical Methods. Students who intend to study Specialist Mathematics in Years 11 and 12 must have completed the Introduction to Mathematical Methods course and achieved a C+ or better.

Students who intend to study General Methods in Year 11 and 12, must study Introduction to General Mathematics in Year 10 and achieve a C+ or better or Introduction to Mathematical Methods and achieve a C. Students who study Introduction to Essential Mathematics in Year 10 must choose Essential Mathematics in Years 11 and 12.

Students entering Year 10 must select a mathematics subject from the following list:

- Introduction to Essential Mathematics
- Introduction to General Mathematics
- Introduction to Mathematical Methods

An outline of each of these subjects is given on the next few pages.

INTRODUCTION TO ESSENTIAL MATHEMATICS

RATIONALE

Essential Mathematics is designed for students with a wide range of needs and aspirations. It provides students with access to authentic trade, industry and business environments and community connections. Students will learn within a practical context related to general employment and successful participation in society, drawing on the mathematics used by various professional and industry groups. The benefit of Essential Mathematics goes beyond traditional ideas of numeracy, requiring greater emphasis on estimation, problem solving and reasoning, with the aim of developing thinking citizens who interpret the world mathematically, and use mathematics to make informed predictions and decisions about personal and financial priorities. The major themes of Essential Mathematics are every day, life-related and practical applications of number, geometry, measurement, financial mathematics, probability and statistics.

COURSE OUTLINE

The **Introduction to Essential Mathematics** course is based on the P-10 Australian curriculum and will cover the three strands, Statistics and probability, Measurement and geometry and Number and algebra to ensure students have the foundation skills for the Essential Mathematics course in Years 11 and 12.

ALIGNMENT TO YEAR 11 AND 12

The **Introduction to Essential Mathematics** course is directly aligned to Year 11 and 12 Essential Mathematics through the content and assessment.

ALIGNMENT TO FURTHER QUALIFICATIONS

A sound achievement or better in Essential Mathematics provides students with the Numeracy credit needed for QCE eligibility.

ALIGNMENT TO FUTURE CAREERS

Essential Mathematics provides the numeracy skills necessary for a wide variety of careers where a knowledge of mathematics is not necessary.

PREREQUISITES

Nil

ASSESSMENT

The assessment for this course will mirror the form and frequency of the summative assessment requirements in Years 11 and 12. The assessment will consist of a problem solving and modelling task and an end of semester test each semester. Problem solving and modelling tasks will require students to demonstrate their skills in mathematical modelling and report writing. The assessment will require students to:

- recall and use facts, rules, procedures and definitions
- apply mathematical concepts and techniques to solve problems
- explain mathematical reasoning to justify procedures and decisions
- evaluate the reasonableness of solutions
- communicate effectively using mathematical, statistical and everyday language and conventions
- make decisions about choice of technology and use the technology to solve problems.

REQUIREMENTS

- 1 x 256-page A4 exercise book, ruler, pens/pencils, protractor, compass and a calculator.
- The minimum requirement for this course is a scientific calculator e.g., Casio fx-82AU PLUS II which can be purchased from the school Uniform Shop.

INTRODUCTION TO GENERAL MATHEMATICS

RATIONALE

General Mathematics is designed for students who want to extend their mathematical skills beyond Year 10 but whose future studies or employment pathways do not require knowledge of calculus. Pathways include trades, and further educational training or university courses in areas such as economics, psychology, business and the arts. The major themes of General Mathematics are life-related and practical applications of number and algebra, geometry and measurement, and probability and statistics, building on the content of the P-10 Australian curriculum.

COURSE OUTLINE

The **Introduction to General Mathematics** course is based on the P-10 Australian curriculum and will cover the three strands, Statistics and probability, Measurement and geometry and Number and algebra to ensure students have the foundation skills for the General Mathematics course in Years 11 and 12.

ALIGNMENT TO YEAR 11 AND 12

The **Introduction to General Mathematics** course is directly aligned to Year 11 and 12 General Mathematics through the content and assessment.

ALIGNMENT TO FURTHER QUALIFICATIONS

General Mathematics is a prerequisite for courses such as Bachelor of Surveying, Bachelor of Building Design, Bachelor of Urban Planning, Bachelor of Aviation, Bachelor of Education, Bachelor of Biomedical Science, Bachelor of Medical Studies, Bachelor of Sport and Exercise Science, Bachelor of Hotel and Tourism Management, Bachelor of Science and Bachelor of Information Technology.

ALIGNMENT TO FUTURE CAREERS

Building or construction manager, site manager, property developer, banking and financial services, pilot, tourism, small business management, international business and commerce, early childhood education, primary and secondary education, industrial designer, designer for medical applications, pharmaceutical and medical technology industries, community nutritionist, sports dietitian, food safety.

PREREQUISITES

Nil

ASSESSMENT

The summative assessment for this course will mirror the form and frequency of the summative assessment requirements in Years 11 and 12.

The assessment will consist of a problem solving and modelling task and an end of Semester test each semester. Problem solving and modelling tasks will require students to demonstrate their skills in mathematical modelling and report writing. The assessment will require students to:

- recall and use facts, rules, procedures and definitions
- apply mathematical concepts and techniques to solve problems
- carry out investigations and analyse the results

- construct mathematical models in a range of situations
- explain mathematical reasoning to justify procedures and decisions
- evaluate the reasonableness of solutions
- communicate effectively using mathematical, statistical and everyday language and conventions
- make decisions about choice of technology and use the technology to solve problems.

REQUIREMENTS

- 1 x 256-page A4 exercise book, ruler, pens/pencils, protractor, compass and a calculator.
- The minimum requirement for this course is a scientific calculator e.g., Casio fx-82AU PLUS II which can be purchased from the school Uniform Shop.

INTRODUCTION TO MATHEMATICAL METHODS

RATIONALE

Mathematical Methods is designed for students whose future pathways may involve the application of mathematics and statistics in a range of disciplines at the **tertiary level** including natural and physical sciences (especially physics and chemistry), mathematics and science education and health sciences (including human biology, biomedical science, nanoscience and forensics), engineering (including chemical, civil, electrical and mechanical engineering, avionics, communication and mining), and computer science (including electronics and software design). The major themes of Mathematical Methods are life-related and abstract applications of calculus and statistics.

COURSE OUTLINE

The **Introduction to Mathematical Methods** course is based on the P-10 Australian curriculum and will cover the three strands, Statistics and probability, Measurement and geometry and Number and algebra but will have a greater emphasis on algebra, functions and their graphs and probability to ensure students have the foundation skills for Mathematical Methods course in Years 11 and 12.

Students who choose to study **Introduction to Mathematical Methods** in Year 10 may be invited to participate in the Year 10 EDGE class. Students in this class will have the opportunity to engage with some of the foundational skills for **Specialist Mathematics**.

ALIGNMENT TO YEAR 11 AND 12

The **Introduction to Mathematical Methods** course is directly aligned to Years 11 and 12 Mathematical Methods through the content and assessment.

ALIGNMENT TO FURTHER QUALIFICATIONS

Mathematical Methods is a prerequisite for university courses such as Bachelor of Business, Bachelor of Engineering, Bachelor of Computer Science, Bachelor of Medical Studies, Bachelor of Health Studies, Bachelor of Para-medicine, Bachelor of Physiotherapy and Bachelor of Pharmacy. (Note: Mathematical Methods and Specialist Mathematics are assumed knowledge for a wide variety of university courses.)

ALIGNMENT TO FUTURE CAREERS

Corporate finance, investment banking, financial analyst, public and private sectors in energy, transportation, manufacturing, construction, telecommunications, pilot, engineer, land development, mining, town planning, general practitioner, medical specialist, exercise science specialist, sport and recreation manager, medical research, software design and development, veterinarian, statistician.

PREREQUISITES

Nil

(Note: Students will find this subject extremely difficult if they have not achieved a C+ or better in Year 9 Mathematics.)

ASSESSMENT

The summative assessment for this course will mirror the form of the summative assessment requirements in Years 11 and 12. Problem solving will be a significant part of this assessment.

The assessment will consist of a problem solving and modelling task and an end of Semester test each semester. Problem solving and modelling tasks will require students to demonstrate their skills in mathematical modelling and report writing. The assessment will require students to:

- recall and use facts, rules, procedures and definitions
- apply mathematical concepts and techniques to solve problems
- carry out investigations and analyse the results
- construct mathematical models in a range of situations
- explain mathematical reasoning to justify procedures and decisions
- evaluate the reasonableness of solutions by assessing strengths, implications and limitations of solutions and/ or models, considering if alternative models or refinements are required
- communicate effectively using mathematical, statistical and everyday language and conventions
- make decisions about choice of technology and use the technology to solve problems.

REQUIREMENTS

- 1 x 256-page A4 exercise book, ruler, pens/pencils, protractor, compass and a calculator.
- The minimum requirement for this course is a scientific calculator e.g., Casio fx-82AU PLUS II which can be purchased from the school Uniform Shop.
  (Note: It will be mandatory for students to purchase a Casio fx-CG20AU or fx-CG50AU calculator (approx. $220) for Years 11 and 12 if they continue to study Mathematical Methods. This calculator could be purchased for Year 10 if students are confident that they will continue their study of Mathematical Methods in Years 11 and 12.)

SCIENCE

COURSE OUTLINE

The Junior Science program aims to nurture students' innate curiosity about the living and non-living parts of the world around them.

In Semester 1, Year 10 students will study each of the following five senior science topics in greater depth:

- **Biology** - Students explain the processes that underpin heredity and evolution. Students analyse how the models and theories they use have developed over time.
- **Chemistry** - Students analyse how the periodic table organises elements and explain how different factors influence the rate of chemical reactions.
- **Physics** - Students explain the concept of energy conservation and apply relationships between force, mass and acceleration to predict changes in the motion of objects.
- **Earth and Environmental Science** - Students describe interactions and cycles within Earth's spheres, and evaluate the evidence for scientific theories that explain the origin of the universe and the diversity of life on Earth.

During Semester 1 Year 10, students undertake a range of investigations to further develop their inquiry skills. They control variables, collect data, consider safety, analyse data and identify relationships between variables. They evaluate their and others' methods from a scientific perspective and use appropriate language and representations when communicating their findings and ideas to specific audiences.

PREREQUISITES

Science is studied as a compulsory subject. There are no prerequisites.
The Year 10 program will provide students with a solid grounding for the Semester 2 science electives and the Year 11 and 12 science subjects:

- Biology
- Chemical
- Psychology
- Physics

ASSESSMENT

The summative assessment for this course will include the following types of assessment:

- Student Experiment - carry out an experiment to generate and analyse primary data
- Research Investigation - research, collect, analyse and draw conclusions about secondary data and information
- Written Test - combination of multiple-choice, single-word, sentence or short paragraph responses and data-based questions

REQUIREMENTS

- 2 x 128-page A4 exercise book
- pencil case containing pens