



Terrigal High School

# STAGE FIVE

# SUBJECT SELECTION GUIDE

A guide for students entering  
into Year 10 in 2021

## Table of Contents

|  |         |
|--|---------|
| Key Dates.....                           | 3       |
| School Directory.....                    | 3       |
| Curriculum Information.....              | 4       |
| Online Subject Selection Process.....    | 5       |
| Material Costs.....                      | 5       |
| Mandatory Courses.....                   | 6 & 7   |
| Aboriginal Studies.....                  | 8       |
| Agricultural Technology.....             | 9       |
| Big History.....                         | 10      |
| Child Studies.....                       | 11      |
| Commerce.....                            | 12 & 13 |
| Dance.....                               | 14      |
| Drama.....                               | 15      |
| Food Technology.....                     | 16      |
| Geography Elective.....                  | 17      |
| History Elective.....                    | 18      |
| Industrial Technology – Electronics..... | 19      |
| Industrial Technology – Timber.....      | 20      |
| Information and Software Technology..... | 21      |
| iSTEM.....                               | 22      |
| Japanese.....                            | 23      |
| Marine & Aquaculture Technology.....     | 24      |
| Music.....                               | 25      |
| Photographic & Digital Media.....        | 26      |
| Physical Activity & Sport Studies.....   | 27      |
| Spanish .....                            | 28      |
| Textiles Technology.....                 | 29      |
| Visual Arts.....                         | 30      |
| Visual Design.....                       | 31      |
| Questions.....                           | 32      |

## **Key Dates**

**Thursday 23<sup>rd</sup> July 2020**      **Email sent to students with link and individual access code**

**Friday 31<sup>st</sup> July 2020**      **Closing date for the online submission of elective subject choices**

## **School Directory**

### **SENIOR EXECUTIVE**

|                                  |                 |
|----------------------------------|-----------------|
| Principal                        | Tania Turik     |
| Deputy Principal (Years 8,10,12) | Adam Montgomery |
| Deputy Principal (Years 7,9,11)  | Jenny Bennett   |

### **HEAD TEACHERS**

|                               |                       |
|-------------------------------|-----------------------|
| Administration (Staff) & LOTE | Lesley Miller (rel)   |
| Support Unit                  | Bronwyn Hull          |
| CAPA                          | Debra Green           |
| English                       | Kathryn Anderson      |
| HSIE                          | Debbie Evans          |
| Maths                         | Matthew Maloney (rel) |
| PDHPE                         | Brooke Playford       |
| Science                       | Stephen Nugent        |
| TAS and VET                   | Melissa Turner        |
| Teaching and Learning         | Karen Pennings        |
| Wellbeing                     | Andrew Yates          |

### **CAREERS ADVISOR**

Elyce Bates

### **YEAR 10 ADVISOR**

Dylan Parbery

## Curriculum Information

In 2021 and 2022 students in Years 9 and 10 at Terrigal High School will study a compulsory core of five courses (English, Maths, Science, Geography, History and Physical Development/Health/Physical Education).

In addition, students will study two elective courses in Year 9 and two elective courses in Year 10. Students may undertake the same courses for both Year 9 and 10, or they may decide to study new electives for Year 10.

### **Elective Courses**

The elective courses are selected from the comprehensive range offered by the school. Details of the courses are described in this guide. Please familiarise yourself with the options available before making your decision.

While elective courses do not have significance as pre-requisites for Preliminary and HSC courses, they are extremely important in developing a student's skills and interest in learning. Students are encouraged to make choices based on their interests and talents and not based on peer influence.

Parents should note the costs related to each of the electives where applicable. These elective costs are compulsory. The school can only offer these courses on the basis that students meet the obligations for the cost of materials.

### **Record of School Achievement (RoSA)**

The NSW Education Standards Authority (NESA) issues the Record of School Achievement (RoSA) to eligible students who leave school before completing the Higher School Certificate (HSC).

The RoSA is a cumulative credential, meaning it contains a student's record of academic achievement up until the date they leave school. This could be between the end of Year 10 up until and including some results from Year 12.

The RoSA is useful to students leaving school prior to the HSC because they can show it to potential employers or places of further learning.

Satisfactory completion of study in each of the **five core/mandatory courses** (English, Mathematics, Science, Geography, History and PDHPE) during Stage 5 (Years 9 and 10) will be recorded with a grade on students RoSA. Satisfactory completion of study in the chosen **elective courses** during Stage 5 (Years 9 and 10) will also be recorded with a grade on students RoSA.

## Online Subject Selection Process

Selection of the electives will be completed via an online process. Students will receive an email on Thursday 23<sup>rd</sup> July which will include their own individual access code and the link to the website to complete their selections.

After submitting the online choices, a confirmation page will be displayed. This needs to be printed, signed by the student and their parent/carer and returned to **Mr Parbery by Friday 31<sup>st</sup> July**. The process will require students to select their first two preferences as well as two reserve choices. Selections must be completed in preferential order.

Please note that every effort will be made to allocate students their first choices, however, due to class size and timetable restrictions this may not always be possible.

## Material Costs

Elective courses are run with the expectation that parents agree to contribute towards the cost of consumables and resources used. The school would like to continue to be able to offer a wide variety of elective courses for our students, but due to the high additional costs involved it is imperative that parents agree to contribute towards the costs. In the event of financial difficulty parents are required to advise the Principal confidentially of their personal financial situation. Financial assistance may be provided so that no student is disadvantaged.

Compulsory material costs are applicable to the following elective courses. These fees are current as at June 2020 and are subject to change.

|                                     |           |
|-------------------------------------|-----------|
| Aboriginal Studies                  | Nil       |
| Agricultural Technology             | \$12.00   |
| Big History                         | Nil       |
| Child Studies                       | Nil       |
| Commerce                            | Nil       |
| Dance                               | \$25.00   |
| Drama                               | \$15.00 * |
| Food Technology                     | \$80.00 * |
| Geography Elective                  | Nil       |
| History Elective                    | Nil       |
| Industrial Technology – Electronics | \$65.00   |
| Industrial Technology – Timber      | \$65.00   |
| Information and Software Technology | Nil       |
| iSTEM                               | \$60      |
| Japanese                            | \$10.00 * |
| Marine & Aquaculture Technology     | Nil       |
| Music                               | \$12.00   |
| Photographic & Digital Media        | \$85.00   |
| Physical Activity & Sport Studies   | Nil       |
| Spanish                             | \$10.00 * |
| Textiles Technology                 | \$30.00*  |
| Visual Arts                         | \$65.00   |
| Visual Design                       | \$65.00   |

\*Additional costs may apply

# MANDATORY COURSES

## English

The study of English in Years 9–10 aims to develop students' knowledge, understanding, appreciation and enjoyment of the English language and to develop their skills as effective communicators.

Students develop their control of language by reading and viewing a range of texts and by writing imaginative, interpretive and critical texts with clarity and accuracy for a range of purposes and audiences. Students engage with and explore literature of past and contemporary societies, as well as a range of spoken, visual, media and multimedia texts.

## Mathematics

Mathematics is used to identify, describe and apply patterns and relationships. It provides a precise means of communication and is a powerful tool for solving problems both within and beyond mathematics. In addition to its practical applications, the study of mathematics is a valuable pursuit in its own right, providing opportunities for originality, challenge and leisure.

The aim of Mathematics in K–10 is to develop students' mathematical thinking, understanding, competence and confidence in the application of mathematics, their creativity, enjoyment and appreciation of the subject, and their engagement in lifelong learning.

In Stage 5, Mathematics has three pathways:

- 5.3 Course For the **most able** students who often go on to study Mathematics and/or Extension 1 and 2 Stage 6.
- 5.2 Course For **middle ability** learners who usually elect for the Mathematics General course in Stage 6. This course contains elements of the 5.3 Course.
- 5.1 Course For the **lesser able** Mathematics students who sometimes consider not continuing with a Mathematics course as part of their Stage 6 study pattern.

The pathway followed by each student is determined at the end of Year 8 utilising available data.

## Science

Science develops students' knowledge, understanding and skills to explain and make sense of the biological, physical and technological world, enabling them to make informed choices and responsible decisions as individuals and part of the community.

## Geography

Students will analyse interconnections between people, places and environments and propose explanations for distributions, patterns and spatial variations over time and across scales. Students compare changing environments, analyse global differences in human wellbeing, explore alternative views to geographical challenges and assess strategies to address challenges using environmental, social and economic criteria.

## History

History develops in young people an interest in and enjoyment of exploring the past. A study of History provides opportunities for examining events, people and societies from modern times, with a focus on twentieth century Australia as well as European history. Opportunities to develop a deeper understanding of civics and citizenship are a feature throughout the Years 7-10.

## Personal Development, Health and Physical Education (PDHPE)

PDHPE develops students' capacity to enhance personal health and well-being. It promotes their enjoyment of and commitment to an active lifestyle and to achieve confidence and competence in a wide range of physical activities. Through PDHPE students develop knowledge and understanding, skills and values and attitudes that enable them to advocate lifelong health and physical activity.

# ELECTIVE COURSES

## Aboriginal Studies

### Course Description

Aboriginal Studies enables students to develop knowledge and understanding of Aboriginal peoples of Australia, their cultures and lifestyles. It is designed for all students and is of value to both Aboriginal and non-Aboriginal students.

### What will students learn about?

Students learn about the contributions and significance of Aboriginal peoples and their cultural expressions, including in the visual and performing arts, language and spirituality. Students study the interaction between Aboriginal and non-Aboriginal people and communities and the sharing of cultural identity. Students gain understanding of the contributions of Aboriginal peoples to the development of Australia and its identity.

Students also learn about a range of factors that influence attitudes towards Aboriginal peoples and their cultures and the effects of these attitudes. This can include the influence of the media on the development of attitudes, and students will analyse the effects of stereotyping attitudes on Aboriginal peoples and communities.

### What will students learn to do?

Students will learn to use a range of research techniques and technologies to locate, select, organise and communicate information and findings.

Students will also develop an awareness of appropriate protocols for consultation with Aboriginal communities, and of the importance of acknowledging ownership of cultural knowledge. In addition they will acquire a wide range of communication skills, including the ability to consult with Aboriginal peoples and communities.



# Agricultural Technology

## Course Description

Students will experience aspects of an agricultural lifestyle through direct contact with plants and animals and a variety of outside activities. They explore the many and varied career opportunities in agriculture and its related service industries.

Students investigate the viability of Australian agriculture through the careful management of issues relating to the sustainability of agricultural systems, as well as the relationships between production, processing and consumption.

The study of a range of enterprises allows students to make responsible decisions about the appropriate use of agricultural technologies.

## What will students learn about?

The essential content integrates the study of interactions, management and sustainability within the context of agricultural enterprises. These enterprises are characterised by the production and sale or exchange of agricultural goods or services, focusing on plants or animals or integrated plant/animal systems. The local environment will be considered in selecting enterprises, as will the intensive and extensive nature of the range of enterprises to be studied.

## What will students learn to do?

Students will spend approximately half of the course time on practical experiences related to the chosen enterprises, including fieldwork, small plot activities, laboratory work and visits to commercial farms and other parts of the production and marketing chain. The skills of designing, investigating, using technology and communicating will also be developed over the period of the course.

# Big History

## Course Description

Big History is an exciting NESA course that we are now offering at Terrigal High School. It is a unique course which has been developed in cooperation with the BG3 Foundation in the United States, through the office of Bill Gates and Macquarie University in Sydney. Now in its tenth year, Big History has developed into a successful global course.

Big History covers the history of the universe from the Big Bang theory right through to considerations about our future. It draws on a range of subject disciplines to create an understanding of the universe and our place in it. There are elements of history, astronomy, chemistry, biology and philosophy which help students to understand that knowledge is drawn from the whole human experience.

Resources for the course are developed in cooperation with Intentional Futures, a high-tech team of Microsoft executives from Seattle in the United States. They work closely with teachers to ensure that students undertaking Big History will have access to the latest resources possible, developed to ensure students acquire a deep understanding of the course content in the most relevant and exciting way possible.

## What students will learn about?

Throughout the course, students will travel from the first second of the Big Bang, through the formation of stars, planets and the earth. From there, they will investigate the emergence of life, changes in both the earth and life on it, and finally the period of human existence. The latest technology will help students to access an exciting array of digital resources provided from the United States.

## What students will learn to do?

In Year 10, students will cover the topics of The Evolutionary Epic, Human Evolution, Migrations and Intensification, The Modern Revolution, and the Anthropocene and the Near Future. Big History has been developed to be used globally. It is a rare and exciting opportunity for students to contribute to the development of an educational resource that will be used around the world. It is designed to be accessible to the full range of student abilities, and lessons will be geared to the ability level of the class. It will suit students who ask questions, have a sense of adventure, and see learning as an opportunity to develop into global citizens.

# Child Studies

## Course Description

This course enables students to develop their knowledge and understanding of the responsibilities and requirements of child carers. Students are faced with real life experiences of parents and regularly participate in case studies as a way of understanding the complex nature of rearing and caring for children.

## What will students learn about?

The course includes modules selected from the following areas of study:

- Preparing for parenthood
- Conception to birth
- Family interactions
- Newborn care
- Growth and development
- Play and the developing child
- Health and safety in childhood
- Food and nutrition in childhood
- The diverse needs of children
- Children and culture
- Media and technology in childhood
- Aboriginal cultures and childhood
- Childcare services and career opportunities

## What will students learn to do?

Throughout the course students will;

- develop knowledge, skills and strategies in the area of growth and development of young children.
- develop strategies that will enable them to provide safe and nurturing care for young babies and children.
- investigate play and its role in the growth and development of children
- develop an understanding of how a range of external factors support the wellbeing of children.

# Commerce

## Course Description

Commerce enables young people to develop the knowledge, understanding, skills and values that form the foundation on which they can make sound decisions about consumer, financial, legal, business and employment issues. It develops in students, the ability to research information, apply problem-solving strategies and evaluate options in order to make informed and responsible decisions as individuals and as part of the community.

## What will students learn about?

Students will study the following Core Topics:

1. Consumer and Financial Decisions - Students learn how to identify and research issues that individuals encounter when making consumer and financial decisions. They investigate laws and mechanisms that protect consumers including the process of consumer redress. Students examine a range of options related to personal decisions of a consumer and financial nature and assess responsible financial management strategies.
2. The Economic and Business Environment - Students develop an understanding of the importance, and features of, the economic environment, including markets. They explore the nature, role and operation of businesses in the context of an increasingly globalised economy. Students investigate cause-and-effect relationships in relation to a major economic event or development affecting Australian consumers and businesses.
3. Employment and Work Futures - Students investigate the contribution of work to the individual and society and the changing nature of work. They examine how individuals may derive an income, and the changing rights and responsibilities of workplace participants. Students analyse a range of perspectives in their consideration of employment and work futures.
4. Law, Society and Political Involvement - Students develop an understanding of how laws affect individuals and groups and regulate society, and how individuals and groups participate in the democratic process. Students examine various legal and political systems and learn how strategies are used to resolve contentious legal and political issues.

Students will also study option topics selected from the following:

1. Our Economy
2. Investing
3. Promoting and Selling
4. Running a Business
5. Law in Action
6. Travel
7. Towards Independence
8. School-developed Option

**What will students learn to do?**

Commerce provides the knowledge, understanding, skills and values that form the foundation on which young people make sound decisions about consumer, financial, economic, business, legal, political and employment issues. It develops in students an understanding of commercial and legal processes and competencies for personal consumer and financial management. Through the study of Commerce students develop consumer and financial literacy which enables them to participate in the financial system in an informed way.

Central to the course is the development of an understanding of the relationships between consumers, businesses and governments in the overall economy. Through their investigation of these relationships, students have the opportunity to apply problem-solving strategies which incorporate the skills of analysis and evaluation. In the study of Commerce, students develop critical thinking, reflective learning and the opportunity to participate in the community.

Developing skills of research, evaluation and collaborative decision-making through the study of Commerce enables students to contribute to our democratic and pluralistic society as well as develop the skills to become self-directed lifelong learners.

Students appreciate the importance of ethical and socially responsible behaviour, and fundamental rights, rules and laws that promote fairness, justice and equity in society.

# Dance

## Course Description

Dance provides students with opportunities to experience and enjoy dance as an art form as they perform, compose and appreciate dance. In an integrated study of the practices of performance, composition and appreciation, students develop both physical skill and aesthetic, artistic and cultural understandings. The course enables students to express ideas creatively and to communicate physically, verbally and in written forms as they make, perform and analyse dances and dance forms.

## What will students learn about?

All students study dance performance, composition and appreciation. They will learn about the elements of dance (space, time and dynamics) and how they are used in, and link, the three practices. They will learn about performing dances with an awareness of safe dance practice, dance technique and performance quality. They will learn about how dance expresses ideas, feelings and experiences as they construct dance compositions to communicate ideas. They learn about people, culture and society as they study and analyse dance performances, compositions and dance works of art.

## What will students learn to do?

Students will learn to develop an articulate body as they perform a range of dances in a variety of styles with a working knowledge of safe dance practice. They will learn to structure movement as they compose dances to express their ideas, feelings and experiences. They will learn to use the language of dance and to describe movements using the elements of dance as they view, discuss, read and write about dance. Drawing from their experiences gained in performing, composing and appreciating dances, they will learn to make connections between the making and performing of the movement and the appreciation of its meaning.

# Drama

## Course Description

Drama enables young people to develop knowledge, understanding and skills individually and collaboratively to make, perform and appreciate dramatic and theatrical works. Students take on roles as a means of exploring both familiar and unfamiliar aspects of their world while exploring the ways people react and respond to different situations, issues and ideas.

## What will students learn about?

All students undertake a unit of play building in every 100 hours of the course. Play building refers to a group of students collaborating to make their own piece of drama from a variety of stimuli. At least one other dramatic form or performance style must also be studied in the first 100 hours. Examples of these include improvisation, mime, script, puppetry, small screen drama, physical theatre, street theatre, mask, comedy and Shakespeare. Students also learn about the elements of drama, various roles in the theatre, the visual impact of design, production elements and the importance of the audience in any performance.

## What will students learn to do?

Students learn to make, perform and appreciate dramatic and theatrical works. They devise and enact dramas using scripted and unscripted material and use acting and performance techniques to convey meaning to an audience. They learn to respond to, reflect on and analyse their own work and the work of others and evaluate the contribution of drama and theatre to enriching society.

# Food Technology

## Course Description

The study of Food Technology provides students with a broad knowledge and understanding of food properties, processing, preparation and their interrelationship, nutritional considerations and consumption patterns. It addresses the importance of hygiene and safe working practices and legislation in the production of food. Students will develop food-specific skills, which can then be applied in a range of contexts enabling students to produce quality food products. It also provides students with a context through which to explore the richness, pleasure and variety food adds to life and how it contributes to both vocational and general life experiences.

## What will students learn about?

Students will learn about food in a variety of settings, enabling them to evaluate the relationships between food, technology, nutritional status and the quality of life. The following focus areas provide a context through which the core (Food preparation and processing, Nutrition and consumption) will be studied.

|                           |                            |
|---------------------------|----------------------------|
| Food in Australia         | Food service and catering  |
| Food equity               | Food for special needs     |
| Food product development  | Food for special occasions |
| Food selection and health | Food trends                |

## What will students learn to do?

The major emphasis of the Food Technology syllabus is on students exploring food-related issues through a range of practical experiences, allowing them to make informed and appropriate choices with regard to food. Integral to this course is students developing the ability and confidence to design, produce and evaluate solutions to situations involving food. They will learn to select and use appropriate ingredients, methods and equipment safely and competently.

Students must undertake a range of practical experiences that occupy the majority of the course time.



# Geography Elective

## Course Description

The Geography (Elective) course provides an opportunity for students to learn more Geography through additional study. It provides students with a broader understanding of the discipline of Geography and the processes of geographical inquiry, and enables depth studies through flexible learning in a choice of focus areas.

## What will students learn about?

Geography (Elective) enables students to learn more about:

- The geographical processes that form and transform environments and communities
- The importance of the world's environments and issues associated with them
- Human activities at a range of scales
- Contemporary world events and issues in terms of their spatial and ecological dimensions
- The roles and responsibilities of individuals, groups and governments in resolving tensions and conflicts at a range of scales
- Being an informed and active citizen

## What will students learn to do?

Students learn to gather, process and communicate geographical information from a variety of primary and secondary sources. Appropriate geographical tools including information and communication technologies (ICT) are to be integrated in each focus area. Geographical tools, such as maps, graphs, statistics, photographs and fieldwork, assist students to gather, analyse and communicate geographical information in a range of formats.

## Course Requirements

In a 100-hour Geography (Elective) course students must study at least three of the eight focus areas. In a 200-hour Geography (Elective) course they will study at least five of the eight focus areas.

# History Elective

## Course Description

History develops in young people an interest in and enjoyment of exploring the past. A study of Elective History provides opportunities for developing a knowledge and understanding of past societies and historical periods.

## What will students learn about?

Students explore the nature of history and the methods that historians use to construct history through a range of thematic and historical studies. Students develop an understanding of how historians investigate and construct history through an examination of various types of history such as oral history, museum or archive studies, historical fiction, media, biography or film. Historical issues studied include the collection, display and reconstruction of the past, ethical issues of ownership and preservation and conservation of the past.

A selection of ancient, medieval and early modern societies are studied in relation to themes such as war and peace, crime and punishment, music through history, slavery, women in history or other relevant topics.

## What will students learn to do?

Students apply an understanding of history, heritage, archaeology and the methods of historical inquiry and examine the ways in which historical meanings can be constructed through a range of media. Students learn to apply the skills of investigating history including understanding and analysing sources and evidence and sequencing major historical events to show an understanding of continuity, change and causation.

Students develop research and communication skills, including the use of ICTs, and examine different perspectives and interpretations to develop an understanding of a wide variety of viewpoints. Students also learn to construct a logical historical argument supported by relevant evidence and to communicate effectively about the past for different audiences.

# Industrial Technology - Electronics

## Course Description

Industrial Technology Electronics provides opportunities for students to develop knowledge, understanding and skills in relation to the electronics and associated industries. The Electronics core module develops knowledge and skills in the use of materials, tools and techniques related to electronics technologies. These are enhanced and further developed through the study of the Electronics 2 specialist module.

Practical projects reflect the nature of the Electronics focus area and provide opportunities for students to develop specific knowledge, understanding and skills related to electronics-related technologies. These may include:

- Electronic circuits and kits
- Electronic controlled devices
- Robotic projects

## What will students learn about?

All students will learn about the properties and applications of electronics in today's society. They will study the range of tools, machines and processes available in both industrial and domestic settings for working with selected materials. Students will learn about safe practices for practical work environments, including risk identification and minimisation strategies. They will also learn about design and designing including the communication of ideas and processes.

## What will students learn to do?

The major emphasis of the Industrial Technology Electronics syllabus is on students actively planning and constructing quality practical projects. Students will learn to select and use a range of materials for individual projects. They will learn to competently and safely use a range of hand tools, power tools and machines to assist in the construction of projects. They will also learn to produce drawings and written reports to develop and communicate ideas and information relating to projects.

# Industrial Technology - Timber

## Course Description

Industrial Technology Timber provides opportunities for students to develop knowledge, understanding and skills in relation to the timber and associated industries. The core module develops knowledge and skills in the use of materials, tools and techniques related to timber which are further developed through their study of a specialist module.

Practical projects undertaken reflect the nature of the Timber focus area and provide opportunities for students to develop specific knowledge, understanding and skills related to timber-related technologies. These may include:

- *decorative timber products*
- *furniture items*
- *small bowls or turned items*
- *storage and display units*
- *storage and transportation products*

## What will students learn about?

All students will learn about the properties and applications of timber in today's society. They will study the range of tools, machines and processes available in both industrial and domestic settings for working with selected materials. Students will learn about safe practices for practical work environments, including risk identification and minimisation strategies. They will also learn about design and designing including the communication of ideas and processes.

## What will students learn to do?

The major emphasis of the Industrial Technology Timber syllabus is on students actively planning and constructing quality practical projects. Students will learn to select and use a range of materials for individual projects. They will learn to competently and safely use a range of hand tools, power tools and machines to assist in the construction of projects. They will also learn to produce drawings and written reports to develop and communicate ideas and information relating to projects.

# Information and Software Technology

## Course Description

People will require highly developed levels of computing and technology literacy for their future lives. Students therefore need to be aware of the scope, limitations and implications of information and software technologies.

Individual and group tasks, performed over a range of projects, will enable this practical-based course to deliver the relevant knowledge and skills needed by students. Development of technology skills and information about career opportunities within this area are important aspects of the course.

## What will students learn about?

The core content to be covered in this course is integrated into the options chosen within school. The course has been designed with an emphasis on practical activities that allow students to sustain focus in a range of interest areas at some depth.

The option topics to be studied within this course include:

- Artificial intelligence, Simulation and Modelling
- Software Development and Programming
- Authoring and Multimedia
- Internet and Website Development
- Robotics and Automated Systems

## What will students learn to do?

Students will identify a need or problem to be solved, explore a range of possible solutions and produce a full working solution. They will use a variety of technologies to create, modify and produce products in a range of media formats.

Group and individual project-based work will assist in developing a range of skills, including research, design and problem-solving strategies over the chosen topics.

# iSTEM

Science, technology, engineering and mathematics are fundamental to shaping the future of Australia. They provide enabling skills and knowledge that increasingly underpin many professions and trades, and the skills of a technologically based workforce. The iSTEM course utilises these knowledge pillars in their application to Skills, Technology Engineering and Mechanics.

## Course Description

The iSTEM School Developed Board Endorsed Course covers a number of STEM based fields, including; Fundamentals, Aerodynamics, Motion, Mechatronics, Surveying, Aerospace, Statistics, CAD/CAM and Biotechnology.

The four core modules are: STEM Fundamentals 1, STEM Fundamentals 2, Mechatronics 1 and Mechatronics 2.

The ten elective modules to select from are: Aerodynamics, Motion, CAD/ CAM1, CAD/CAM2, STEM PBL Minor, STEM PBL Major, Surveying, Design for Space, Statistics in Action and Biotechnology.

## What will students learn about?

Students will gain:

1. knowledge and understanding of scientific and mechanical concepts through investigations of technology and engineering
2. knowledge and understanding of STEM principles and processes
3. an appreciation of the role and potential of STEM in the world in which they live
4. an understanding of the contribution of STEM disciplines to the economic wellbeing of nations.

## What will students learn to do?

Students must undertake a range of inquiry based (IBL) and project based (PBL) learning activities which occupy the majority of course time. Inquiry-based and project based learning assists students to actively pursue and use STEM based knowledge beyond the simple transmission of content. Thus in the course structure there are many points at which students raise questions and explore ideas.

Students will learn to use a range of tools, techniques and processes, including relevant technologies in order to develop solutions to a wide variety of problems and challenges relating to their present and future needs and aspirations.

1. Inquiry and project based learning skills appropriate to STEM practice
2. Skills in solving STEM based problems and meeting STEM challenges using mechanical, graphical and scientific methods
3. Skills in communicating and critically evaluating
4. Problem solving skills in a range of STEM contexts

# Japanese

The study of Japanese provides access to the language and culture of one of the global community's most technologically advanced societies and economies. Students engage with elements of modern Japan, including popular culture such as *anime*, *manga*, music and fashion, as well as with the rich cultural tradition of this part of Asia. Students develop an appreciation for the place of Australia within the Asia region, including the interconnections of languages and cultures, peoples and communities, histories and economies. In today's globalised world, the ability to speak a foreign language and understand another culture is a valuable asset for all students, regardless of their future career goals as it broadens students' opportunities in all fields

## Course Description

Japanese provides students with the opportunity to gain effective skills in communicating in the target language, to explore the relationship between other languages and English, and to develop an understanding of Japanese culture. Terrigal High School has strong sister school relationships with several schools in Japan which provide our students with many opportunities to engage with Japanese people.

## What will students learn about?

In the elective course students develop their communication skills in Japanese by applying their knowledge of language structures and vocabulary to a wide range of relevant and practical topics. These include:

- Daily Routine (telling the time, sequencing activities, talking about daily life)
- School (school rules and regulations, school events, comparisons between Japan and Australia)
- Celebrations (cultural celebrations in Australia and Japan, recounting events in the past tense)
- Media (describing appearance and personality, comparing Mass Media between countries)
- Globalisation & Identity (nationality, language, identity in multicultural societies)
- Shopping (buying and describing things, counting items, expressing preferences, handling money)
- Around Town (asking for and giving directions, identifying landmarks, map reading skills)
- Travel & Weather (predicting the weather, discussing travel plans and tourist destinations in both Japan and Australia, and planning a trip to Japan/within Australia).

## What will students learn to do?

Students will learn to: listen and respond to spoken language, read and respond to written texts, establish and maintain communication in familiar situations, and analyse features of language. Students will also develop cross-cultural communication skills and a greater understanding of the values and beliefs of diverse cultures.

**Students are required to purchase a workbook to accompany the textbooks used, the estimated cost is \$30-35.**

# Marine and Aquaculture Technology

## Course Description

Marine and Aquaculture Technology develops students' capacity to design, produce, evaluate, use and manage marine and water-related environments in an environmentally sustainable way.

Across Stage 5 students will study two core modules and a variety of optional modules. They are organised into seven focus areas:

|             |                  |
|-------------|------------------|
| Biology     | Employment       |
| Ecology     | Management       |
| Leisure     | General Interest |
| Aquaculture |                  |

## What will students learn about?

All students learn about marine and aquatic environments. They study water safety, general first aid and the maintenance of equipment. The economical sustainability of aquaculture and marine environments is emphasised together with the preservation of wild seafood stocks. Students learn about the ethical and sustainable use, management and protection of the marine environment. The responsible selection and safe use of equipment in aquaculture and marine and maritime activities is emphasised. They also study a range of industries and organisations that use, manage and regulate the marine environment.

## What will students learn to do?

The major emphasis of the Marine and Aquaculture Technology syllabus is on practical experiences. Students learn about Occupational Health and Safety issues and apply principles of water safety and first aid in marine situations. They also learn to responsibly select, use and maintain materials and equipment and to use appropriate techniques in the context of the modules selected for study. Students will learn to research, experiment and communicate in relation to aquaculture, maritime and marine activities and to apply ethical and sustainable practices in the use and management of the marine environment. Other learning experiences in the course are dependent on the optional modules studied.



# Music

## Course Description

All students should have the opportunity to develop their musical abilities and potential. As an art form, music pervades society and occupies a significant place in world cultures and in the oral and recorded history of all civilisations. Music plays important roles in the social, cultural, aesthetic and spiritual lives of people. At an individual level, music is a medium of personal expression. It enables the sharing of ideas, feelings and experiences. The nature of musical study also allows students to develop their capacity to manage their own learning, engage in problem-solving, work collaboratively and engage in activity that reflects the real world practice of performers, composers and audiences.

## What will students learn about?

In the Music course, students will study the *concepts of music* (duration, pitch, dynamics and expressive techniques, tone colour, texture and structure) through the learning experiences of *performing, composing and listening*, within the *context* of a range of styles, periods and genres.

The course requires the study of the compulsory topic Australian Music, as well as a number of optional topics that represent a broad range of musical styles, periods and genres.

## What will students learn to do?

In Music, students learn to perform music in a range of musical contexts, compose music that represents the topics they have studied and listen with discrimination, meaning and appreciation to a broad range of musical styles.

The study of the concepts of music underpin the development of skills in performing, composing and listening.

# Photographic and Digital Media

## Course Description

Photographic and Digital Media provides opportunities for students to enjoy making and studying a range of photographic and digital media works. It enables students to represent their ideas and interests about the world, to engage in contemporary forms of communication and understand and write about their contemporary world. Photographic and Digital Media enables students to investigate new technologies, cultural identity and the evolution of photography and digital media into the 21st century. Students are provided with opportunities to make and study photographic and digital media works in greater depth and breadth than through the Visual Arts elective course.

## What will students learn about?

Students learn about the pleasure and enjoyment of making different kinds of photographic and digital media works in still, interactive and moving forms. They learn to represent their ideas and interests with reference to contemporary trends and how photographers, videographers, film-makers, computer/digital and performance artists make photographic and digital media works.

Students learn about how photographic and digital media is shaped by different beliefs, values and meanings by exploring photographic and digital media artists and works from different times and places, and relationships in the art world between the artist – artwork – world – audience. They also explore how their own lives and experiences can influence their making and critical and historical studies.

## What will students learn to do?

Students learn to make photographic and digital media works using a range of materials and techniques in still, interactive and moving forms, including ICT, to build a Photographic and Digital Media portfolio over time. They learn to develop their research skills, approaches to experimentation and how to make informed personal choices and judgements. They learn to record procedures and activities about their making practice in their Photographic and Digital Media journal.

Students learn to investigate and respond to a wide range of photographic and digital media artists and works in making, critical and historical studies. Students learn to interpret and explain the function of and relationships in the art world between the artist – artwork – world – audience to make and study photographic and digital media artworks.

## Course Requirements

Students are required to produce a Photographic and Digital Media portfolio and keep a Photographic and Digital Media journal.

# Physical Activity and Sports Studies

## Course Description

Physical Activity and Sports Studies aims to enhance students' capacity to participate effectively in physical activity and sport, leading to improved quality of life for themselves and others. Students engage in a wide range of physical activities in order to develop key understandings about how and why we move and how to enhance quality and enjoyment of movement.

## What will students learn about?

The course includes modules selected from each of the following three areas of study:

### ***Foundations of Physical Activity***

- Body systems and energy for physical activity
- Physical activity for health
- Physical fitness
- Fundamentals of movement skill development
- Nutrition and physical activity
- Participating with safety

### ***Physical Activity and Sport in Society***

- Australia's sporting identity
- Lifestyle, leisure and recreation
- Physical activity and sport for specific groups
- Opportunities and pathways in physical activity and sport
- Issues in physical activity and sport

### ***Enhancing Participation and Performance***

- Promoting active lifestyles
- Coaching
- Enhancing performance – strategies and techniques
- Technology, participation and performance
- Event management

## What will students learn to do?

Throughout the course students will develop skills that develop their ability to:

- work collaboratively with others to enhance participation, enjoyment and performance in physical activity and sport
- display management and planning skills to achieve personal and group goals in physical activity and sport
- perform movement skills with increasing proficiency
- analyse and appraise information, opinions and observations to inform physical activity and sport decisions

## Spanish

Spanish is one of the most widely spoken languages in the world, with approximately 500 million speakers. It is the official language of more than 20 countries and one of the official languages of the United Nations and the European Union. Spanish belongs to the Romance family of languages, which includes Catalan, French, Italian, Portuguese and Romanian. Spanish and English have a common linguistic link with Latin, sharing many Latin-derived words and using the same Roman alphabet. The fact that Spanish is spoken across different continents offers students a broad and rich range of cultural experiences.

Through learning languages, students develop an intercultural capability and an understanding of the role of language and culture in communication, and become more accepting of difference and diversity. They develop understanding of global citizenship, and reflect on their own heritage, values, culture and identity.

### What will students learn?

Students will undertake a variety of relative topic areas such as school life, family and friends and personal interests.

### Communicating Strand

Students use language for communicative purposes by:

- interacting – exchanging information, ideas and opinions, and socialising, planning and negotiating
- accessing and responding – obtaining, processing and responding to information through a range of spoken, written, digital and/or multimodal texts
- composing – creating spoken, written, bilingual, digital and/or multimodal texts.

### Understanding Strand

Students analyse and understand language and culture by:

- systems of language – understanding the language system, including sound, writing, grammar and text structure; and how language changes over time and place
- the role of language and culture – understanding and reflecting on the role of language and culture in the exchange of meaning, and considering how interaction shapes communication and identity.

### Values and Attitudes

Students:

- develop an interest in and enjoyment of language learning
- appreciate and value their own heritage, culture and identity
- appreciate and respect the culture, beliefs and values of others through language learning.

**Students are also required to purchase a workbook to accompany the textbooks used, approximate cost is \$30.00**

# Textiles Technology

## Course Description

The study of Textiles Technology provides students with knowledge of the properties, performance and uses of textiles. They explore fabrics, colouration, yarns and fibres. Students examine the historical, cultural and contemporary perspectives on textile design and develop an appreciation of the factors affecting them as textile consumers. Students investigate the work of textile designers and make judgements about the appropriateness of design ideas, the selection of materials and tools and the quality of textile items. Textile projects will give students the opportunity to be creative, independent learners and to explore functional and aesthetic aspects of textiles.

## What will students learn about?

Students will learn about textiles through the study of different focus areas and areas of study. The following focus areas are recognised fields of textiles that will direct the choice of student projects.

|             |              |
|-------------|--------------|
| Apparel     | Textile arts |
| Furnishings | Non-apparel  |
| Costume     |              |

Project work will enable students to discriminate in their choices of textiles for particular uses. The focus areas provide the context through which the three areas of study (Design, Properties and Performance of Textiles, Textiles and Society) are covered.

## What will students learn to do?

Students will undertake a range of practical experiences that occupy the majority of class time. Practical experiences allow students to develop skills and confidence in the use of a range of equipment.

By examining the work of designer's students will learn to use the creative process to design textile items. Design ideas and experiences are documented and communicated and will show evidence of each of the stages of designing, producing and evaluating. Students will learn to select, use and manipulate appropriate materials, equipment and techniques to produce quality textile projects. Students will learn to identify the properties and performance criteria of textiles by deconstructing textile items and identify the influence of historical, cultural and contemporary perspectives on textile design, construction and use.

# Visual Arts

## Course Description

Visual Arts provides opportunities for students to enjoy the making and studying of art. It builds an understanding of the role of art in all forms of media, both in the contemporary and historical world, and enables students to represent their ideas and interests in artworks. Visual Arts enables students to become informed about, understand and write about their contemporary world.

## What will students learn about?

Students learn about the pleasure and enjoyment of making different kinds of artworks in 2D, 3D and/or 4D forms. They learn to represent their ideas and interests with reference to contemporary trends and how artists' including painters, sculptors, architects, designers, photographers and ceramists, make artworks.

Students learn about how art is shaped by different beliefs, values and meanings by exploring artists and artworks from different times and places and relationships in the art world between the artist – artwork – world – audience. They also explore how their own lives and experiences can influence their art making and critical and historical studies.

## What will students learn to do?

Students learn to make artworks using a range of materials and techniques in 2D, 3D and 4D forms, including traditional and more contemporary forms, site-specific works, installations, video and digital media and other ICT forms, to build a body of work over time. They learn to develop their research skills, approaches to experimentation and how to make informed personal choices and judgements. They learn to record procedures and activities about their art making practice in their Visual Arts diary.

They learn to investigate and respond to a wide range of artists and artworks in art making, critical and historical studies. They also learn to interpret and explain the function of and relationships in the art world between the artist – artwork – world – audience to make and study artworks.

## Course Requirements

Students are required to produce a body of work and keep a Visual Arts diary.

# Visual Design

## Course Description

Visual Design provides opportunities for students to enjoy making and studying visual design artworks and to become informed about and understand and write about their contemporary world. It enables students to represent their ideas and interests about the world in visual design artworks and provides insights into new technologies, different cultures, and the changing nature of visual design in the 21st century. Students are provided with opportunities to make and study visual design artworks in greater depth and breadth than through the Visual Arts elective course.

## What will students learn about?

Students learn about the pleasure and enjoyment of making different kinds of visual design artworks in print, object and space-time forms. They learn to represent their ideas and interests with reference to contemporary trends and how web designers, architects, commercial and industrial designers, space, light and sound designers, graphic designers and fashion, accessory and textile designers make visual design artworks.

Students learn about how visual design is shaped by different beliefs, values and meanings by exploring visual designers and visual design artworks from different times and places, and relationships in the art world between the artist/designer – artwork – world – audience. They also explore how their own lives and experiences can influence their making and critical and historical studies.

## What will students learn to do?

Students learn to make visual design artworks using a range of materials and techniques in print, object and space-time forms, including ICT, to build a folio of work over time. They learn to develop their research skills, approaches to experimentation and how to make informed personal choices and judgements. They learn to record procedures and activities about their making practice in their Visual Design journal.

They learn to investigate and respond to a wide range of visual designers and visual design artworks in making, critical and historical studies. They also learn to interpret and explain the function of and relationships in the art world between the artist/designer – artwork – world – audience to make and study visual design artworks.

## Course Requirements

Students are required to produce a folio of work and keep a Visual Design journal.

