

Inspire. Achieve. Succeed



# Year 9 Curriculum Booklet

Inspire, Achieve, Succeed.

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# Introduction

This handbook is to provide you with the details of the courses that may be offered in Year 9, dependent on staff expertise and resourcing availability.

The courses are based on study within the following Learning Areas:

- 1. The Arts
- 2. English
- 3. Health & Physical Education
- 4. Humanities & Social Sciences
- 5. Mathematics
- 6. Science
- 7. Technologies

Each week students study in the learning areas of English, Mathematics, Science and Humanities & Social Sciences. In addition, students study for two hours in Physical Education.

In Year 9, students will be given three option choices to study for two hours a week in the learning areas of Arts, Technologies, Physical Education and Extension over the year. Included is a compulsory Health option studied in one semester.

Students in Year 9 complete NAPLAN testing in May. This is a national standardised test with the results used by staff to help students to improve their literacy and numeracy language skills.

Yanchep Secondary College complete the NAPLAN tests online and prepare the students through a variety of online platforms including Reading Plus.

For further information you are encouraged to access: <u>https://www.nap.edu.au/home</u>

# <u>ENGLISH</u>

Students engage with a variety of texts for enjoyment. They interpret, create, evaluate, discuss and perform a wide range of literary texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade. These include various types of media texts, including newspapers, film and digital texts, fiction, non-fiction, poetry, dramatic performances and multimodal texts, with themes and issues involving levels of abstraction, higher order reasoning and intertextual references. Students develop a critical understanding of the contemporary media and the differences between media texts.



# <u>MATHS</u>

The proficiency strands of **understanding**, **fluency**, **problem-solving** and **reasoning** are an integral part of Mathematics content across the three content strands: number and algebra, measurement and geometry, and statistics and probability. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics. The achievement standards reflect the content and encompass the proficiencies.

At this year level:

- **understanding** includes describing the relationship between graphs and equations, simplifying a range of algebraic expressions and explaining the use of relative frequencies to estimate probabilities and of the trigonometric ratios for right-angle triangles
- **fluency** includes applying the index laws to expressions with integer indices, expressing numbers in scientific notation, listing outcomes for experiments, developing familiarity with calculations involving the Cartesian plane and calculating areas of shapes and surface areas of prisms
- **problem-solving** includes formulating and modelling practical situations involving surface areas and volumes of right prisms, applying ratio and scale factors to similar figures, solving problems involving right-angle trigonometry and collecting data from second-ary sources to investigate an issue



# **SCIENCE**

In Year 9 students continue to develop their knowledge of Science at Yanchep Secondary College. They explore ways in which the human body as a system responds to its external environment and how it is able to maintain a normal working environment (homeostasis). Students investigate the effects of microorganisms on the human body and how we combat these diseases. They explore the interdependencies between biotic (living) and abiotic (non-living) components of ecosystems.



Students are introduced to the notion of the atom and the parts that make up the atom; protons, electrons and neutrons, and how this system can change through nuclear decay. They learn that matter can be rearranged through chemical change and that these changes play an important role in life.

They are introduced to the concept of the conservation of matter in reactions and begin to develop a more sophisticated view of energy transfer through objects, discovering the characteristics of light and sound.

They also apply their understanding of energy and forces to global systems such as continental movement, volcanoes and earthquakes.

# **HUMANITIES AND SOCIAL SCIENCES**

Humanities and Social Sciences is the study of human behaviour and interaction in social, cultural, environmental, economic and political contexts. Humanities and Social Sciences has a historical and contemporary focus, from personal to global contexts, and considers opportunities and challenges for the future.

Students will be assessed in a variety of ways, which could include source analysis, report writing, infographics or a range of informative products.

Each assessment will determine the skills of using structured overviews, using information to inform, and analysis of the information using opinion based questions. These are important skills for both life and the workforce.

In each year the Western Australian Curriculum, the Humanities and Social Sciences learning area comprises four subjects: Civics and Citizenship, Economics and Business, Geography and History.

#### **Civics and Citizenship**

In Civics and Citizenship, the key concepts are democracy, democratic values, the Westminster system, justice, participation, rights and responsibilities. They are integral in developing students' civics and citizenship understanding. In Year 9, the institutions, function and values that are central to Australia's democracy and justice system are explored with comparisons made to other nations, including those in the Asian region.

#### **Economics and Business**

In Economics and Business, the key concepts are scarcity, making choices, specialisation and trade, interdependence, allocation and markets, economic performance and living standards. They are integral in developing students' economics and business understanding. In Year 9 the concepts are examined in a national and global context with the ways that decisions about the allocation of resources are made in the Australian economy and the place of the Australian economy in the broader global economy; the interdependence between countries and the impact on economic performance and living standards.



#### Geography

In Geography the key concepts are place, space, environment, interconnection, sustainability, scale and change. They are integral in developing students' geographical thinking. In Year 9, students further develop their understanding of place, space, environment, interconnection, sustainability and change and apply this understanding to a wide range of places and environments at the full range of scales, from local to global, and in a range of location.

#### History

In History the key concepts are sources, evidence, continuity and change, cause and effect, significance, perspectives, empathy and contestability. They are integral in developing students' historical understanding. In Year 9, students also consider the more abstract concepts of evidence and contestability as they examine a range of topics from the ancient to the modern world.

History	Experiences of people during the Industrial Revolution, World War 1; causes, Gallipoli, the Western Front, our Anzac tradition, the world at war
Geography	Biomes, altering biomes, food security, challenges to food production, feeding the fu- ture population
Economics	Circular flow model, international trade, Multinational Corporations, sweatshops, share market, risks such as scams and identity theft
Civics and Citizenship	How governments are formed in parliament, policies of major political parties, the court system, precedents, factors that undermine justice.

# HEALTH AND PHYSICAL EDUCATION

#### **Health Education**

At Yanchep Secondary College students identify strategies to promote their own and others' health, safety and wellbeing in different situations and across different environments. Students identify the health and social benefits of physical activity and associate the importance of physical activity as a preventive health strategy to positively impact both individuals and the wider community. Students will spend two periods a week for a semester over the year applying appropriate protocols in face-to-face and online interactions and understand the importance of positive relationships on health and wellbeing.

This year in health we cover:

- Mental health (mindset)
- Alcohol / illicit drugs
- Training methods
- Sexual health

#### **Physical Education**

At Yanchep Secondary College students participate in Physical Education for two periods a week. They perform movement skills and sequences in selected sport or physical activity contexts to improve accuracy and efficiency. They implement simple tactics in order to achieve the intended outcome in competitive contexts.

Students describe how physical activity can improve elements of health and fitness. When participating in a variety of sports or physical activities, they demonstrate ethical behaviour and communicate to assist team cohesion and the achievement of an intended outcome.

# **OPTION SUBJECTS**

Students are required to select three subjects from the following. These subjects are dependent on minimum student numbers and staff expertise. All students will be provided with a selection form which will outline the process to choose these subjects.

#### <u>Dance</u>

Students learn the fundamentals of dance movement and technique. They are given further opportunities to choreograph using the elements of dance (BEST), choreographic devices and structures to develop choreographic intent.

They will build on and refine technical competence in their dance skills in specific dance styles. Students will also develop an appreciation for dance through responding to dance works and researching styles of dance.

The role of dance in society will be one aspect that students will explore in detail while also working collaboratively to develop a small group routine.

#### <u>Drama</u>

Students are given the opportunity to refine their knowledge and skills to present scripted drama.

They will explore the use of voice and movement in drama and how improvisation and characterisation influence the style of drama. Students will develop drama based on published script excerpts (e.g. Australian drama pre-1960 or world drama), using selected drama forms and styles.

# <u>Media</u>

Students will be provided with opportunities to view media work from contemporary and past times to explore viewpoints from Australian and/or international media work.

They will consider the impact context and audience have on media work, and explore the impact of trends on how audiences use media. Students will refine their skills and processes for problem -solving, working as a team, following timelines and using processes and strategies to ensure safe and responsible use of media equipment.

They will have the opportunity to use a range of technology, including DSLR cameras and different programs. Students will gain practical production skills, industry knowledge and editing skills.



#### <u>Music</u>

In Music students develop skills and knowledge through performing, composing and listening. Students explore different genres and experiment with electronic music and associated software.

The learning program will be examining the main styles of contemporary music from early rock songs right through to current trends. In addition, students will have the opportunity to develop their playing skills on the drums, keyboard and the acoustic guitar, as well as some creative work with ICT.

Some activities will require students to work individually or in a group, while others will involve the whole class working together.



#### Visual Arts

The Year 9 course allows students a more in depth look at the range of skills and techniques available in Visual Arts, with more time in class and opportunities to experience further materials and methods.

We learn about the work of more international and Australian artists and how to understand their motivations or messages, as well as utilize their techniques or styles in our own artworks.

This course is integral in the students' development of skills and understanding for further years of study in Visual Arts.

### **DESIGN AND TECHNOLOGY**

Students can choose either Woodwork or Metalwork in Year 9.

These classes build upon the skills developed in Year 8 and introduce many new tools and machines to extend their skills in Metal and Wood fabrication.

Design work is a significant feature of this learning area and students have the opportunity to design and construct their own projects as they work within an established Design Process.

Students are also able to explore their artistic side through the medium of Wood or Metal as they create personalised projects that reflect their personality.

Students will be given the opportunity to continue to build on experiences of workshop tools and processes. They will undertake three 'Design and Production' assignments below, that will enable them to develop their skills throughout the semester.

Students will identify design needs taking into account sustainability, social and economic factors.

- Single Drawer Handsaw Box
- Three Legged Side Table
- Personal Design and Production Assignment

Students will be given the opportunity to evaluate the advantages and disadvantages of their design ideas and solutions. They will generate their own original ideas and represent these through Production Plans in 2-D and 3-D representations.

Students will develop safety procedures and identify steps needed to complete design tasks in a safe and responsible manner.

They will follow the process below.

Investigating and defining Designing Producing and implementing Evaluating Collaborating and managing



Single Drawer Bandsaw Box



Three Leg Side Table

#### Home Economics

This practical and hands on course will provide students with the opportunity to investigate a wide range of delicious cuisine and learn about their own food choices and the need to make wise and healthy choices about foods. Whilst developing their cooking skills, students will learn to make the best possible use of many of the exciting foods available today. They will prepare delicious and interesting dishes and have the opportunity to adapt and create their own recipes. Key skills taught in this course include: practical cooking skills, recipe development, team work, time management, good nutrition and cooking for others. This course is designed to build on skills developed in Semester 1, or develop these skills in students who have not completed Semester 1.



# Languages - Japanese

In the first semester, students will look at developing their use of verbs and sentence structures by studying animals and animal descriptions. Students will learn how to give and receive basic directions. In the second half of the semester, students will explore Japanese cuisine, eating customs and restaurant language so they can order food in Japanese.



In the second semester, seasons, weather & festivals will be studied and students will learn how to compare, describe and comment on the differences between Australian and Japanese culture using written and spoken Japanese. The second half of the semester will focus on daily life and school routines, looking at what school life is like for Japanese students and then learning how to talk about their own school life using written and spoken language. In both topics of this semester there will be a focus on memorising Hiragana and basic Kanji.

### Marine Science

This program is ideally suited to students with a passion for the marine environment and who want to actively learn about this environment in a sustainable way. This course leads into Year 11 and 12 Marine and Maritime Studies, potentially leading into university, TAFE or a job in Environmental, Biological or Marine Science fields.

In this course you will gain a greater understanding of the marine environment and the issues that impact these ecosystems in a theoretical and practical program.

The Marine Science course offers students a fantastic opportunity to study a variety of marinebased topics related to Marine Biology and human impacts on the marine environment.

You will discover the impact humans have on our delicate ecosystem and how to support the conservation and management of the marine environment, while developing a greater understanding of biology, coastal physical sciences and coastal management through practical and experiential learning.



# <u>STEM</u>

This program is ideally suited to students with a passion for problem-solving and who want to develop the skills that can help them achieve success in the 21<sup>st</sup> century. This course will enable students to develop these "21<sup>st</sup> century skills" which have been identified as a major focus for industries moving into the future.

These skills include the ability to:

- think critically
- be creative
- be innovative
- communicate effectively
- be a team player
- use ICT effectively

Students will develop these skills while working in a project-based learning environment. They will be taught how to transfer these skills into their everyday life and other subjects at school.

They will complete a variety of projects, requiring students to implement the STEM learning process known as Design Thinking with final solutions being presented using a blend of physical and digital technologies. The projects that the students complete will include a range of the following: bridge building, model rockets including bottle rockets, power anchor vehicles including model planes and technology projects such as Spheros and Makey Makeys.

# **Digital Technology**

In Year 9, Digital Technologies focuses on further developing understanding and skills in computational thinking such as precisely and accurately describing problems and the use of modular approaches to solutions.

It also focuses on engaging students with specialized learning in preparation for vocational training or learning in the senior secondary years.

The following are a possible selection of courses:

#### **Computer Applications – Graphics**

In this course students develop essential knowledge and skills in Digital Technologies. Students use a variety of software applications to design and create digital products. Products may images for web sites, cartoon strips and generating original images. Students will explore a range of techniques to enhance and produce images, the will also explorer software to aid in the creation of cartoons.

#### **Computer Applications - Animation**

This course continues to develop students' skills in the area of Digital Technologies. Students will have the opportunity to develop high level application skills and learn how to effectively design, develop and create professional interactive digital products. Products will focus on creating animated images using Adobe Photoshop. Students will also be introduced to 2D animations with Blender.



#### Coding and Information Systems – Game Creation

In this course students will develop problem solving skills to create digital products using code. The course caters for students with all levels of coding experience. Students will use Scratch and build of techniques developed in Year 8. Students will develop games like Flappybirds, Space Invaders and Moon Lander. Students will also explore using platforms such as Excel and Powerpoint to create games.

#### SPORTS PROGRAM

Our Sports Program develops character, teaches technical skills and self-discipline, and nurtures a love of sport. This program enables children to compete at the highest levels and develop their skills as athletes both on the field and in the classroom. Our Sports Program has strong links to peak sporting bodies in the Yanchep community.

