



**Lynwood**

**Year 10 - 2021  
Information and Curriculum Handbook**

*Learners Today, Leaders Tomorrow*



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## Message from our Principal

Lynwood Senior High School is a comprehensive and inclusive school catering for a rich diversity of students from Years 7 - 12. With a school Vision statement of "Embracing Diversity, Celebrating Excellence, Together Creating Sustainable Futures", Lynwood Senior High School proudly embraces its diverse multi-cultural community. A stimulating, challenging and values-rich environment is provided where students are strongly supported by community, education, business and industry partners to develop the skills and resilience required to overcome the inevitable challenges that will come their way in a complex and changing world.

As a highly aspirational school, we are committed to building the social capital of students and staff to enable their engagement and success. As evidence of this, in 2018 Lynwood Senior High School was the winner of the prestigious WA Education Awards Secondary School of the Year.

Lynwood's diversity and respect for difference is reflected in every facet of school life. All of our academic programs are complemented by a strong focus on social and emotional development, enabling our students to become positive and resilient, confident and enthusiastic about their futures and the contribution they can make to our community and more globally. Lynwood Senior High School offers students the opportunity to find a pathway that meets their needs, that stimulates them to achieve their academic goals and enables access to a range of options upon completion of their secondary schooling.

This booklet is designed to inform students about the courses available at our school and to help them understand the expectations of each course. Please see the Parent and Student Information Handbook for information re school policy and procedures.

I hope that students, their parents and guardians find these publications useful and enjoy focusing positively and enthusiastically on the opportunities being provided at our school. If you have any further questions do not hesitate to contact the appropriate staff member or our front office staff who will help you find the right person to talk to.

For further information please refer to our website: [www.lynwood.wa.edu.au](http://www.lynwood.wa.edu.au)

**Geraldine Hardy**  
Principal

## Visitors to our School

We are always keen to have parents and guardians visit our school. To ensure the safety of your child and other students, we ask all visitors to firstly report to the front office reception, sign in using our iPad sign-in system (someone will help you if unsure) and be given a visitor's badge. By following this process you can avoid the circumstance of being asked by staff to state why you are on the property.

***If you would like to meet with a teacher, please telephone first so we can organise a mutually convenient appointment.***

## Course Costs

***Please note that the course costs stated on the following pages are given as a guide only. These costs are based on the 2020 pricing structures and are subject to change in 2021.***

# Curriculum Information

## Schooling in Western Australia

All schools in Western Australia will be implementing the Australian Curriculum over the next three years. English, Mathematics, Science and History are the first learning areas to do this and other learning areas will continue to utilise the Curriculum Framework in the interim. The Australian Curriculum sets out what students should know, understand and value whilst preparing them as lifelong learners in the 21<sup>st</sup> Century.

The Australian Curriculum has seven General Capabilities and three priorities, which are embedded into the curriculum of each learning area. The Australian Curriculum also sets minimum standards for students to achieve and hopefully surpass in each learning area. The General Capabilities and Priorities are listed below:

### General Capabilities

1. Literacy
2. Numeracy
3. ICT Capability
4. Critical and Creative Thinking
5. Personal and Social Development
6. Ethical Behaviour
7. Intercultural Understanding

### Cross-Curricular Priorities

1. Aboriginal and Torres Strait Islander histories and cultures
2. Asia and Australia's Engagement with Asia
3. Sustainability

### Course Overview

The curriculum at Lynwood Senior High School covers eight learning areas and aligns the lower school curriculum to the senior school curriculum as set out by the School Curriculum and Standards Authority.

Year 10 student courses generally cover the eight learning areas:

- The Arts
- English or English as an Additional Language (EAL/D)
- Health and Physical Education
- Languages other than English – Chinese
- Mathematics
- Science
- Humanities and Social Sciences (Business and Careers Education)
- Technologies and Enterprise (Design and Technology, Digital Technologies)

All Year 10 students will be involved in compulsory courses in the area of English, Maths, Science, Humanities and Social Science, and Health and Physical Education.

### Course Selection

Year 10 is a significant decision making year so it is important that you choose your subjects wisely. Some courses make recommendations for study at a Year 10 level to prepare you for senior school selection. It is also an opportunity to try subjects you have not studied to see if they are appropriate for you.

In Year 11 you will choose a University and/or General pathway. You will undergo a Career Development Program in Term Two to guide you in selecting appropriate courses for your preferred career pathway. Course selection will be based on students meeting prerequisites for many courses.

Your grades from Semester One in Year 10 combined with teacher recommendations, exam results and OLNA results will be used to direct the course selection process to ensure you are in a pathway matched to your ability level and future aspirations.

Further information regarding pathways and courses for senior school will be provided throughout the year. A parent information evening in Term Two will explain the course selection process further and assist families in making the correct choices.

# The ARTS

The Arts learning area comprises five subjects: Dance, Drama, Media Arts, Music and Visual Arts.

The Arts curriculum is written on the basis that all students will study at least two Arts subjects from Pre-primary to the end of Year 8. It is a requirement that students study a performance subject and a visual subject. Each of the five Arts subjects are organised into two interrelated strands: *Making and Responding*.

## **Making**

Making in each Arts subject engages students' cognition, imagination, senses and emotions in conceptual and practical ways and involves thinking kinesthetically, critically and creatively. Students develop knowledge and skills to plan, produce, present, design and perform in each arts subject independently and collaboratively. Students work from an idea, an intention, resources, an imaginative impulse, or an external stimulus. A part of making involves students considering their work in the Arts from a range of points of view, including that of the audience. Students reflect on the development and completion of making in the Arts.

## **Responding**

Responding in each Arts subject involves students reflecting, analysing, interpreting and evaluating in the Arts. Students learn to appreciate and investigate the Arts through contextual study. Learning through making is interrelated with, and dependent upon, responding. Students learn by reflecting on their making and responding to the making of others. The points of view students hold, shift according to different experiences in the Arts. Students consider the Arts' relationships with audiences. They reflect on their own experiences as audience members and begin to understand how the Arts represent ideas through expression, symbolic communication and cultural traditions and rituals. Students think about how audiences receive, debate and interpret the meanings of the Arts.

## **CONTEXT: ART AND DESIGN:**

### **VISUAL ART**

**CODE 10VART \$25.00**

This course is constructed to allow students to explore traditional methods of investigating through a range of art media and drawing approaches. The students will have the opportunity to be exposed to a range of Art methods including Drawing and Printmaking, Graphics and Design, and Painting and Sculpture. Students will explore themes from our environment, still life and social issues as well as learning to use the Art Design language to evaluate their own work and the works of others both past and present. In Year 10, the Visual Art course is designed to prepare students for Upper School Visual Art, both in a practical and analytical sense.

## **CONTEXT: MEDIA:**

### **MEDIA STUDIES**

**CODE 10MEDIA \$25.00**

In this course students are introduced to the codes and conventions of Media. Students are taught how to deconstruct media forms by analysing the selective processes used to create intended meanings through Film, Advertising, Radio Productions, Magazine Layouts, Web Designs, Comic Strips, Cartoons, Videogames, Soundscapes, Photo manipulation and Typography. Students will construct their own Media Production from their understanding of the selective processes. This course is highly recommended for students who wish to study Media Production and Analysis in Senior School.

## **CONTEXT: DRAMA:**

### **DRAMA**

**CODE 10DRAMA \$25.00**

In Year 10 students will use drama for exploring and expressing their individual and social identities. They will learn to use symbols, mood, irony and multiple subtexts in making drama. They will experiment with innovative and hybrid forms and performance styles. They will practise directing and production tasks and responsibilities and refine and practise for their performances. Students will explore and respond to more complex theatre forms and styles from a range of traditions and movements and begin to develop and articulate a personal framework for critical study.

## **CONTEXT: MUSIC:**

The Music Program consists of class music, weekly instrumental lessons and involvement in an ensemble. Students are expected to participate in all three areas.

### **CERTIFICATE II IN MUSIC INDUSTRY**

**CODE 10MUS1/2 \$50.00**

The Certificate II in Music Industry is a one-year course designed to prepare students for the Certificate III in Music Industry course in Years 11 and 12. If students are successful in completing the 8 Units of Competency, they will achieve a Certificate II by the end of Year 10. This certificate will contribute two points (equivalent to 2 C Grades) towards their WA Certificate of Education by the end of Year 12. It is recommended only for students who have previously studied Classroom Music in Years 7, 8 and 9, or for students who have a keen interest in music and can play a musical instrument or sing. It involves students creating, performing and responding to music from a range of genres, as well as investigating future career opportunities on offer within the Music Industry. The Units of Competency delivered are:

BSBWHS201 Contribute to health and safety of self and others  
CUAIND201 Develop and apply creative arts industry knowledge  
BSBWOR203 Work effectively with others  
CUAMLT201 Develop and apply musical ideas and listening skills  
CUAMPF102 Develop ensemble skills to perform simple musical parts  
CUAMPF201 Play or sing simple musical pieces  
CUASOU201 Develop basic audio skills and knowledge  
CUASOU202 Perform basic sound editing

### **INSTRUMENTAL AND ENSEMBLE MUSIC**

**CODE 10SIM \$36.00**

Students who are currently involved in the school's Music program will continue their Instrumental Music lessons with the visiting School of Instrumental Music teacher and continue to be involved in the school's Band(s). The lessons and rehearsals are taken above the normal student workload. Students enrolled in this course are expected to attend and participate in all the musical activities organised – such as the annual Arts Showcase, and various other performances, festivals and excursions. Instrumental and Ensemble Music does not count as part of your elective choices. These courses can only be taken in conjunction with The Certificate II in Music Industry course.

### **CONTEXT: DANCE:**

### **CERTIFICATE I IN DANCE**

**CODE 10DANCE \$450.00**

The Certificate I in Dance course introduces students to the basic foundations of dance qualification. Students will be instructed on foundation dance techniques, given an introduction to creative arts knowledge and learn the principles required for a safe dance environment with the appropriate application of etiquette. The Units of Competency delivered are:

BSBCRT101	Apply critical thinking techniques
BSBLED101	Plan skills development
CUADAN101	Core - Develop foundation dance techniques
CUADAN104	Develop foundation tap technique
CUADAN102	Develop foundation ballet dance technique
CUADAN103	Develop foundation jazz dance technique
CUADAN105	Develop foundation street dance technique
CUADAN106	Develop foundation cultural dance technique
CUAIND201	Core - Develop and apply creative arts industry knowledge
CUAWHS101	Core - Follow safe dance practices
ICTICT101	Operate a personal computer
HLTAID003	Provide first aid

## ENGLISH

CODE 10ENG \$25.00

In the English learning area, students learn about the English language: how it works and how to use it effectively. The study of English plays a vital role in the development of students' literacy, enhances their learning in all areas of the curriculum and provides them with the communication skills and critical understanding of language necessary for active participation in society.

Students complete a course that focuses on four aspects of learning: i.e. Speaking/Listening, Reading, Writing and Viewing. This approach to learning will work in conjunction with the Australian Curriculum inter-related strands of Language, Literacy and Literature. Students are required to demonstrate some level of competence in the Major Learning Outcomes listed below, and these results will be determined at the point of exit of each school year.

### ENGLISH LEARNING AREA OUTCOMES

#### 1. Understanding Language

Students understand that the way language is used varies according to context.

#### 2. Attitudes, Values and Beliefs

Students understand that language has an important effect on the ways in which they view themselves and the world in which they live.

#### 3. Conventions

Students use the conventions of Standard Australian English with understanding and critical awareness.

#### 4. Processes and Strategies

Students select from a repertoire of processes and strategies when listening, viewing, reading, speaking and writing by reflecting on their understanding of the way language works.

#### 5. Listening

Students listen actively with purpose, understanding and critical awareness in a wide range of situations.

#### 6. Speaking

Students speak with purpose and effect in a wide range of contexts.

#### 7. Viewing

Students view a wide range of visual texts with purpose, understanding and critical awareness.

#### 8. Reading

Students read a wide range of texts with purpose, understanding and critical awareness.

#### 9. Writing

Students write for a range of purposes and in a range of forms using conventions appropriate to audience, purpose and context.

Student performance in Year 10 will determine which Year 11 course will best suit each student. Enrolment in Year 11 ATAR courses will best suit students who get an A or B grade in Year 10 English.

## **ENGLISH as AN ADDITIONAL LANGUAGE OR DIALECT**

EAL/D

**CODE 10EALD \$25.00**

English as an Additional Language or Dialect (EAL/D) aims to provide students whose first language is not Standard Australian English with the opportunity to reach a level of Standard Australian English enabling them to participate and work in general English classes and within the community.

The EAL/D program is designed to develop students' ability to understand purpose, main ideas and the relationship between ideas as well as compare texts, which reflects purpose and the development of ideas. Students will examine social and ethical issues in fiction, newspapers, advertisements and expository texts. Synthesis of texts is a main focus in reading and viewing to prepare students for TAFE and WACE courses in Senior School.

It also deals with the concept of genre in English. Students will compare and contrast genres (e.g. science fiction, crime, adventure, etc) and compose texts expressing their ideas and opinions of at least three written and visual texts, which may include comics, cartoons, advertisements, graphs, diagrams as well as articles, letters and various other texts.

All students are encouraged to read the newspaper; either online or a hard copy, as course content and WACE examination content focuses heavily on contemporary issues that are discussed and reported on daily.

All lower school EAL/D programs are designed to effectively prepare students for achieving the Western Australian Certificate of Education (WACE) through participation in English or English as an Additional Language or Dialect Foundation, General or ATAR units in Years 11 and 12.

# HEALTH and PHYSICAL EDUCATION

Courses in Health and Physical Education focus on the physical, emotional and social dimensions of the health of the individual.

Students plan, act and reflect in order to develop the essential knowledge and understandings, attitudes, values and skills which encourage participation in regular physical activity and support the maintenance of a healthy lifestyle.

Health and Physical Education has two integrated strands:

- Personal, social and community health
- Movement and physical activity.

The two strands signify and provide a balance within the learning area of health - related and movement - related knowledge, understanding and skills.

## **PERSONAL, SOCIAL AND COMMUNITY HEALTH**

### **HEALTH EDUCATION**

**CODE 10HE \$15.00**

Personal, social and community health strand will develop student's knowledge, understanding and skills to support a positive sense of self, to effectively respond to life events. This unit includes the "Keys 4 Life" pre driver education program which enables students to obtain their learners permit.

Skills and topics that are integral to this strand are:

- Interpersonal Skills
- Stress and Mental Health Issues
- Fitness
- Growing and Developing Positive Healthy Relationships
- Trauma - road etc.
- First Aid and Emergency Scenarios
- Drug Education
- School/Community Health Projects

## **MOVEMENT AND PHYSICAL ACTIVITY**

In movement and physical activity contexts, students will develop movement competence in a range of physical activities in a variety of contexts and environments including games and sports, outdoor and recreational activities that are performed individually and in groups.

Focuses in this include the following activities:

- Swimming/Survival/Water polo
- Volleyball
- Fitness/Weights
- Team Games
- Racquet Sports
- Individual Choice
- Group Selected Options

### **GENERAL PHYSICAL EDUCATION**

**CODE 10PE \$25.00**

Students develop the physical skills and self-management skills to enable them to independently pursue an active lifestyle. The focus is on developing the student's understanding of the activities they enjoy and their ability to manage their own activity. Activities will vary according to the interest of the group but may include:

- Fitness
- Water Polo
- Team Games
- Racquet Games
- Individual Choice
- Swimming
- Offence and Defence Games

**ACADEMY OF SOCCER****CODE 10SOCC \$414.00****Inclusive of Referees Course**

The Academy is designed to enable students to attain excellence in Soccer. Programmes cover the skills, techniques and attitudes of high level training practices. These include nutrition, training and physiology, umpiring and coaching of Soccer. Links are developed with Club, State and National bodies. Students need to have a specific interest in the course and entry requires a selection process.

**ELITE SKILLS – FOOTBALL OR NETBALL****CODE 10ESP \$40.00**

The course is designed to enable students to attain advanced skills in ATAR Physical Education, generally and specifically. This may include studying a selected sport in depth, eg Netball and AFL Football. Programmes will cover the skills, techniques and attitudes for high level participation. Entry to this course will involve a selection process.

All Physical Education courses provide an excellent foundation for the Certificate II in Sport and Recreation or Physical Education Studies ATAR in Senior School. In addition, students may select the following semesterised electives:

**RACQUET SPORTS (Elective)****CODE 10RACQ \$25.00**

- Tennis
- Badminton
- Table Tennis

An opportunity to build on skills acquired in Years 7, 8 and 9. The course covers advanced skills and strategies for effective participation at a recreational and social level. This course is highly recommended for students who wish to study Physical Education in Year 11 and 12.

**SPECIALISED BASKETBALL (Elective)****CODE 10BBL \$25.00**

This course covers the advanced skills, techniques, strategies, tactics and attitudes for higher level participation in Basketball. It is highly recommended for students who wish to study ATAR Physical Education Studies and/or Certificate II in Sport and Recreation in Year 11 and 12.

**WEIGHTS FOR FITNESS (Elective)****CODE 10WGHTS \$25.00**

This course covers the skills and knowledge required in attaining personal fitness through weight training and cardio respiratory exercise. This course is highly recommended for students who wish to study Physical Education in Year 11 and 12.

**OUTDOOR EDUCATION 1 (Elective)****CODE 10ODP1 \$40.00**

Please note that swimming skills are essential in this option (students must be able to competently swim 200m and tread water).

- Water Safety/Survival
- Canoeing
- Snorkelling

Students acquire the skills to participate safely in the above activities. One day excursions and camps will be offered to develop these challenges. This course will prepare students for Outdoor Education General in Senior School.

**OUTDOOR EDUCATION 2 (Elective)****CODE 10ODP2 \$40.00**

Bushcraft/Camping Skills

- Navigation/Orienteering
- Hiking

Students acquire the skills to participate safely in the above activities. One day excursions and camps will be offered to develop these challenges. This course will prepare students for Outdoor Education General in Senior School.

# HUMANITIES and SOCIAL SCIENCES

**HASS** **CODE 10HASS \$25.00**

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. In the Western Australian Curriculum, the Humanities and Social Sciences learning area comprises four subjects:

- Civics and Citizenship
- Economics and Business
- Geography
- History

By studying Humanities and Social Sciences, students will develop the ability to question; think critically, make decisions based on evidence, devise proposals for actions and communicate effectively. The Humanities and Social Sciences subjects provide students with the knowledge and skills they need to develop a broad understanding of the world in which we live and how people can participate as active and informed citizens in the 21<sup>st</sup> century.

The following units will be taught to Year 10 students:

## **Justice at Home and Overseas**

- The key features and values of Australia's system of government (e.g. democratic elections, the separation of powers) compared with **one** other system of government in the Asia region, such as China, Japan, India or Indonesia.
- Australia's roles and responsibilities at a global level (e.g. provision of foreign aid, peacekeeping, participation in international organisations such as the United Nations).
- The role of the High Court, including interpreting the Constitution.

## **Economic Performance and Living Standards**

- Indicators of economic performance (e.g. economic growth rates, unemployment trends, inflation rates, human development index, quality of life index, sustainability indexes) and how Australia's economy is performing.
- The links between economic performance and living standards, the variations that exist within and between economies and the possible causes (e.g. foreign investment, employment rates and levels of debt).
- The distribution of income and wealth in the economy and the ways in which governments can redistribute income (e.g. through taxation and social welfare payments).

## **Environmental Change and Management**

- The human-induced environmental changes that challenge sustainability (e.g. water and atmospheric pollution, degradation of land, inland and coastal aquatic environments).
- The environmental worldviews of people and their implications for environmental management.
- Select **one** of the following types of environments as the context for a comparative study of an environmental change for Australia and **one** other country:
  - Land
  - Inland water
  - Coast
  - Marine
  - Urban

## **Geographies of Human Wellbeing**

- The different ways of measuring and mapping human wellbeing and development, and how these can be applied to measure differences between places.
- The reasons for spatial variations between countries in selected indicators of human wellbeing.
- The issues affecting the development of places and their impact on human wellbeing, drawing on a study from a developing country or region in Africa, South America or the Pacific Islands.

## **The Modern World and Australia**

- The inter-war years between World War I and World War II, including the Treaty of Versailles, the Roaring Twenties and the Great Depression.

### **Depth Study I: Investigating World War II (1939-1945)**

- The causes and course of World War II
- The experience of Australians during World War II, such as prisoners of war (POWS), the Battle of Britain, Kokoda and the fall of Singapore.
- An examination of significant events of World War II, including the Holocaust and the use of the atomic bomb.

### **Depth Study 2: Investigating Rights and Freedoms (1945-the present)**

- The origins and significance of the Universal Declaration of Human Rights, including Australia's involvement in the development of the declaration.
- The background to the struggles of Aboriginal and Torres Strait Islander Peoples for rights and freedoms before 1965, including the 1938 Day of Mourning and the Stolen Generations.
- The US civil rights movements and its influence on Australia.

## **Business and Careers**

### **1. Knowledge and Understanding**

- Civics and Citizenship
- Economics and Business

### **2. Skills**

- Questioning
- Analysing
- Evaluating

***It is very important that students who wish to study in the areas of Business and Careers in SENIOR SCHOOL, select as many related courses as possible.***

The following table has been produced to assist you in your Year 10 choices. It indicates which Lower School courses ensure that students have the background knowledge and skills required in Business and Careers Senior School courses.

<b>Code</b>	<b>Lower School Courses</b>	<b>Senior School Courses</b>
10SMB	Introduction to Small Business	Business Management and Enterprise General Accounting & Finance
10WST	Work Studies	Career and Enterprise

### **INTRODUCTION TO SMALL BUSINESS (Elective)**

**CODE 10SMB \$14.00**

Students will investigate and evaluate areas of small business including:

- The nature of a small business
- Preparing a business plan
- Management
- Marketing
- Finance
- Business source documents
- Location

**WORK STUDIES (Compulsory)****CODE 10WST \$14.00**

The content of this course is divided into two main interrelated strands: skills for learning and work and career life design. In Year 10 the concepts and skills introduced in Year 9 are investigated and developed at a higher level. Students are encouraged to be increasingly independent and self-directed learners. These are skills that are essential in Senior School and the work force.

Using the technology process students will continue their career pathway planning and will:

- Continue to develop personal profile analysis and apply it to lifelong learning challenges with the work requirements in the 21<sup>st</sup> century.
- Develop workplace skills in communication, negotiation, problem solving, teamwork and initiative.
- Further develop their career management by exploring work trends, job applications, support services such as recruitment agencies and small business associations.
- Explain how diverse work arrangements are impacting on the rights and responsibilities of employers and workers.

## LANGUAGES other than ENGLISH (LOTE)

In languages students learn to **speak**, to **listen**, to **read** and to **write** short texts and simple conversation. They will explore the **cultural aspects** and experiment with the language.

Why study a second language? A second language:

- Provides exciting job and travel opportunities
- Develops an appreciation of other cultures
- Develops an understanding of language structure which assists with English

### CHINESE (Elective)

**Prerequisite:** Year 9

**CODE 10CHIN \$20.00**

#### CHINESE IN THE WORLD

The Republic of China currently boasts the fastest growing economy in the world and is widely regarded as the potentially biggest global market in the twenty-first century. Proficient speakers of Mandarin Chinese will find jobs in various fields such as business, government, international relations, information technology, and translation.

Chinese is the language of nearly 1/4 of the World's Population. Speakers of Chinese not only live in China, Taiwan, and Singapore, but also spread throughout Southeast Asia, North America, and Europe. Learning Chinese is an extraordinary and agreeable experience through which you can immerse yourself in a different culture.

Unlike most languages, Chinese has a unique ideographic writing system, which provides visual comprehensibility. The grammatical structure of Chinese is not only logical, but also pragmatic, related to the particular way of Chinese thinking.

# MATHEMATICS

## MATHEMATICS

CODE 10MAT \$25.00

Learning Mathematics creates opportunities for and enriches the lives of all Australians. The Western Australian Curriculum: Mathematics provides students with essential mathematical skills and knowledge in Number and Algebra, Measurement and Geometry, and Statistics and Probability. It develops the numeracy capabilities that all students need in their personal, work and civic life.

## CONTENT STRUCTURE

The Western Australian Curriculum: Mathematics is organised around the interaction of three content strands and four proficiency strands. It also assumes teachers will make use of available digital technology, including calculators in teaching and learning contexts.

## EQUIPMENT

It is vital to students' learning and their ability to participate fully that they have the equipment specified in the Booklist for Mathematics. At a minimum, students need to make sure that they have pens, pencils, a ruler, a protractor, an exercise book and a calculator with them for every Mathematics lesson. Parents can support the Mathematics teachers and their child by ensuring that this equipment is purchased for their child, as well as regularly checking that they still have all their required equipment and that it is in working order.

Students should be monitoring their progress throughout Year 10 with the following in mind:

- A realistic assessment of their ability in Mathematics
- Consideration being given to Senior School Mathematics courses that may be recommended prerequisites for further study in their choice of vocation.
- Developing a commitment to study and achievement through schoolwork, homework and study.

## PATHWAYS

Year 10 students will be placed in one of three pathways according to their ability level, which will have been determined during their previous studies in Mathematics. Year 10 Pathways will be:

**Pathway 1** The content of which covers prerequisite mathematical concepts for all Mathematics ATAR courses available in Senior School.

**Pathway 2** The content of which covers prerequisite mathematical concepts for the ATAR Mathematics Applications course and the General Mathematics Essential course available in Senior School.

**Pathway 3** The content of which covers prerequisite mathematical concepts for the General courses available in Senior School.

**Note:** The achievement of students in each Pathway is monitored throughout the year and Pathway changes may be made for students whose achievement in their present Pathway is either outstanding or very poor.

During Year 10, students will be advised by their teachers as to which Senior School Mathematics course/s would be most appropriate for their ability level, based on their achievement in assessments during the year. Teachers will use the following achievement prerequisites when making their recommendations.

### Year 10 Achievement Prerequisites for Entry to Courses in Senior School

Mathematics Specialist – Learning Area Grade A and Pathway 1 Grade A in second semester.

Mathematics Methods – Learning Area Grade A and Pathway 1 Grade A or B in second semester.

Mathematics Applications – Learning Area Grade A or B and Pathway 1 Grade A, B or C or Pathway 2 Grade A in second semester.

Mathematics Essential – Learning Area Grade C or better and Pathway Grade C or better or at the discretion of staff in consultation with Deputy Principal.

Mathematics Foundation – only students who have not met the numeracy requirements are permitted in this course, ie students who have to sit OLNA in Year 11 and/or 12.

**Students should consider this advice in the context of their future career aspirations.**

# SCIENCE

## SCIENCE

CODE 10SCI

\$27.00

Science provides an empirical way of answering interesting and important questions about the biological, physical and technological world. The knowledge it produces has proved to be a reliable basis for action in our personal, social and economic lives. Science is a dynamic, collaborative and creative human endeavour arising from our desire to make sense of our world through exploring the unknown, investigating universal mysteries, making predictions and solving problems. Science aims to understand a large number of observations in terms of a much smaller number of broad principles. Science knowledge is contestable and is revised, refined and extended as new evidence arises.

**The Australian Curriculum: Science has three interrelated strands,** Science Understanding, Science as a Human Endeavour and Science Inquiry Skills.

### MAJOR SCIENCE LEARNING AREA OUTCOMES

1. The **Science Inquiry Skills** and **Science as a Human Endeavour** strands are described across a two-year band. **Science Inquiry Skills** involve identifying and posing questions; planning, conducting and reflecting on investigations; processing, analysing and interpreting evidence; and communicating findings. **Science as a Human Endeavour** focuses on scientific inquiry. This enables students to make clear connections between the inquiry skills that they are learning and the work of scientists.
2. **Biological Sciences**  
Students learn that the transmission of heritable characteristics from one generation to the next involves DNA and genes and that the theory of evolution by natural selection explains the diversity of organisms.
3. **Chemical Sciences**  
Students learn how the atomic structure and properties of elements are used to organise them in the Periodic Table. They also investigate how different types of chemical reactions are used to produce a range of products and can occur at different rates.
4. **Earth and Space Sciences**  
Students recognise that the universe contains features including galaxies, stars and solar systems and the Big Bang theory can be used to explain the origin of the universe. They also learn that global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere.
5. **Physical Sciences**  
Students recognise that energy conservation in a system can be explained by describing energy transfers and transformations. They then find out how the motion of objects can be described and predicted using the laws of physics.

### Science Pathways

As students' progress through the Science course in Years 8 and 9 they demonstrate varying interests and capabilities. To cater for these differences a number of pathways are created for them in Year 10. These pathways offer varying difficulty in scientific concepts and understanding and hopefully prepare the students to choose their most suitable subjects in Years 11 and 12 and future University or TAFE courses.

## TECHNOLOGIES

All courses within technologies aim to prepare the next generation of problem solvers, critical and creative thinkers, who have strong transferable practical skills, knowledge of contemporary and traditional technologies, and who work well both independently and in teams.

The Technologies learning area comprises two distinct subjects namely Design and Technology and Digital Technology. The study of both subjects in Year 10 are optional. All courses within the two subjects provide a clear pathway into senior school courses. Students are strongly recommended to study at least one of the courses in Year 9 and in Year 10 to ensure they have the prerequisite knowledge, skills and attributes to be successful in the senior school courses they are keen on pursuing in Years 11 and 12.

### DESIGN and TECHNOLOGY

All Design and Technology courses are suitable for students of all abilities. Each course, however, builds on the foundation of previous years. The focus of study in Year 10 is to develop students into autonomous learners in preparation for senior school pathways that will lead them to post school opportunities of choice. Students will develop logical and structured processes to empathise investigate, devise, produce and evaluate possible solutions. The study of Design and Technology also provides students with valuable life skills and industry preparedness as they explore creative expression through the interplay between form and function in a variety of mediums.

The following table has been produced to assist you in your Year 10 choices. It indicates all Year 10 courses offered in the Technologies learning area and the senior school courses they lead into.

Code	Year 10 Courses	Senior School Courses
10ENMEC	Engineering(Mechatronics)	ATAR Engineering (Mechatronics)
10WOOD	Woodwork	Materials Design and Technology Wood (General) Building and Construction (General)
10METAL	Metalwork	Building and Construction (General) Certificate II in Engineering (Pathways)
10PHOTO	Photography	Certificate II Visual Art – Photography
10TECH	Technical Graphics	Design - Technical Graphics (General)
10FST	Food General	Food Science and Technology (General) Certificate II in Hospitality
10CAFE	Café Food	Food Science and Technology (General) Certificate II in Hospitality
10BODY	Body Shop	Children Family and Community (General)

**ENGINEERING (Mechatronics)**

**CODE 10MECH \$55.00**

Mechatronic engineering is a rapidly growing broad field of study that combines knowledge and understandings of mechanics, electrical and electronic and systems and control to create artificial intelligence 'smart' machines. It underpins the technology behind robotics and autonomous systems, automated manufacturing and 'intelligent' microprocessor-based technologies. Mechatronic Engineers are in great demand in fields such as aerospace, biotechnology, robotics and agricultural technology. Students will combine 3D printing, Laser cutting, Electronics and Programmable Logic controllers to create autonomous automated solutions that will replicate more advanced systems used in industry. Students will engage in building projects such as:

- Drones
- Robots for specialised applications
- Automated Machines

This course is a prerequisite for any students wishing to pursue ATAR Engineering in 2022 and who wish to pursue a career in Engineering.

### **WOODWORK (Elective)**

**CODE 10WOOD \$49.00**

Students will use a technology process to further develop their creativity and project management skills through the creation of functional Timber artefacts. Students will be encouraged to consider in greater depth design and production elements like material properties, construction and production methods to create the end product. Computer Aided Designing is a vital part of the course. The use of a laser cutter to cut and engrave and create marquetry patterns will also be encouraged.

- Occasional tables
- Chess board tables
- Step ladders
- Personal projects

This course is recommended for all students especially those considering a career in the Furnishing and Light Manufacturing industry.

### **METALWORK (Elective)**

**CODE 10METAL \$49.00**

Students will be more involved in a wider range of problem solving activities using the technology process. During these experiences students will be introduced to more advanced hand and machine skills. Activities will include lathe work, sheet metal work, bench work and wrought iron work. Students will also have the opportunity to develop their MIG and ARC welding skills, soft, silver soldering and braze welding ability.

Projects could include the design and making of:

- Tool boxes
- Wrought iron products
- Personal projects
- Garden tools
- Machine tools

This course is recommended for all students especially those considering a career in the Metals and Engineering industry.

### **DIGITAL PHOTOGRAPHY (Elective)**

**CODE 10PHOTO \$36.00**

Students are further exposed to photographic systems and Digital Technologies that include greater use of digital SLR cameras, formats and emerging technologies while producing their studio photographic portfolio. Students will also have the opportunity to generate advanced digital images as part of their portfolio. This will require the manipulation and generation of images using digital photographic computer software and systems. Students are required to produce a studio type photographic portfolio of work and designs illustrating creative and innovative solutions and developmental planning, identifying the needs of the stakeholder.

### **TECHNICAL GRAPHICS (Elective)**

**CODE 10TECH \$24.00**

Year 10 Technical Graphics is an introduction to communicating ideas through drawing. Students will use instrument and freehand techniques to produce a range of drawings. Auto CAD will be taught to produce drawings suitable for 3D printing and Laser Cutting. Students explore creativity and entrepreneurship through the creation of prototypes design to meet the personal needs of a client.

### **FOOD GENERAL (Elective)**

**CODE 10FST \$30.00**

Travel the world in this unit preparing and tasting staple foods from the different regions. Appreciate how other cultures prepare and cook food from the crops they grow. Develop your technology skills by using a variety of equipment and cooking methods from other cultures. Discover the fun in cooking and designing a new international fast food while working through the technology process. Develop innovative strategies and use materials to package and advertise food products. Through this unit you will have the opportunity to develop food preparation skills and promote healthy eating.

### **CAFÉ FOOD (Elective)**

**CODE 10CAFE \$47.00**

Indulge in café style food in the classroom. You will work your way through the café menu creating pasta dishes, burgers, wraps, smoothies and sweet treats such as cookies, cakes and muffins. Have a go at making a latte, or perhaps a cappuccino is more to your taste. Your technology skills will be developed by planning and preparing recipes/meals that are suitable for the café market and cater for present health trends. Create your own pizza sensation!

### **BODY SHOP (Elective)**

**CODE 10BODY \$30.00**

Develop skills to give you confidence and improve self-esteem. Indulge yourself in practical sessions like skin care, make up, and nail care along with great tips to assist with personal presentation. Expand your knowledge of materials by exploring the range of beauty and stress relief products which can be made at home. Sustainability will be the focus through the choice of materials. Learn how to look after yourself physically and emotionally. Nutritional requirements for teenagers will be investigated and some delicious healthy meals prepared.

## **DIGITAL TECHNOLOGIES**

We live in a Technological world where progress is very much dependent on the ever increasing sophistication of the devices driven by complex algorithms designed to make access to information, products and services easier. Digital Technologies courses in Year 10 are designed to appeal to the analytical as well as creative individuals who would like to move from just users of technology to creators of technological solutions.

### **CREATIVE DIGITAL DESIGN (Elective)**

**CODE 10DIGD \$14.00**

The Year 10 Creative Digital Design course moves into the 3D virtual environment space. Students will begin to investigate opportunities to develop their entrepreneurial online presence by creating a website and associated marketing materials for a brand. Later they use specialised industry standard software to create graphics, 3D characters, rendering, animation, environments and motion graphics. They will also investigate the opportunities to create and work within virtual reality environments as they develop assets and environments for virtual as well as mixed reality applications. Working with Autodesk Maya and 3D Max students will work both individually and in teams to simulate industry as they collaborate to create the finished product.

10DIGD

Creative Digital Design

Information Digital Media and Technology (General)





**Lynwood Senior High School**

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