

YEAR 9



Mark Oliphant
College

2027 Curriculum Guide

Choose Your Direction.

Create Your Future



Government
of South Australia
Department for Education

RESPECT • KINDNESS • BELONGING • RESPONSIBILITY

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Mark Oliphant
College

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Year 9



Learning Areas



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Welcome to Mark Oliphant College

At Mark Oliphant College, we are committed to providing a world-class education which supports and challenges each student. This enables students to have the widest choice of post-school options and the skills and qualities to be successful in the world beyond school.

In third term each year we ask all students in Years 9 to 11 to undertake the important task of selecting their courses for the following year. It is a time when students need to work closely with their parents/carers and teachers to gather accurate, relevant information on which to base decisions about subjects and future directions. Subject counselling staff will provide information about SACE, TAFE and Vocational Education and Training (VET) courses to students currently in Years 10 and 11. It is important that all students make informed subject choices to keep as many pathways open while completing their studies.

As a parent/carer, you can assist by:

- Reading the Curriculum Guide carefully and encouraging your child to do the same
- Talk with your child about:
 - Their interests, particularly regarding subjects
 - Their future career and study aspirations
 - Their progress in subjects they are studying this year
 - The subjects on offer for next year
 - Your ideas about their subject choices
- Assisting your child to view subject selection as an important process that requires careful consideration
- Encouraging your child to ask questions and seek advice
- Contacting school staff to discuss any issues where you need more information.

This guide provides current students, prospective students and their families, with course descriptions of subjects offered at Mark Oliphant College. It is designed to help students make decisions about a suitable course of study from Years 9-12. Please seek the advice of your child's teachers and/or Area of Study Coordinators if you would like further clarification.

Kerry Williams
Principal

Why This Guide Matters

This guide has been designed to support students and families as they explore learning opportunities and future pathways.

Message from the Head of Middle School

At Mark Oliphant College, we are committed to supporting every Year 9 student to explore their interests, build on their strengths and develop the knowledge, skills and confidence needed for future learning.

Year 9 is an important stage in each student's educational journey. It provides students with an opportunity to experience a broader range of subjects, discover new areas of interest and begin thinking about the pathways they may wish to pursue in the Senior Years and beyond.

When selecting subjects, students should consider their interests, strengths and areas they would like to further develop. While students may already have ideas about their future, it is also important to remain open to new experiences and choose a balanced program that keeps a range of future options available.

We encourage students and families to work together throughout the subject selection process. Conversations with teachers, Home Group staff and school leaders can also provide valuable guidance and help students make informed decisions.

This Curriculum Guide has been designed to provide clear information about the subjects and learning opportunities available to Year 9 students at Mark Oliphant College. I encourage students and families to take the time to explore each option carefully and make choices that support engagement, achievement and future aspirations.

I wish all Year 9 students every success as they take this important next step in their learning journey.

Daniel Lyciano

Head of Middle School

‘Year 9 is an important stage in each student's educational journey. It provides students with an opportunity to experience a broader range of subjects, discover new areas of interest and begin thinking about the pathways they may wish to pursue in the Senior Years and beyond.’



Every learner.
Every pathway.
Every opportunity.

Subject selection

INFORMATION

Choosing subjects is an important step in shaping your future.

Take time to explore your interests, strengths and goals. Talk with your parents/carers, teachers and the subject counselling team to make informed choices.

YOUR SUBJECT JOURNEY



1

EXPLORE

discover your interests and strengths



2

DISCUSS

Talk with your parents/carers and teachers



3

SELECT

Submit Web preferences in LFL Week 3



4

SIGNOFF

Attend Course counselling meeting in week 4



HOW CAN FAMILIES HELP

- ✓ Read the Curriculum Guide carefully
- ✓ Talk to your child about interests and goals
- ✓ Discuss subject options and future pathways
- ✓ Encourage your child to ask questions



Keep your options opened and choose subjects that challenge you and support your future goals

SUBJECT AVAILABILITY

Although every effort is made to accommodate each student subject choices, final subject offerings are dependent on the number of students enrolled, and staff availability. If your child selects a subject that will not be offered, they will be re-counselled accordingly. Additionally, some re-counselling in Term 4 may occur based on a review of student achievement.

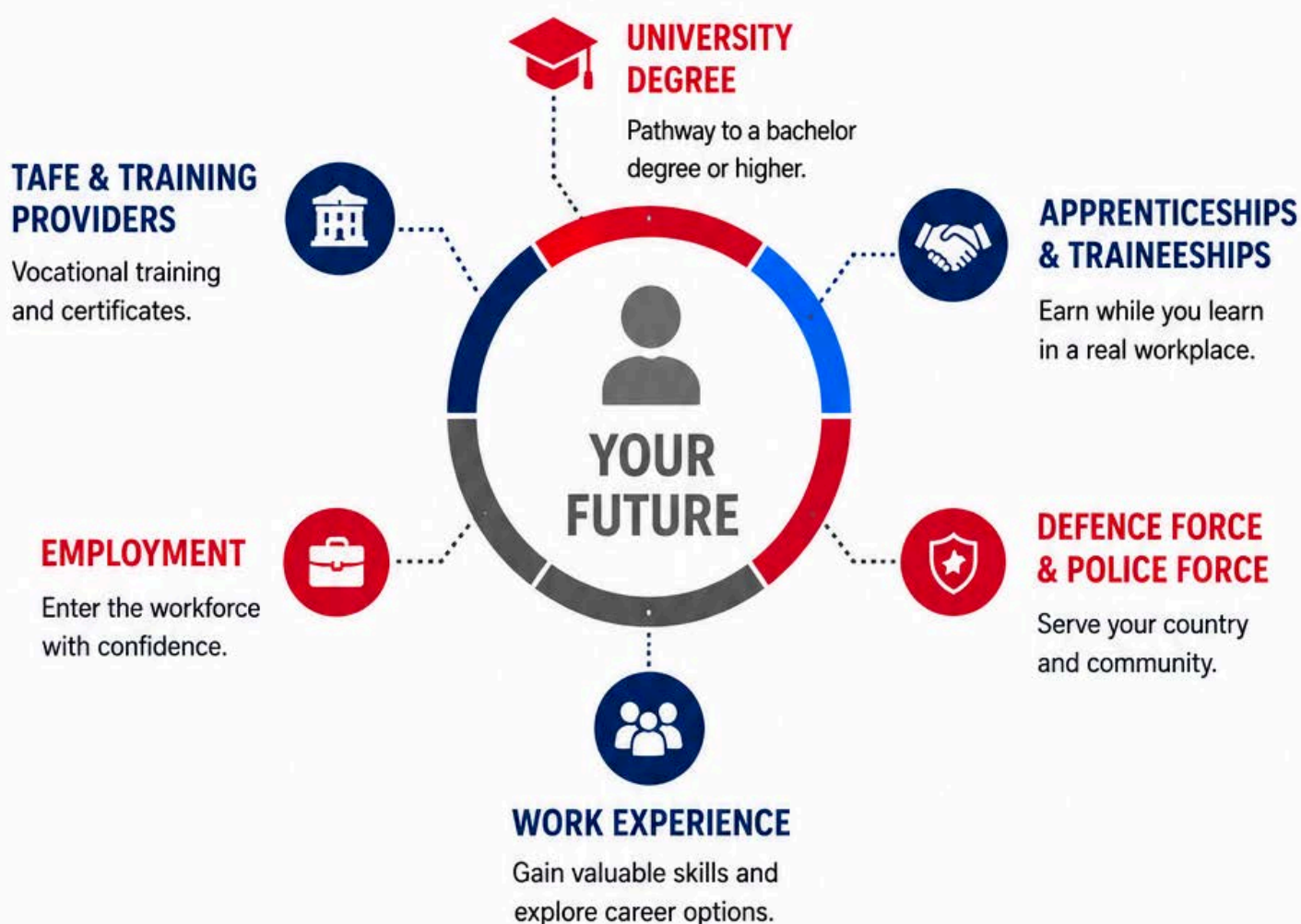
PATHWAY PLANNING

Research shows that students who select a pathway that is relevant to them are much more likely to engage positively with learning in senior school. Decisions about pathways for students start with conversations about the student's interests, passions, strengths and values.

Students have access to career information through the Exploring Identities and Futures (EIF) process, a compulsory component of the SACE completed in Year 10. The purpose of EIF is to encourage students to develop the skills and understandings required to succeed in senior school and beyond.

Students explore the connection between their interests, abilities, learning styles and employment pathways. They set goals, research how to get there and design a plan that supports achieving their goals.

Year 10, 11 and 12 students are also able to complete Work Experience by negotiation with appropriate leadership staff.



YEAR 9

LEARNING AREA / SUBJECT NAME	PAGE
ARTS – Compulsory (1 term each)	
CERAMICS (semester 2) MUSIC EXPERIENCE PERFORMING ARTS - INTEGRATED LEARNING PHOTOGRAPHY PRINTMAKING (semester 2) VISUAL ARTS - DESIGN (semester 1) VISUAL ARTS A (TRADITIONAL) (semester 1)	5
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ARTS

Create • Perform • Inspire



Mark Oliphant
College

ARTS

LEARNING PATHWAYS

Explore pathways from Year 7 through to Stage 2



VISUAL
ARTS



DRAMA



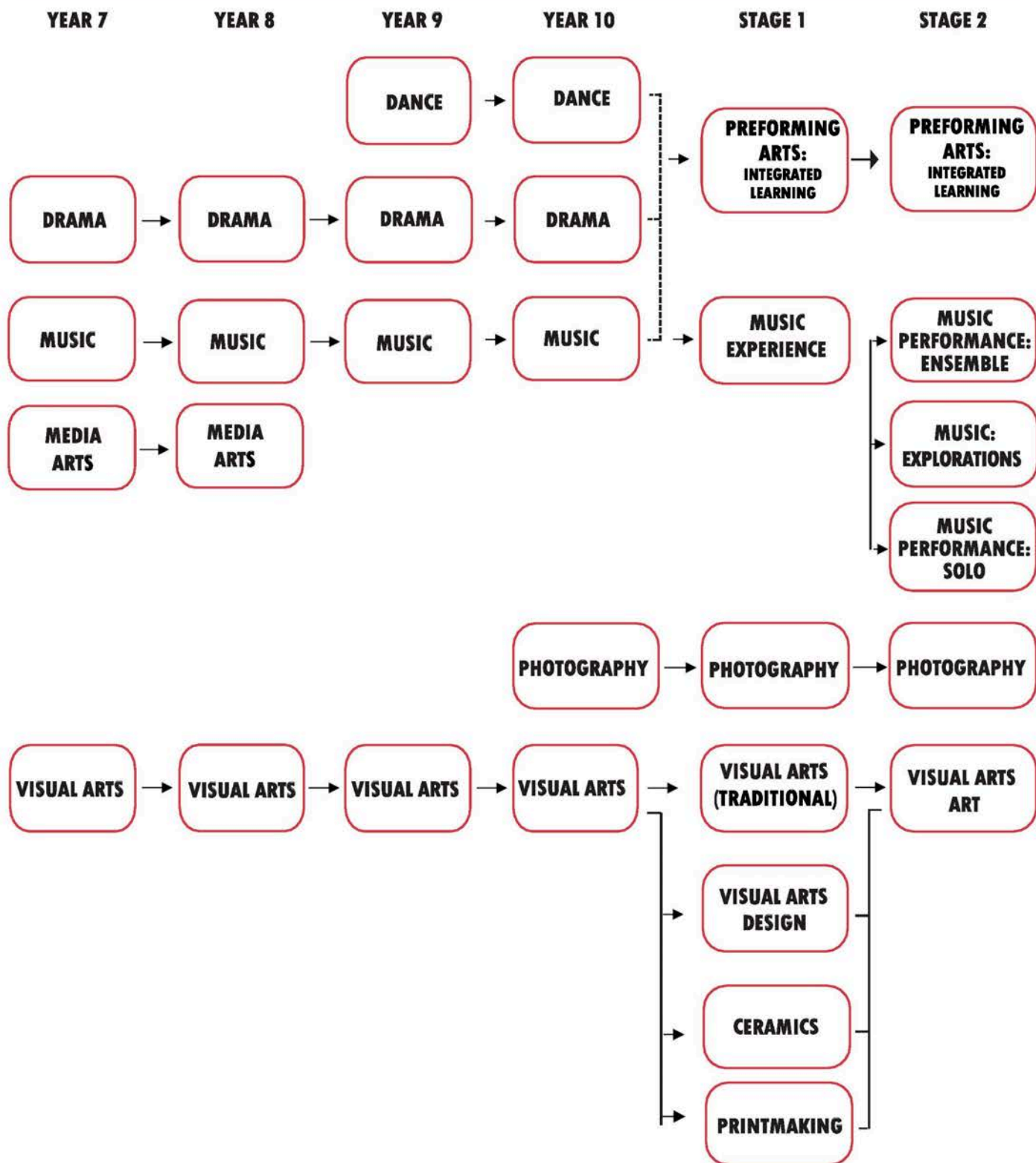
MUSIC



PHOTOGRAPHY



MEDIA
ARTS





Arts

DANCE 1 SEMESTER ELECTIVE

CONTENT:

Students will continue to develop their practical Drama skills and their ability to write academically using arts-specific terminology and style, moving from reflective writing towards review writing. Students look at the interdependent nature of theatrical roles while working through the page-to-stage process.

Students are expected to perform in an on-stage role as part of this subject (Arts and Technologies Showcase and/or Drama Night).

THEORY TOPICS:

- Arts Specific Terminology
- Elements of Drama
- Analytical Response to a Performance
- Reflection of Performance
- Script Creation

PRACTICAL TOPICS:

- Scripted Performance
- Devised Performance
- Off-stage Dramatic Roles
- Dramatic Practitioner

ASSESSMENT:

- Analytical Response to a Performance
- Ensemble and Individual Performances

DRAMA 1 SEMESTER ELECTIVE

CONTENT:

Students will work collaboratively and independently to explore the elements of dance, choreographic devices, form and production elements to communicate choreographic intent in dances they make, perform and view. They will evaluate the impact of dance from different cultures, places and times on Australian dance. They will choreograph, rehearse and perform dances, demonstrating technical and expressive skills appropriate to the genre and style. Students will learn and apply arts specific terminology in this subject. Students are expected to perform onstage as part of this subject.

THEORY TOPICS:

- Arts Specific Terminology
- Elements of Dance
- Analytical Response to a Performance
- Indigenous Dance Research
- Review Writing

PRACTICAL TOPICS:

- Body awareness and dance skills development through warmups, stretches and combinations
- Devised ensemble performances
- Group choreography



Arts

MUSIC A & B 1 SEMESTER(MUSIC A) OR FULL YEAR (MUSIC A & B) ELECTIVE

CONTENT:

Students develop their practical skills on their chosen instrument/s as they work collaboratively within their ensemble group to perform. It is expected that students will perform in front of an audience at school assemblies and The Arts Showcase. Students work independently to refine their instrumental skills and apply these skills in their ensemble performances. Students discuss periods from music history and explore various music styles, conventions and elements of music applying their knowledge in creative works.

If students are considering Year 10 Music, it is highly recommended they select Year 9 Music for a Full Year. If students are considering Stage 1 Music Experience in Year 11, students are required to have studied Year 9 and Year 10 Music for a Full Year.

THEORY TOPICS:

- Elements of Music
- Music History
- Musical Analysis

PRACTICAL TOPICS:

- Instrumental Skills
- Ensemble Participation
- Arrangement/Composition

ASSESSMENT:

- Ensemble and/or Solo Performances
 - Music in Context, Theory and analysis
 - Musical Arrangement or Original Composition
- Musical Arrangement

VISUAL ARTS 1 SEMESTER ELECTIVE

CONTENT:

This course focuses on teaching students the fundamental techniques and methods of art, enabling them to develop and refine their technical skills and understanding the elements and principles of art and design. They will consolidate their knowledge of basic art forms, including drawing, painting, sculpture and digital media. Students are encouraged to develop their artistic potential through hands-on projects, art analysis discussions and researching historically renowned artists and artworks.

THEORY TOPICS:

- Visual Art Specific Terminology
- Art Movements Timeline
- Artist Research
- Critical Analysis
- The Elements and Principles of Art and Design

PRACTICAL TOPICS:

- Drawing with Graphite and Portraiture
- Painting with Acrylics
- Working with Clay

ASSESSMENT:

- Drawing Techniques
- Colour Mixing with Acrylic Paint
- Practical Clay Vessels
- Mixed Media Collage

ENGLISH

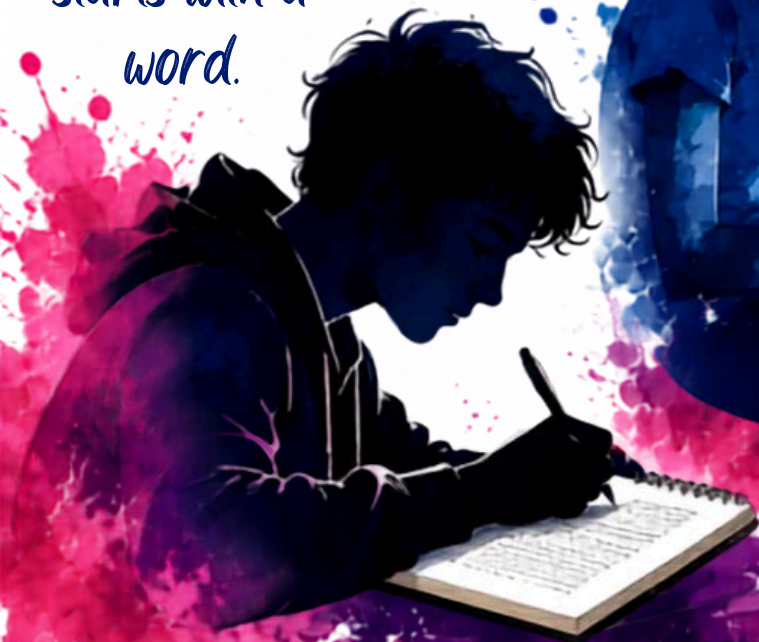
Read • Write • Communicate



*Every story
starts with a
word.*



*ideas
thoughts
words
impact*



*Your voice.
Your words.
Your Future.*



READ

WRITE

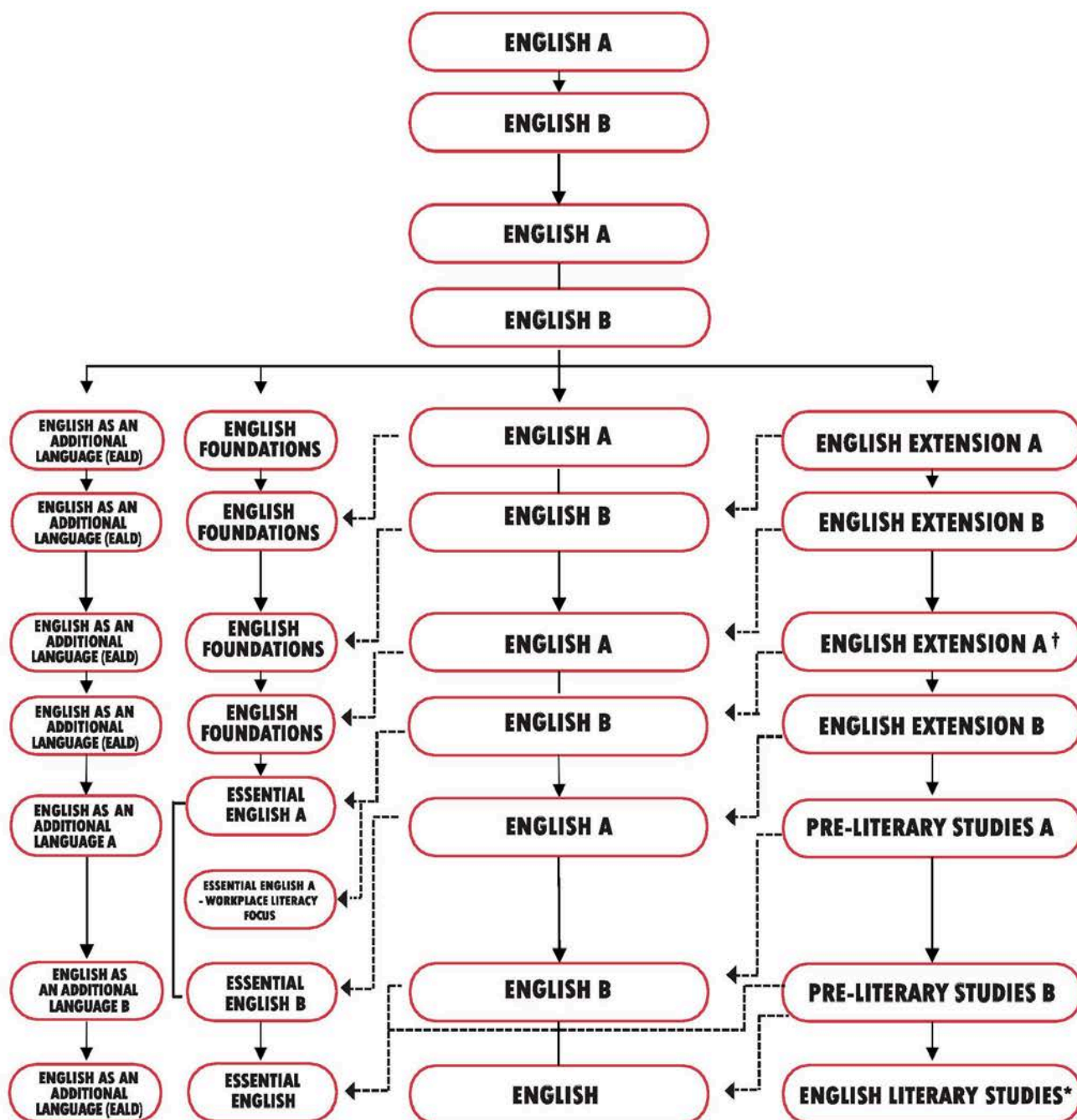


Mark Oliphant
College

SPEAK

LISTEN

Full Year



PREREQUISITES	
† Year 10 English Extension A	Students must complete Year 9 English Extension with a C grade or higher OR achieved an A or B in Year 9 English.
Stage 1	Students must pass two Semesters of English. Note: If a C grade or higher is not achieved in Semester 1, then Stage 1 Essential English B and/or Stage 1 Essential English (EALD Focus) B as two electives will become compulsory in Semester 2 to satisfy SACE requirements.
*Stage 2 English Literary Studies	Students must achieve an A or B in two semesters of Stage1 Pre-Literary Studies



English

ENGLISH FOUNDATIONS A 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students develop literacy skills and confidence in the basics of the Year 9 Australian Curriculum English course.

The content is similar to the standard Year 9 English, however, assessment design will be modified to allow success at different levels with an emphasis on building reading comprehension and basic literacy skills.

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATIVE TEXT:

- Persuasive Speech
- Narrative
- Newspaper Articles

RESPONDING TO TEXTS:

- Poetry
- Comprehension

ENGLISH FOUNDATIONS B 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students develop literacy skills and confidence in the basics of the Year 9 Australian Curriculum English course. The content is similar to the standard Year 9 English, however, assessment design will be modified to allow success at different levels with an emphasis on building reading comprehension and basic literacy skills.

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATING TEXT:

- Recount
- Short Stories (Myths, Legends, Gothic)

RESPONDING TO TEXTS:

- Advertising
- Film Study
- Novel Study



English

ENGLISH A 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students develop literacy skills and confidence in the basics of the Year 9 Australian Curriculum English course. The content is similar to the standard Year 9 English, however, assessment design will be modified to allow success at different levels with an emphasis on building reading comprehension and basic literacy skills.

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATIVE TEXT:

- Persuasive Speech
- Narrative
- Newspaper Articles

RESPONDING TO TEXTS:

- Poetry

ENGLISH B 1 SEMESTER 10 CREDITS COMPULSORY ELECTIVE

CONTENT:

Students understand how to use a variety of language features to create different levels of meaning. They understand how interpretations can vary through the author's purpose, by reading and/or viewing texts. Students create their own texts that require them to interpret and integrate ideas from various short stories. They continue to develop reading comprehension skills and edit for effect, selecting effective vocabulary and grammar that contribute to the precision of texts.

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATING TEXT:

- Recount
- Short Stories (Myths, Legends, Gothic)

RESPONDING TO TEXTS:

- Advertising
- Film Study
- Novel Study



English

ENGLISH AS AN ADDITIONAL LANGUAGE A (EALD) 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

This is a specialised course for students who speak English as an additional language or dialect at home. Students will build their confidence in all aspects of the English language, with a strong focus on writing and oral language skills, alongside other students who come from diverse personal, educational and cultural backgrounds

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including

CREATING TEXTS:

- Persuasive speech
- Newspaper articles

RESPONDING TO TEXTS:

- Advertising
- Film study

ENGLISH AS AN ADDITIONAL LANGUAGE A (EALD) 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

This is a specialised course for students who speak English as an additional language or dialect at home. Students will build their confidence in all aspects of the English language, with a strong focus on writing and oral language skills, alongside other students who come from diverse personal, educational and cultural backgrounds

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATING TEXTS:

- TikTok advocacy
- Podcast

RESPONDING TO TEXTS:

- Novella or short story study



English

ENGLISH EXTENSION A 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

This subject is designed for students who are passionate and enthusiastic about English, enjoy reading and wish to pursue this subject through to Year 12 and/or at a tertiary level. While similar in content to standard English, students will explore more complex texts and develop a more thorough understanding of the key skills needed in high level analytical responses.

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATING TEXTS:

- Narrative
- Poetry
- Writer's Statement

RESPONDING TO TEXTS:

- Film Study
- Advertising

PREREQUISITES:

Completion of Year 9 English Extension with a C grade or higher or Year 9 General English with a B grade or higher.

ENGLISH EXTENSION B 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

This subject is designed for students who are passionate and enthusiastic about English, enjoy reading and wish to pursue this subject through to Year 12 and/or at a tertiary level. While similar in content to standard English, students will explore more complex texts and develop a more thorough understanding of the key skills needed in high level analytical responses.

ASSESSMENT:

Students demonstrate evidence of their learning through Creating Texts and Responding to Texts assessment types including:

CREATING TEXTS:

- Biography
- Review

RESPONDING TO TEXTS:

- Text Comparison
- Persuasive Writing
- Biography

HEALTH PHYSICAL EDUCATION

Move • Thrive • Succeed



**BE ACTIVE
FOR YOUR
BODY**



**LOOK AFTER
YOUR
MENTAL HEALTH**



**EAT WELL
FUEL YOUR
BODY**



**SUPPORT
EACH OTHER**



**CHALLENGE
YOURSELF**

*Strong Bodies.
Healthy Minds.
Bright Futures.*



Mark Oliphant
College

HEALTH & PHYSICAL EDUCATION LEARNING PATHWAYS

Explore pathways from Year 7 through to Stage 2



PHYSICAL
EDUCATION



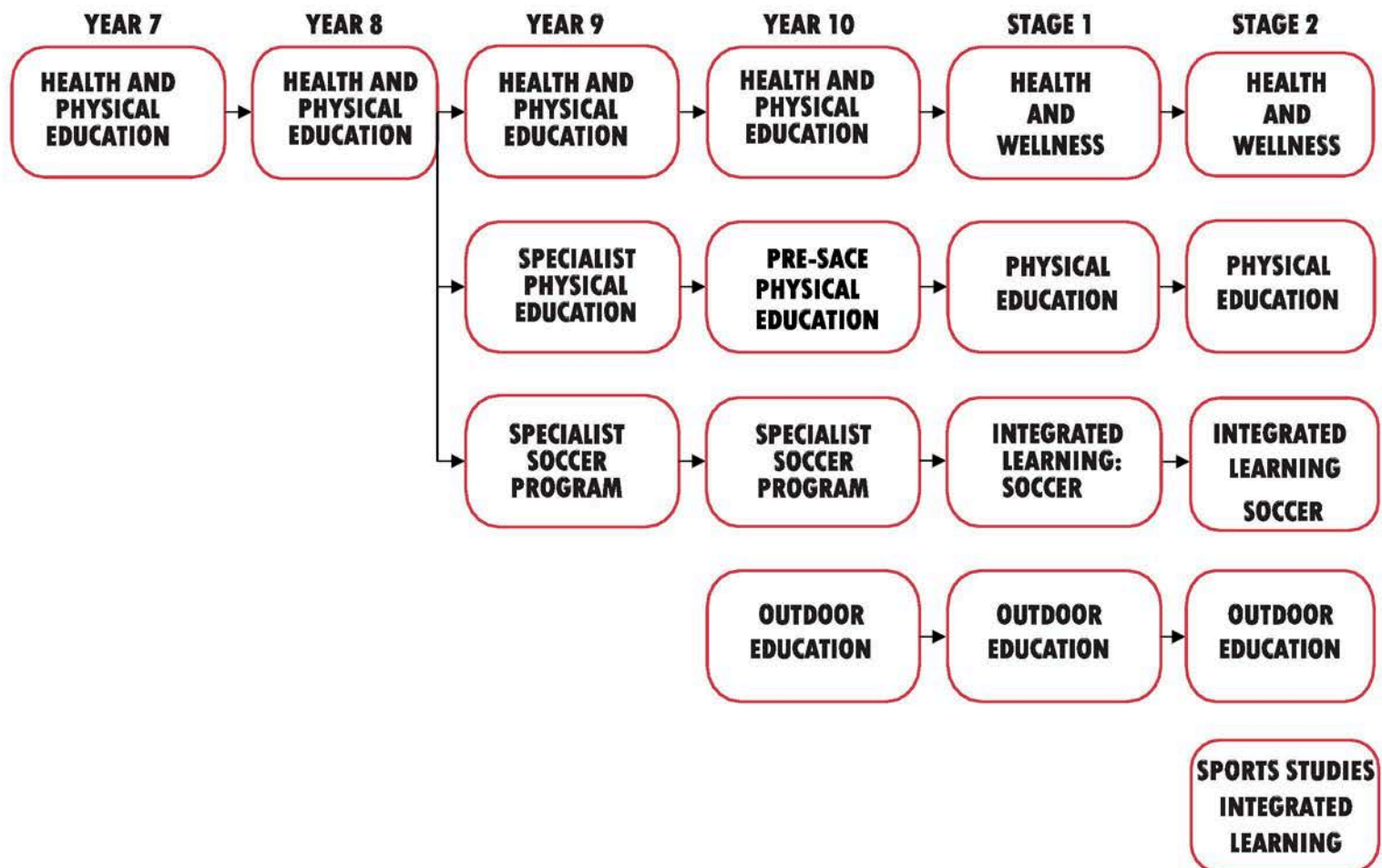
HEALTH AND
WELLBEING



SOCCER



OUTDOOR
EDUCATION





Health & Physical Education

HEALTH AND PHYSICAL EDUCATION 1 SEMESTER COMPULSORY

CONTENT:

During practical sessions, students will engage in a range of invasion games, court-divided games and net and wall games and learn tactical concepts of these games.

During theory classes, students will learn about identity and inclusion through completion of close reading tasks, written responses and case studies (Manly Sea Eagles, NRL).

Through completion of the Shine curriculum, students explore topics including gender diversity, negotiating consent and sexually transmitted infections.

THEORY TOPICS:

- Identity and inclusion
- Shine curriculum

PRACTICAL TOPICS:

Invasion Games

- Lacrosse
- Soccer
- Basketball

Net and Wall Games

- Tennis
- Volleyball

ASSESSMENT:

- Identity and Inclusion 3-part assignment
- Shine curriculum

SPECIALIST PHYSICALEDUCATION 1 SEMESTER ELECTIVE

CONTENT:

Through the theory units of this subject students will develop an understanding of fitness components and how they relate to performance capacity in sports. Students will develop and demonstrate their understanding of movement strategies and build their capacity to analyse and evaluate evidence by producing a video using class performance from GoPro and drone footage. Students will develop and demonstrate their performance of specialised movement skills, application of movement strategies and application of fair play and leadership skills through engagement in Net and Wall Games, Invasion Games and Striking and Fielding Games.

THEORY TOPICS:

- Fitness Components
- Invasion Games Performance Analysis

PRACTICAL TOPICS:

Net and Wall Games

- Volleyball
- Badminton

Invasion Games Options

- Touch Football and/or Tag Rugby
- Ultimate Frisbee

Striking and Fielding

- Softball



Health & Physical Education

OUTDOOR EDUCATION 1 SEMESTER OR FULL YEAR 10 OR 20 CREDITS ELECTIVE

CONTENT:

Students participate in a collaborative team environment to develop their ability as a soccer player, and as a member of a team. Time in class is split between practical and some theory lessons. Practical lessons focus on developing the principles of ball possession soccer, while theory lessons centre around a variety of topics that are directly linked to the practical. Students in the Soccer Program also get to represent the school at several school sport competitions such as knockout soccer, futsal, 5-a-side and friendly matches.

THEORY TOPICS:

- Core Skill Analysis
- Sport Science
- Coaching
- Futsal SEPEP

PRACTICAL TOPICS:

- Soccer Training

ASSESSMENT:

- Practical
- Theory Based Assessment

HUMANITIES & SOCIAL SCIENCES (HASS)

Explore • Understand • Lead




HISTORY
Learning from
the past


GEOGRAPHY
Understanding
our world


**CIVICS &
GOVERNMENT**
Democracy in
action


**SOCIETY &
CULTURE**
People, places
and diversity


**BUSINESS &
ECONOMICS**
Choices shape
our future

GLOBAL

Informed citizens. Active participants. Positive change.

HUMANITIES & SOCIAL SCIENCES (HASS)

LEARNING PATHWAYS

Explore pathways from Year 7 through to Stage 2



HISTORY



GEOGRAPHY



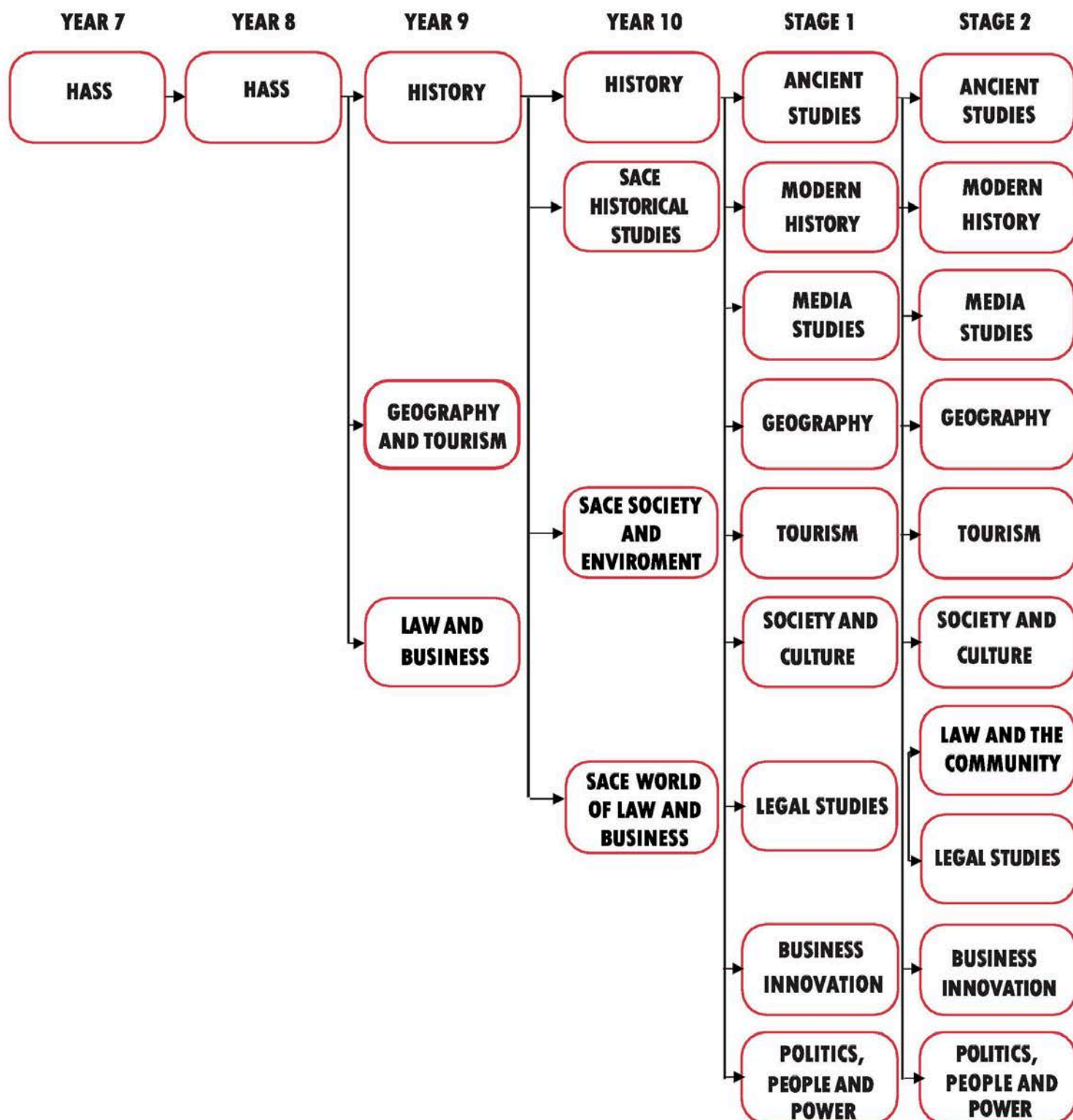
LAW



BUSINESS



MEDIA





HUMANITIES & SOCIAL SCIENCES (HASS)

HISTORY A 1 SEMESTER COMPULSORY (SEMESTER 1)

CONTENT:

Students study the making of the modern world from 1750 to 1918, with a focus on Australian history. Students develop historical understanding through key concepts including continuity and change, empathy and cause and effect. They evaluate the reliability and usefulness of primary and secondary sources, as well as investigate the significance of historical people and events from a range of different perspectives.

TOPICS:

- Making and transforming the Australian nation (1750–1914)
- World War I (1914–1918)
- Optional topic: The Industrial Revolution and movement of peoples (1750–1900)

ASSESSMENT:

- Source Analysis
- Historical Empathy
- Research Task
- Essay

GEOGRAPHY AND TOURISM B 1 SEMESTER COMPULSORY ELECTIVE (SEMESTER 2)

CONTENT:

Students study environmental geography by learning about biomes and food security. They will then spend time learning about the geographies of human interconnections with a focus on tourism, trade and technology. Students learn about cause and effect and develop geographical skills through data collection and analysis. They develop mapping and field study skills and learn how to evaluate and represent data in different ways.

TOPICS:

- Biomes and food security
- Geographies of interconnections
- Tourism and Trade

ASSESSMENT:

- Mapping Skills
- Field Study
- Investigation
- Issues Report
- Comparison



HUMANITIES & SOCIAL SCIENCES (HASS)

LAW AND BUSINESS B 1 SEMESTER COMPULSORY ELECTIVE (SEMESTER 2)

CONTENT:

Students develop their understanding of Australia's system of government and how it enables change. Students investigate the features of Australia's court system. They also examine global connectedness and how this is shaping Australian society and global citizenship.

They investigate international trade and interdependence within a global context, including trade with the countries of Asia. Students investigate what it means for Australia to be part of the global economy, and how businesses create and maintain competitive advantage. Students focus on consumer and financial risks and rewards. They examine Australia's financial sector.

TOPICS

Civics and Citizenship

- Government and democracy
- Laws and citizens
- Citizenship, diversity and identity

Economics and Business

- International trade and interdependence

ASSESSMENT:

- Research Task
- Report
- Comparison
- Investigation
- Business Presentation

LANGUAGES INDONESIAN

Connect • Communicate • Discover

Halo!
Hello!

Apa kabar?
How are you?

Terima kasih!
Thank you!

Selamat pagi!
Good morning!

*Bahasa
adalah
jendela
dunia.*
Language is
the window
to the world.

*Explore a new culture.
Build confidence.
Broaden your future.*



COMMUNICATE

Build practical language skills for everyday life.



CONNECT

Build relationships and understand perspectives.



EXPLORE

Discover Indonesia's culture and traditions.



EXPAND

Prepare for travel, study and work.



ENRICH

Challenge yourself and open new opportunities.

LANGUAGES

LEARNING PATHWAYS

Explore pathways from Year 7 through to Stage 2



GLOBAL
UNDERSTANDING



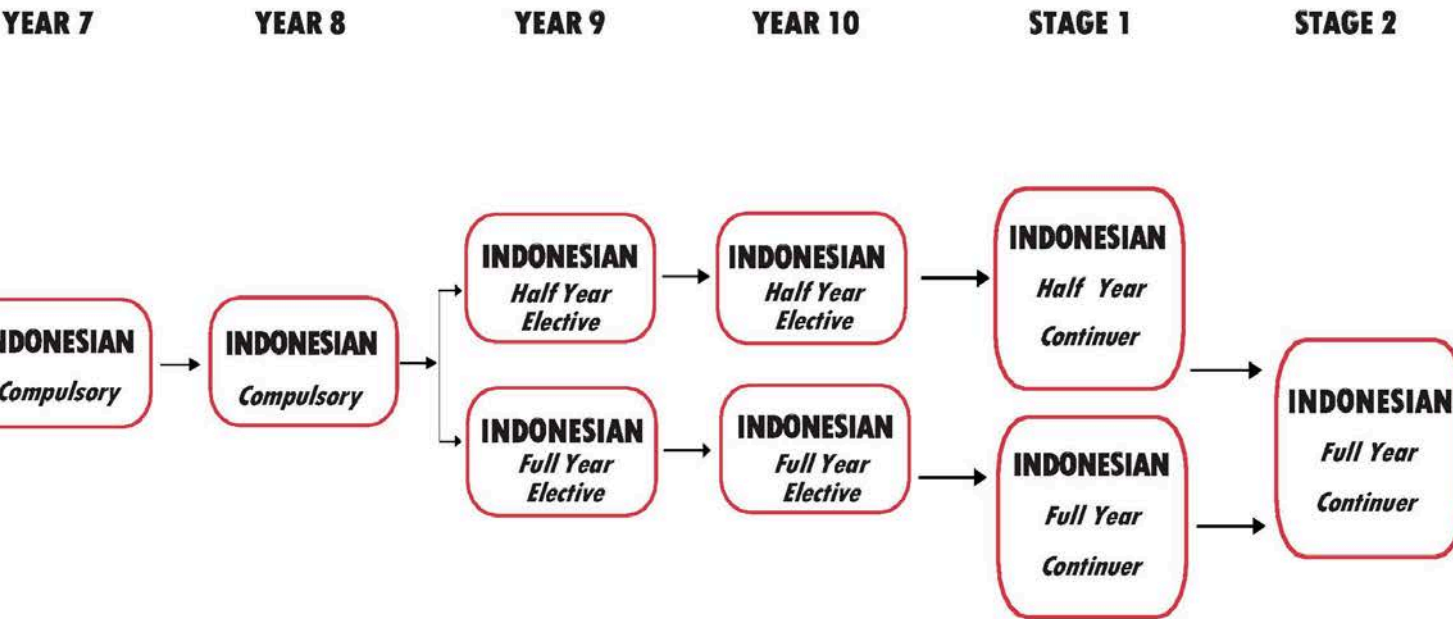
COMMUNICATION
SKILLS



CULTURAL
CONNECTIONS



GLOBAL
OPPORTUNITIES





Languages

**INDONESIAN A & B
1 SEMESTER (INDONESIAN A)
OR
FULL YEAR (INDONESIAN A & B)
ELECTIVE**

CONTENT:

Students will develop their skills around the Indonesian language and learn about the country's diversity of people and culture.

Students will use Indonesian in a range of classroom interactions and experiences. They will read and listen to texts, and apply practical conversational skills in the Indonesian language. Students will engage with and create texts such as scripts, messages, letters, songs and stories

TOPICS:

- Hobbies and Sport - including places, people, days of the week and frequency words.
- School - including subjects, objects around the classroom, school activities, transportation, telling the time and uniform

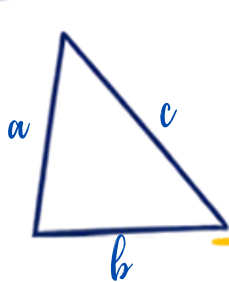
ASSESSMENT:

- Speaking Skills
- Listening Skills
- Writing Skills
- Reading Skills
- Language Interpreting Script Translating Skills
- Culture-related Behavioural Skills and Manners
- Indonesian Cultural Musical and Dance Skills
- Authentic Indonesian (and Asian) Cooking Masteries

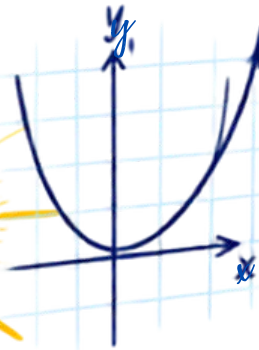
MATHEMATICS

Think • Solve • Apply

Building
skills for
today and
tomorrow!



$$a^2 + b^2 = c^2$$



$$-b \pm \sqrt{b^2 - 4ac}$$

NUMBER

ALGEBRA

MEASUREMENT

GEOMETRY



Mark Oliphant
College

STATISTICS & PROBABILITY



DEVELOP
PROBLEM SOLVING
SKILLS



BUILD
LOGICAL THINKING



MAKE SENSE
OF THE WORLD
AROUND US



PREPARE FOR
YOUR FUTURE

MATHEMATICS LEARNING PATHWAYS

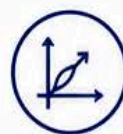
Explore pathways from Year 7 through to Stage 2



MATHEMATICS



GENERAL
MATHEMATICS



MATHEMATICAL
METHODS



SPECIALIST
MATHEMATICS

YEAR 7

Semester 1

MATHEMATICS A

Semester 2

MATHEMATICS B

YEAR 8

Semester 1

MATHEMATICS A

Semester 2

MATHEMATICS B

YEAR 9

Semester 1

MATHEMATICS FOUNDATIONS A

MATHEMATICS A

MATHEMATICS EXTENSION A[†]

Semester 2

MATHEMATICS FOUNDATIONS B

MATHEMATICS B

MATHEMATICS EXTENSION B

YEAR 10

Semester 1

MATHEMATICS FOUNDATIONS A

MATHEMATICS A

MATHEMATICS EXTENSION A^{††}

Semester 2

MATHEMATICS FOUNDATIONS B

MATHEMATICS B

MATHEMATICS EXTENSION B

STAGE 1

Semester 1

ESSENTIAL MATHEMATICS A

GENERAL MATHEMATICS A

**MATHEMATICAL
METHODS A**

**SPECIALIST
MATHEMATICS A***

Semester 2

ESSENTIAL MATHEMATICS B

GENERAL MATHEMATICS B

**MATHEMATICAL
METHODS B**

**SPECIALIST
MATHEMATICS B***

STAGE 2

Full Year

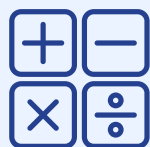
**MATHS SKILLS FOR LIFE
INTEGRATED LEARNING**

GENERAL MATHEMATICS

**MATHEMATICAL
METHODS**

**SPECIALIST
MATHEMATICS***

PREREQUISITES	
[†] Year 9 Mathematics Extension A	Students must complete Year 8 Mathematics with a B grade or higher.
^{††} Year 10 Mathematics Extension A	Students must complete Year 9 Mathematics with a B grade or higher.
*Specialist Mathematics	This course must be studied in conjunction with Mathematical Methods.



Mathematics

MATHEMATICS FOUNDATIONS A 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students develop mathematical competency and confidence in the basic skills of the Year 9 Australian Curriculum mathematics course. Students complete a modified program to aid in understanding, fluency and problem solving with the aim to increase confidence and help them bridge skills gaps moving forward.

The course covers the basic skills from the Australian Curriculum strands of Number and Algebra, Measurement and Geometry, and Statistics and Probability. The program incorporates developing technology skills, including the use of scientific calculators and student laptops to consolidate mathematical concepts and to provide opportunities to apply their skills.

TOPICS:

- Real numbers
- Money and financial mathematics
- Patterns and algebra
- Using units of measurement
- Chance
- Data representation and interpretation

ASSESSMENT:

Students are assessed using tests, assignments and folio tasks (individual and collaborative) with and without the use of ICT.

MATHEMATICS FOUNDATIONS B 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students develop mathematical competency and confidence in the basic skills of the Year 9 Australian Curriculum mathematics course. Students complete a modified program to aid in understanding, fluency and problem solving with the aim to increase confidence and help them bridge skills gaps moving forward.

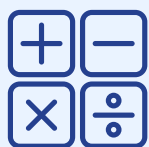
The course covers the basic skills from the Australian Curriculum strands of Number and Algebra, Measurement and Geometry, and Statistics and Probability. The program incorporates developing technology skills, including the use of scientific calculators and student laptops to consolidate mathematical concepts and to provide opportunities to apply their skills.

TOPICS:

- Linear and non-linear relationships
- Geometric reasoning
- Pythagoras and trigonometry

ASSESSMENT:

Students are assessed using tests, assignments and folio tasks (individual and collaborative) with and without the use of ICT.



Mathematics

MATHEMATICS A 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students solve problems involving simple interest. They apply the index laws to numbers and express numbers in scientific notation. Students expand binomial expressions and calculate areas of shapes and the volume and surface area of right prisms and cylinders. They compare techniques for collecting data from primary and secondary sources. Making sense of the position of the mean and median in skewed, symmetric and bimodal displays to describe and interpret data. Students calculate relative frequencies to estimate probabilities, list outcomes for two-step experiments and assign probabilities for those outcomes. They construct histograms and back-to-back stem- and-leaf plots.

TOPICS:

- Real numbers
- Money and financial mathematics
- Patterns and algebra
- Using units of measurement
- Chance
- Data representation and interpretation

ASSESSMENT:

- Home loans assignment
- Real life (living expenses) assignment
- Index laws test
- Algebra test
- Pac-Man statistics assignment
- Central Markets probability excursion
- Surface area display card
- Volume test

ASSOCIATED SUBJECT COSTS:

There is a small fee which will contribute towards excursions over the 2 semesters. More information will be provided closer to the time of each excursion.

MATHEMATICS B 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Students interpret ratio and scale factors in similar figures. Students explain similarity of triangles and recognise the connections between similarity and the trigonometric ratios. They find the distance between two points on the Cartesian plane and the gradient and midpoint of a line segment. They sketch linear and non-linear relations. They use Pythagoras' Theorem and trigonometry to find unknown sides of right-angled triangles.

TOPICS:

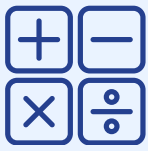
- Linear and non-linear relationships
- Geometric reasoning
- Pythagoras and trigonometry

ASSESSMENT:

- Scale factor assignment
- Mt Everest assignment
- Trigonometry excursion
- Linear artwork
- Non-linear relationships test

ASSOCIATED SUBJECT COSTS:

There is a small fee which will contribute towards excursions over the 2 semesters. More information will be provided closer to the time of each excursion.



Mathematics

MATHEMATICS EXTENSION A 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Designed for students who are passionate and enthusiastic about Mathematics, enjoy problem solving and who aim to study the subject through to Year 12. While the content may be similar to the standard Mathematics, in this subject, students will explore more complex concepts and develop a more thorough understanding of the key skills needed in high-level problem-solving approaches. They will learn how to analyse patterns and trends in data and gain insight into how mathematical approaches can be applied in other subject areas as they progress into senior school. It is an expectation that students keep up with a faster pace of learning and commit time outside of school to homework.

TOPICS:

- Real numbers
- Money and financial mathematics
- Patterns and algebra
- Using units of measurement
- Chance
- Data representation and interpretation

ASSESSMENT:

- Topic Tests
- Mathematical Investigations
- End of semester examination

PREREQUISITES:

Completion of Year 8 Mathematics with a B grade or higher.

MATHEMATICS EXTENSION B 1 SEMESTER COMPULSORY ELECTIVE

CONTENT:

Designed for students who are passionate and enthusiastic about Mathematics, enjoy problem solving and who aim to study the subject through to Year 12.

While the content may be similar to the standard Mathematics, in this subject, students will explore more complex concepts and develop a more thorough understanding of the key skills needed in high-level problem-solving approaches. They will learn how to analyse patterns and trends in data and gain insight into how mathematical approaches can be applied in other subject areas as they progress into senior school. It is an expectation that students keep up with a faster pace of learning and commit time outside of school to homework.

TOPICS:

- Linear and non-linear relationships
- Geometric reasoning
- Pythagoras and trigonometry

ASSESSMENT:

- Topic Tests
- Mathematical Investigations
- End of semester examination

PREREQUISITES:

Successful completion of Year 9 Mathematics Extension A with a C grade or higher.

SCIENCE

Discover • Investigate • Innovate



Ask questions. Seek answers. Shape the future.



DISCOVER

Explore the world around you.



INVESTIGATE

Test ideas and explore how things work.



INNOVATE

Use creativity to solve problems.



UNDERSTAND

Build knowledge and make connections.



CARE

Respect our planet and our future.



Explore pathways from Year 7 through to Stage 2





Science

SCIENCE A 1 SEMESTER COMPULSORY

CONTENT:

Students will study biological systems and how they function and respond to external environmental changes in connection to biotic and abiotic elements of different ecosystems. Students will study chemical processes and natural radioactivity in terms of atoms and energy transfers and describe the importance of chemical reactions. They are introduced to the concept of the atom as a system of protons, electrons and neutrons, and how this system can change through nuclear decay.

THEORY TOPICS:

- Diseases
- Human Immune System
- Body Systems
- Atomic Theory
- Radioactivity
- Chemical Reactions

PRACTICAL TOPICS:

- Laboratory and Field research

ASSESSMENT:

- Practical Reports
- Investigation Assignments
- Homework Exercises
- Biology and Chemistry Topic Tests

SCIENCE B 1 SEMESTER COMPULSORY

CONTENT:

Students will study that energy transfer through different mediums can be explained using wave and particle models. They are introduced to the concept of the conservation of matter and begin to develop a more sophisticated view of energy transfer. Students will also explain global features and events in terms of geological processes and timescales. They begin to apply their understanding of energy and forces to global systems such as continental movement

THEORY TOPICS:

- Energy transfer
- Heat, Light and Sound Energy
- Electric circuits
- Plate Tectonics

PRACTICAL TOPICS:

- Laboratory and field research

ASSESSMENT:

- Practical Reports
- Investigation Assignments
- Homework Exercises
- Physic and Earth Science Topic Tests



TECHNOLOGIES

Design • Create • Innovate



DESIGN

Plan with purpose.
Think creatively and
solve problems.



CREATE

Make, build and
bring ideas to life
with skill.



TECHNOLOGY

Use digital tools and
technologies to enhance
and expand our world.



INNOVATE

Explore new ideas.
Improve, adapt and
make an impact.



COLLABORATE

Work together.
Share ideas and
create the future.



Curious Minds



Skilled Hands



Connected Futures



Technologies

DESIGN AND TECHNOLOGY 1 SEMESTER ELECTIVE

CONTENT:

Students will build on processes within the workshop. Students will produce products on needs or opportunities that are relevant to individuals and global communities. Students will use graphical representation to generate ideas and production plans.

Students then identify steps involved in planning the production of products while considering time, cost, and safety. They will learn to transfer theoretical knowledge to practical activities across projects.

THEORY TOPICS:

- Investigation Aerodynamics/Newton's Laws
- CO2 Evaluation
- Packaging analysis
- Electronic Knowledge and Understanding booklet

PRACTICAL TOPICS:

- CO2 Dragster
- Resin Jewellery
- Jewellery Packaging
- Electronic Steady hand game

ASSESSMENT:

- Investigation
- Evaluation

DIGITAL TECHNOLOGIES 1 SEMESTER ELECTIVE

CONTENT:

Learning in 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 specialised learning in preparation for vocational training or learning in the senior secondary years.

THEORY TOPICS:

- Data Representation
- Data Types
- Cyber Security

PRACTICAL TOPICS:

- Design Algorithms through Game Design
- HTML coding
- PYTHON / SWIFT through Robotics

ASSESSMENT:

- Website building
- Drone Flying Project
- Game Design
- Investigation, how to be smart online

RECOMMENDED PRIOR LEARNING:

Completion of Year8 Digital Technologies with a C grade or higher.

ASSOCIATED SUBJECT COSTS:

There is a small fee which will contribute towards an excursion/workshop at the Apple store in Rundle Mall.



Technologies

**DIGITAL COMMUNICATIONS
(CAD/CAM)
1 SEMESTER (SEMESTER 1 ONLY)
10 CREDITS
ELECTIVE**

CONTENT:

Students work on developing their food safety knowledge. Through creating commercial handouts, using this knowledge students have the opportunity to pick a recipe that includes a high-risk food for their practical exam. Students will practice their cookery skills and techniques through weekly practical's. Students investigate sustainability through learning techniques for preserving fresh leftover foods to minimize food wastage at home. Students explore emerging trends through creating their own gourmet burgers.

To conclude the semester course, students will host a high tea for staff, and will explore the historical importance of high teas. They will then design a menu including both savoury and sweet finger foods

THEORY TOPICS:

- High Risk Foods
- Sustainability
- Food Trends
- High Tea

PRACTICAL TOPICS:

- Food Safety practices
- Cookery techniques
- Contemporary plating
- Seasonal produce
- Catering events

ASSESSMENT:

- Folio work(theory lessons)
- Practical exams
- Constructing commercial handout
- Evaluation
- Food order/recipe procedure
- Action plan writing
- Research task



Mark Oliphant
College



Government
of South Australia

Department for Education

RESPECT • KINDNESS • BELONGING • RESPONSIBILITY