

# YEAR 7-9 CURRICULUM HANDBOOK

2024

# **CONTENTS**

Year 7 Curriculum Overview	4
Assessment	5
Homework	θ
Subject descriptions	7
Year 8 Curriculum Overview	1
Assessment	1
Homework	1
Core subject descriptions	1
Elective subject descriptions	2
Year 9 Curriculum Overview	
Assessment	
Homework	
Core subject descriptions	
Elective subject descriptions	

# YEAR 7 COURSE INFORMATION



# YEAR 7 COURSE ORGANISATION

The College provides a balanced curriculum. The timetable is organised around a fortnightly cycle with five periods of sixty minutes per day.

In Year 7, students are required to undertake the following subjects:

SUBJECT	PERIODS PER CYCLE
English	9
Mathematics	9
Science	5
Humanities	5
Health & Physical Education	4
Sport	2
Languages – German	5
Food / Digital Technology	3
Art / Visual Communication	3
Music	3
Challenge Program	2

LANGUAGES: Year 7 students undertake German.

THE ARTS: Year 7 students study Art (one semester of two periods), Visual Communication (one semester

of two periods) and Music (two semesters of two periods).

**TECHNOLOGY:** Technology studies include Food Technology (one semester of two periods) and Digital

Technology (one semester of two periods).

# YEAR 7 CHALLENGE

The Challenge program supports the students' transition into Mullauna College with an understanding of our core values of Curiosity, Courage and Community. The program includes the following focus areas:

- Time Capsule: Students create a time capsule about themselves as they enter secondary schooling. This is stored and returned to students at the end of Year 12.
- My School Community: Students explore what it means to be a great school community member, including what their roles and responsibilities within it are.
- This is Me: Students strengthen their sense of self by exploring their goals and their future as well as what it means to embody the values of courage and creativity.
- Contributing to My Community: Students will explore their place within our college community. This unit of study will culminate in a community improvement project.

# EXCEL PROGRAM

A program for high achievers operates in Year 7. This program aims to extend students' learning across all core subjects with most students operating 6-12 months ahead of expected level.

# **ASSESSMENT**

There are three modes of assessment at Year 7.

### 1. ASSESSMENT TASKS

A grade will be awarded for specific tasks and projects. The grades indicate how well the student is performing in these

There will be a range of assessment tasks for each unit. Assessment tasks can include major projects, topic tests, written reports, oral presentations and folios. A grade will be awarded for each task.

To satisfactorily complete a unit, a student must obtain an 'N' in no more than one assessment task.

# 2. LEVEL OF ACHIEVEMENT AGAINST STATEMENT LEARNING STANDARDS

Students will be assessed against the Victorian Curriculum standards. This framework identifies eight learning areas and four general capabilities for the Foundation to Year 10 curriculum. The Learning Areas describe distinct disciplines, while the capabilities represent knowledge and skills that are developed and applied across the curriculum.

The Victorian Curriculum includes standards at ten levels. The level broadly associated with schooling at Year 7 is Level 7. Student achievement will be reported against the achievement standards indicating the level of attainment reached by each student and the age expected level of attainment.

# 3. WORK HABITS

Students are assessed in the Work Habits of Effort and Class Behaviour.

# **HOMEWORK**

Home study reinforces the development of skills in organisation, planning and self-management that are crucial in assisting students to become independent learners.

It is expected that students in Years 7 will complete a minimum of 5 to 6 hours of homework per week.

Students should set aside regular times in the week that will best suit their schedule of activities. This time should be used to ensure that all required work (set homework, incomplete classwork, assignments, and test revision) is completed and submitted for assessment by the due date. Mathematics and Language require regular practice, and, for English, it is essential that the reading of set texts and independently selected books is a nightly practice.

This Course Information Booklet should be kept in a safe place for reference throughout the year.

# YEAR 7 SUBJECT DESCRIPTIONS

English	
Health & Physical Education	8
Sport Education	8
Humanities	9
German	10
Mathematics	11
Science	

Technology	
Food Technology	12
Digital Technology	12
The Arts	
Art	13
Visual Communication	13
Music	14



# **ENGLISH**

# **OVERVIEW**

Students strengthen and expand their reading and writing skills, and extend their ability to speak and listen effectively. Students will study the craft of writing, and read and view a variety of texts that explore ideas and information related to familiar and more challenging topics, themes and issues. Students will also take part in oral language activities, presenting their ideas and information in a variety of ways. They will be encouraged to take responsibility for their learning and develop their skills as critical and creative thinkers.

# **Key Skills**

On completion of this course students are able to:

- o Produce, in print and electronic forms, writing for a variety of purposes
- o Read and view imaginative, informative and persuasive texts
- o Produce a range of responses, including interpretive pieces and personal reflections
- o Present creative, informative or persuasive responses to texts, themes and issues, as individuals or in groups
- Ask clarifying questions and build on the ideas of others

- Text response: a minimum of three texts studied and relevant assessment activities completed
- Wide reading: a minimum of three texts and associated responses  $\circ$
- Writing: a variety of writing tasks for different purposes and audiences
- **Oral presentation**: a minimum of one oral activity per semester
- Examination: an examination at the end of the year

# **HEALTH AND PHYSICAL EDUCATION**

# **OVERVIEW**

Health and Physical Education provides students with knowledge, skills and behaviours to enable them to develop and maintain their physical, mental and social health. Students proficiently perform complex movement and skills. They measure their own fitness and physical activity levels and identify factors that influence motivation to be physically active. Students maintain regular participation in moderate to vigorous physical activity and analyse and evaluate their level of involvement in physical activity. They combine motor skills, strategic thinking and tactical knowledge to improve individual and team performance. Students describe the physical, mental and social changes that occur as a result of the youth stage of the lifespan and the factors that influence their own development.

# **Key Skills**

On completion of this course students are able to:

- o Perform motor skills proficiently, which are appropriate to specific games, activities and sports
- o Describe initiatives and motivational influences that affect participation in physical activity
- Identify outcomes of risk-taking behaviours
- o Describe health issues about which young people make decisions, and strategies that are designed to maintain or improve their health
- Identify changes that occur during puberty
- Describe health resources, products and services available to individuals and groups in Australia and consider how they could be used to improve health

# **Assessment Tasks**

- **Skill Execution:** ability to perform complex movement and manipulative skills
- Game Sense: ability to combine motor skills, strategic thinking and tactical knowledge
- Written Health Work: a minimum of one piece for each Health unit

# **SPORT EDUCATION**

# **OVERVIEW**

Sport Education provides students with knowledge, skills and behaviours to enable them to be lifelong participants in physical activity. Emphasis is on combining motor skills and tactical knowledge to improve individual and team performance. Engaging in sport contributes to a sense of community and social connectedness, thus improving wellbeing. Students select a different sport each term to participate in and have the opportunity to represent the college in interschool competition.

# **Key Skills**

On completion of this course students are able to:

- Perform complex movement patterns that form part of team games
- Analyse strategies and tactics used in team games
- Explain the rules, player positions and roles associated with sports
- Use equipment safely and confidently
- Identify a variety of roles in sports such as umpire, scorer, coach, player, captain, team member, spectator and administrator and assume responsibility for the organisation of aspects of a sporting competition

- **Activity Level:** participation level in moderate to vigorous activities
- Game Sense: ability to combine motor skills, strategic thinking and tactical knowledge

# **HUMANITIES**

# **OVERVIEW**

Students study human progress and how people have organised themselves into societies over time and interacted with their physical environments. Topics include prehistory, Ancient Australia and studies of other ancient civilisations, such as, China, Egypt, Greece, India, Mesoamerica and Rome; mapping; renewable and non-renewable resources, with a major focus on water, and investigating the concept of 'liveability' in our world.

# **Key Skills**

On completion of this course students are able to:

- Explain processes that influence the characteristics of places
- Identify, analyse and explain spatial distributions and patterns to identify and explain their implications
- Collect and record relevant geographical data and information from useful primary and secondary sources
- o Sequence significant events in chronological order to analyse the causes and effects and identify continuities and changes
- Describe and explain the broad patterns of change over the period from the Ancient to the Modern World
- Analyse and corroborate sources and ask questions about their accuracy, usefulness and reliability 0
- Analyse the different perspectives of people in the past

- Source Data Analysis: exercises based upon the collection and analysis of historical sources and geographical
- **Research Tasks:** a research task/s on a selected topic/s
- Extended Responses: extended writing tasks requiring students to articulate and justify opinions about historical debates and geographical issues



# **GERMAN**

# **OVERVIEW**

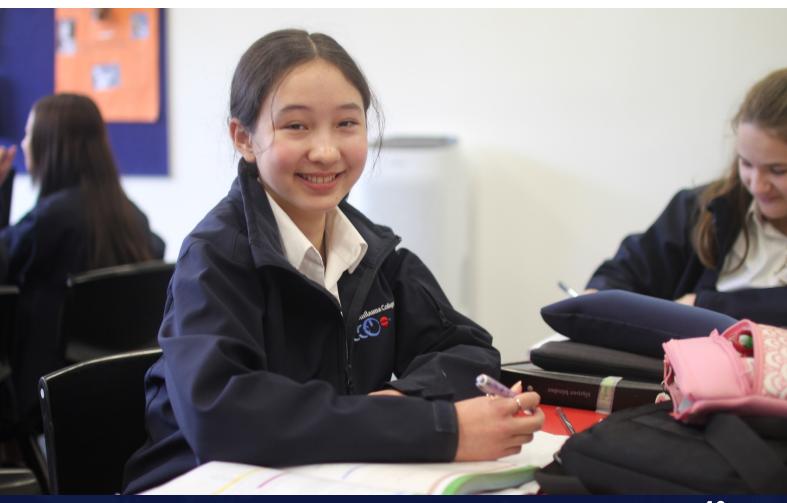
Students learn that there are similarities and differences between languages, and how German and English are related. There is an important emphasis on how language works, so that students achieve an understanding of the structure of German as well as their own language. Students participate in activities where they practise exchanging simple personal information on topics such as self, friends, family, time, school, likes, dislikes, foods, daily routines and pastimes. They talk about themselves in response to questions, and learn to ask questions. They begin to write short paragraphs, initially based on models and on memorised sequences, eventually developing independence. Students learn to use print and electronic resources, such as dictionaries, apps, and online learning resources. They start to listen, read, speak and write in the new language, concentrating on authentic language use within defined topics and contexts.

# **Key Skills**

On completion of this course students are able to:

- Introduce themselves, greet and farewell others
- Exchange simple information on topics such as daily routines and above-mentioned aspects of the world
- Respond to simple questions, and ask questions themselves
- o Demonstrate knowledge and application of the German sound system in writing, listening, reading and speaking
- Read short passages for meaning
- Express themselves through writing, in print and electronic form, by generating original sequences which may be linked to form paragraphs
- Understand the content of simple spoken texts

- Written work: a variety of written exercises including two pieces of creative writing
- Text response: oral and written responses to written and spoken material
- Reading: texts studied and relevant questions answered
- **Conversation**: participation in role-play activities



# **MATHEMATICS**

# **OVERVIEW**

Students investigate ways in which mathematics is used to represent and explain aspects of the world. They will work mathematically to enhance their knowledge of space, measurement, chance and data. Students will be introduced to algebraic expression and its ability to explain real life situations. They will work collaboratively to solve mathematical problems.

# **Key Skills**

On completion of this course students are able to:

- Use a range of mathematical techniques to solve mathematical problems
- Communicate their understanding using correct mathematical language and notation
- Problem solve by employing a variety of strategies
- Define key mathematical concepts
- Select appropriate technologies as an integral part of their mathematical activities

# **Assessment Tasks**

- **Tests:** completion of a series of tests within each topic
- o **Projects:** completion of a range of mathematical investigations
- Analytical tasks: completion of a range of in-depth analysis tasks
- **Examination**: an examination at the end of the year

# **SCIENCE**

# **OVERVIEW**

Students will cover topics including safety in science, using equipment, properties of substances and the particle theory, space, forces, classification, habitats, mixtures and Earths resources. Students explore scientific ideas through investigations, secondary source research and experiments. They collect data, analyse information and evaluate evidence to suggest solutions to scientific questions and ideas.

# **Key Skills**

On completion of this course students are able to:

- Safely and effectively use a range of scientific equipment
- Understand the role of classification in ordering and organising information
- Explain the interactions between forces
- Describe relationships between the Earth, sun, moon and other planets
- Make accurate measurements and control variables in practical experiments
- Understand concepts related to matter

- **Tests:** completion of a range of topic tests at the end of each unit of study
- **Projects:** major projects including research and/or analysis
- Practical reports: written reports and posters, completed individually, based on experiments and practical investigations run in class

# **FOOD TECHNOLOGY**

# **OVERVIEW**

Students will explore a wide range of topics including: food safety and hygiene, the design process, cooking processes and the use of tools and equipment. Each fortnight students will participate in both practical and theory classes. They will watch cooking demonstrations and put into practice the skills they have been shown. Teamwork will be encouraged during practical classes. Students will reflect on the success of activities when completing practical evaluations. They will also be encouraged to use terminology that is appropriate for Food Technology.

# **Key Skills**

On completion of this course students are able to:

- Critique needs or opportunities for designing and instigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas
- Generate, develop, test and communicate design ideas, plans and processes for various audiences using appropriate technical terms and technologies including graphical techniques
- Effectively and safely use a broad range of materials, components, tools, equipment and techniques to make designed solutions
- Independently develop criteria for success to assess design ideas, processes and solutions and their sustainability
- Use project management processes when working individually and collaboratively to coordinate production of designed solutions

### **Assessment Tasks**

- Research Report: a research report on a relevant topic
- **Project:** a project based on the design process
- Bookwork: an accurate and organised workbook
- Production: students prepare sweet and savoury dishes using a wide range of skills and techniques

# DIGITAL TECHNOLOGY

# **OVERVIEW**

The Digital Technologies curriculum enables students to become confident and creative developers of digital solutions through the application of information systems and specific ways of thinking about problem solving. Students are actively engaged in the processes of analysing problems and opportunities, designing, developing and evaluating digital solutions, and creating and sharing information.

# **Key Skills**

On completion of this course students are able to:

- Navigate both the school's network and Compass learning management system
- Understand the importance of file management and file naming conventions
- Apply practices that support safe, ethical and respectful communications and collaboration
- Create projects using a range of Microsoft Office programs as well as online software

- o **Digital Systems:** investigation of how a computer and computer networks work
- Data and Information: analysing and visualising data using a range of software to create information
- Creating Digital Solutions: developing and modifying programs with user interfaces using a general-purpose, object orientated programming language

# ΔRT

# **OVERVIEW**

Students will explore a variety of art materials and learn skills in both 2D and 3D areas. They will learn and refine artistic skills and techniques in drawing, painting and ceramics. They will apply the design elements and principles of art to create a series of individual and creative art pieces. Research will also accompany the practical component of the course.

# **Key Skills**

- On completion of this course students are able to: 0
- Use a range of ideas to create artworks and develop a personal style
- Explore themes, issues and ideas when making and presenting artworks
- Use a range of 2D and 3D materials and techniques
- Analyse and interpret the work of artists and their artworks
- Use appropriate art language

### **Assessment Tasks**

- Practical Folio: completion of a range of artworks.
- Written Presentation: written report/s based on research into set topics that will be supported by visual material.

# VISUAL COMMUNICATION

# **OVERVIEW**

This subject explores the way ideas and messages are communicated through visual designs. Students will consider the way visual communications are designed to meet specific purposes and appeal to different audiences. They will be introduced to the design process through the creation of both two-dimensional and three-dimensional designs. Students will explore a variety of media and methods to produce work, including both freehand and digital techniques.

# **Key Skills**

On completion of this course students are able to:

- Use the design process to generate, develop and refine ideas to set tasks
- Create effective graphic designs
- Apply technical drawing skills
- Demonstrate freehand drawing and rendering skills
- o Manipulate design elements and design principles to develop designs for specific purposes
- o Use both freehand and digital design methods to communicate ideas
- Analyse and evaluate examples of visual communications
- Use appropriate visual communication terminology

- **2D** and **3D** Representations: a series of tasks that demonstrate the understanding of, and ability to apply, different techniques and devices
- Type and Imagery in Visual Communications: exploration of type and imagery in visual communication using both digital and manual means
- Analysing Visual Communications: written analysis of existing visual communications

# **MUSIC**

# **OVERVIEW**

Using music performance as the basis, students will learn musical skills in order to be able to create and perform music. All topics include class and small group performance. Topics of study include:

- Instruments of the orchestra and what individuals want to play
- Counting the beat, rhythm, elements and percussion performance, including drum kit
- Notation and keyboard performance
- Guitar, bass guitar and singing
- Composition
- o Musicals and musical life

# **Key Skills**

On completion of this course students are able to:

- Create successful performance in a variety of settings
- Manage themselves within a performance group
- o Listen critically and write listening diaries
- Increase their individual theoretical and aural knowledge
- o Play, as a beginner, a variety of instruments

# Assessment Tasks (two of the following)

- **Practical work:** preparation and completion of a variety of performance tasks.
- Notation: create a baseline and demonstrate evidence of growth when engaging in online and documented note reading/theory activities.
- Composition: use a Digital Audio Workstation to demonstrate understanding of song structure and compositional devices.
- Aural Training: a variety of aural assessment on pitch and rhythm.



# YEAR8 COURSE INFORMATION

# YEAR 8 COURSE ORGANISATION

The Year 8 program includes a combination of core subjects and elective subjects:

SUBJECT	PERIODS PER CYCLE
English	9
German	5
Health & Physical Education	4
Humanities	7
Mathematics	8
Science	5
Sport	2
Elective 1	5
Elective 2	5

# **ELECTIVE SUBJECTS**

In 2024, Mullauna College will offer combined Year 8 and 9 Elective subjects. This will enable students to select from a wider variety of subject choices. Over the course of the two years, students will select eight elective subjects from the list below. Students may not undertake the same elective twice.

# YEAR 8 ELECTIVES

In Year 8, students will undertake two elective subjects each semester from the list below. Year 8 students are required to complete any two elective subjects from the Performing Arts, Technology or Visual Arts electives. The remaining two elective choices can be selected from any of the subjects listed below.

Each elective subject is timetabled for five periods per fortnight. Please note elective subjects will only run if selected by enough students.

# 2024 ELECTIVE LIST

### General

- Creative Writing
- Environmental Science
- Forensic Science
- Sport Science

# **Performing Arts**

- o Drama Masterclass
- Music Performance
- Screen Music
- Stage School

# **Technology**

- Programming Basics
- o Food and Culture
- o Food for Life
- Invent and Learn
- Robotics

# **Visual Arts**

- o 2D Art (Draw, Paint, Print)
- o 3D Art (Ceramics & Sculpture)
- Architecture and Product Design
- o Creative Media
- o Digital Art
- o Filmmaking
- o Graphic Design

# **EXCEL PROGRAM**

A program for high achievers operates in Year 8. This program aims to extend students' learning across all core subjects with most students operating 6-12 months ahead of expected level.

# **ASSESSMENT**

There are three modes of assessment at Year 8.

# 1. ASSESSMENT TASKS

A grade will be awarded for specific tasks and projects. The grades indicate how well the student is performing in these areas of the unit.

There will be a range of assessment tasks for each unit. Assessment tasks can include major projects, topic tests, written reports, oral presentations and folios. A grade will be awarded for each task.

To satisfactorily complete a unit, a student must obtain an 'N' in no more than one assessment task.

# 2. LEVEL OF ACHIEVEMENT AGAINST STATEMENT LEARNING STANDARDS

Students will be assessed against the Victorian Curriculum standards. This framework identifies eight learning areas and four general capabilities for the Foundation to Year 10 curriculum. The Learning Areas describe distinct disciplines, while the capabilities represent knowledge and skills that are developed and applied across the curriculum.

The Victorian Curriculum includes standards at ten levels. The level broadly associated with schooling at Year 8 is Level 8. Student achievement will be reported against the achievement standards indicating the level of attainment reached by each student and the age expected level of attainment.

# 3. WORK HABITS

Students are assessed in the Work Habits of Effort and Class Behaviour.

# **HOMEWORK**

Home study reinforces the development of skills in organisation, planning and self-management that are crucial in assisting students to become independent learners.

It is expected that students in Years 8 will complete a minimum of 5 to 6 hours of homework per week.

Students should set aside regular times in the week that will best suit their schedule of activities. This time should be used to ensure that all required work (set homework, incomplete classwork, assignments, and test revision) is completed and submitted for assessment by the due date. Mathematics and Language require regular practice, and, for English, it is essential that the reading of set texts and independently selected books is a nightly practice.

This **Course Information Booklet** should be kept in a safe place for reference throughout the year.



# YEAR 8 SUBJECT DESCRIPTIONS

RE		

English	19
Health & Physical Education	20
Sport Education	20
Humanities	
German	22
Mathematics	23
Science	23

# **ELECTIVE SUBJECTS**

Architecture & Product Design	_ 24
2D Art – Draw, Paint, Print	_ 25
3D Art – Ceramics and Sculpture	_ 25
Digital Art	_ 26
Graphic Design	_ 26
Creative Media	_ 27
Filmmaking	27

# **Performing Arts**

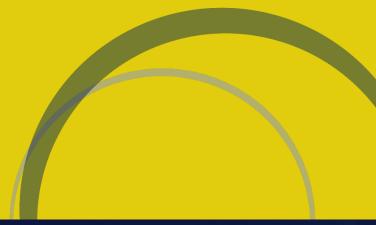
Music – Music Performance	28
Music – Screen Music	28
Drama – Drama Masterclass	29
Drama – Stage School	29

# **Technology**

Food and Culture	30
Food for Life	30
Invent and Learn	31
Programming Basics	31
Robotics	32

# Additional/General

Creative writing	
Environmental Science	33
Forensic Science	34
Sports Science	34



# **CORE SUBJECTS**

The following section provides information on core subjects.

# **ENGLISH**

# **OVERVIEW**

Students strengthen and expand their reading and writing skills and extend their ability to speak and listen effectively. Students will study the craft of writing and read and view a variety of texts that explore ideas and information related to familiar and more challenging topics, themes and issues. Students also take part in oral language activities, presenting their ideas and information in a variety of ways. They are encouraged to take responsibility for their learning and develop their skills as independent learners.

# **Key Skills**

On completion of this course students are able to:

- Produce, in print and electronic forms, writing for a variety of purposes
- Read and view imaginative, informative and persuasive texts
- o Produce a range of responses, including interpretive pieces and personal reflections
- o Present creative, informative or persuasive responses to texts, themes and issues, as individuals or in groups
- Ask clarifying questions and build on the ideas of others

- Text response: a minimum of three texts studied and relevant assessment activities completed
- Wide reading: a minimum of three texts and associated responses
- Writing: a variety of writing tasks for different purposes and audiences
- **Oral presentation:** a minimum of one oral activity per semester
- **Examination:** an examination at the end of the year

# **HEALTH AND PHYSICAL EDUCATION**

# **OVERVIEW**

Health and Physical Education provides students with knowledge, skills and behaviours to enable them to develop and maintain their physical, mental and social health. Students proficiently perform complex movement and skills. They measure their own fitness and physical activity levels and identify factors that influence motivation to be physically active. Students maintain regular participation in moderate to vigorous physical activity and analyse and evaluate their level of involvement. They combine motor skills, strategic thinking and tactical knowledge to improve individual and team performance. Students describe the physical, mental and social changes that occur as a result of the youth stage of the lifespan and the factors that influence their own development.

# **Key Skills**

On completion of this course students are able to:

- o Develop proficient motor skills, which are appropriate to specific games, activities and sports
- Describe initiatives and motivational influences that affect participation in physical activity
- Identify outcomes of risk-taking behaviours
- Analyse a range of influences on food selection
- Identify major nutritional needs for growth and activity
- Describe health issues about which young people make decisions, and strategies that are designed to maintain or improve their health
- Describe health resources, products and services available to individuals and groups in Australia and consider how they could be used to improve health

# **Assessment Tasks**

- o Skill Execution: ability to perform complex movement and manipulative skills
- Game Sense: ability to combine motor skills, strategic thinking and tactical knowledge
- Written Health Work: a minimum of one piece for each Health unit

# **SPORT EDUCATION**

# **OVERVIEW**

Sport Education provides students with knowledge, skills and behaviours to enable them to be lifelong participants in physical activity. Emphasis is on combining motor skills and tactical knowledge to improve individual and team performance. Engaging in sport contributes to a sense of community and social connectedness, thus improving wellbeing. Students select a different sport each term to participate in and have the opportunity to represent the college in interschool competition.

### **Key Skills**

On completion of this course students are able to:

- o Perform complex movement patterns that form part of team games
- Analyse strategies and tactics used in team games
- Explain the rules, player positions and roles associated with sports
- Use equipment safely and confidently
- Identify a variety of roles in sports such as umpire, scorer, coach, player, captain, team member, spectator and administrator and assume responsibility for the organisation of aspects of a sporting competition

- Activity Level: participation level in moderate to vigorous activities
- Game Sense: ability to combine motor skills, strategic thinking and tactical knowledge



# **HUMANITIES**

# **OVERVIEW**

Students investigate and evaluate significant changes, events and individuals from the Middle Ages and Renaissance periods. They will explain the processes that influence characteristics of our landscapes and landforms as well as causes and consequences of the global trend of urbanisation. They describe the characteristics of entrepreneurial individuals and successful businesses.

# **Key Skills**

On completion of this course students are able to:

- o Identify, analyse and explain interconnections within places and between places and identify and explain changes resulting from these interconnections
- o Select and represent data and information in different forms, including by constructing appropriate maps at different scales that conform to cartographic conventions, using digital and spatial technologies as appropriate
- Analyse maps and other geographical data and information, to develop identifications, descriptions, explanations and conclusions that use geographical terminology
- Explain different historical interpretations and contested debates about the past
- Identify and explain patterns of continuity and change in society to the way of life
- Analyse causes and effects of significant events that caused change and/or decline over the period
- Evaluate the role and achievement of a significant individual, developmental and/or cultural achievement that led to progress

- Source/Data Analysis: exercises based upon the collection and analysis of historical sources and geographical
- **Research Tasks:** a research task/s on a selected topic/s
- Extended Responses: extended writing tasks requiring students to articulate and justify opinions about historical debates and geographical issues

# GERMAN

# **OVERVIEW**

Students learn that there are similarities and differences between languages, and how German and English are related. There is an important emphasis on how language works, so that students achieve an understanding of the structure of German as well as their own language. Students participate in activities where they practise exchanging simple personal information on topics such as self, friends, family, time, school, likes, dislikes, foods, daily routines and pastimes. They talk about themselves in response to questions, and learn to ask questions. They begin to write short paragraphs, initially based on models and on memorised sequences, eventually developing independence. Students learn to use print and electronic resources, such as dictionaries, CDs, PC apps, and online learning resources. They start to listen, read, speak and write in the new language, concentrating on authentic language use within defined topics and contexts.

# **Key Skills**

On completion of this course students are able to:

- Introduce themselves, greet and farewell others
- Exchange simple information on topics such as daily routines and above-mentioned aspects of the world
- Respond to simple questions, and ask questions themselves
- Demonstrate knowledge and application of the German sound system in writing, listening, reading and speaking
- Read short passages for meaning
- Express themselves through writing, in print and electronic form, by generating original sequences which may be linked to form paragraphs
- Understand the content of simple spoken texts

- Written work: a variety of written exercises including two pieces of creative writing
- **Text response:** oral and written responses to written and spoken material
- **Reading**: texts studied and relevant questions answered
- Conversation: participation in role-play activities

# **MATHEMATICS**

# **OVERVIEW**

Students investigate ways in which mathematics is used to represent and explain aspects of the world. They will work mathematically to enhance their knowledge of space, measurement, chance and data. Students will be introduced to algebraic expression and its ability to explain real life situations. They will work collaboratively to solve mathematical problems.

# **Key Skills**

On completion of this course students are able to:

- Use a range of mathematical techniques to solve mathematical problems
- Communicate their understanding using correct mathematical language and notation
- Problem solve by employing a variety of strategies
- Define key mathematical concepts
- o Select appropriate technologies as an integral part of their mathematical activities

### **Assessment Tasks**

- o **Tests:** tests within each topic
- o **Projects:** a range of mathematical investigations
- Analytical tasks: a range of in-depth analysis tasks
- o **Examination**: an examination at the end of the year

# **SCIENCE**

### **OVERVIEW**

Students will cover topics including cells, body systems, atomic structures, introduction to chemistry, transferring energy, geology and mining for resources. Students explore scientific ideas through investigations, research and experiments. They collect data, analyse information and discuss evidence to suggest solutions to their individual scientific questions and ideas.

# **Key Skills**

On completion of this course students are able to:

- Demonstrate safe and technical use of a range of instruments and chemicals
- Make predictions and propose explanations drawing on evidence from their experiments 0
- Understand the organization of the body's systems in terms of flow of matter between organs
- Identify the difference between elements, compounds and mixtures that can be described at a particle level
- Describe different energy transformations through an object as an event occurs
- Understand chemical changes involved in reactions that form new substances
- Describe the constantly changing Earth through identification of rock types and geological process over time

- Tests: completion of a range of topic tests at the end of each unit of study
- **Projects:** major projects including research and/or analysis 0
- Practical reports: written reports and posters, based on experiments and practical investigations in class



# **ELECTIVE SUBJECTS**

The following section provides information on elective subjects.

# **VISUAL ARTS**

# **ARCHITECTURE AND PRODUCT DESIGN**

# **OVERVIEW**

Students will undertake creative tasks exploring product design, interior design and architecture. They will apply the design process to develop designs to suit specific purposes and audiences. Students will explore technical and freehand drawing methods to communicate their ideas and use both digital and manual techniques to present their final designs. The work of other designers will be analysed through theory tasks.

# **Key Skills**

On completion of this course students are able to:

- Create technical drawings, such as perspective drawings an floorplans
- Demonstrate freehand drawing and rendering skills
- o Apply the design process to develop 3D designs suitable for a set purpose
- Use both digital and manual techniques to present final designs
- Analyse examples of visual communications

- o Environmental Design Task: completion of environmental design task, including all relevant development work
- Industrial Design Task: completion of industrial design task, including all relevant development work
- Written Presentation: a written report, completed individually

# 2D ART - DRAW, PAINT, PRINT

# **OVERVIEW**

Students will explore a variety of art materials and learn skills in drawing, painting and printmaking. They will learn new techniques in drawing and apply the skills in a variety of interesting topics involving acrylic painting and printmaking. They will apply the design elements and principles of art to create individual art pieces. Research will also accompany the practical component of the course.

# **Key Skills**

On completion of this course students are able to:

- Use a range of ideas to create artworks and develop a personal style
- Explore themes, issues and ideas when making and presenting artworks
- Use a range of 2D materials and techniques
- Analyse and interpret the work of a range of artists and their artworks
- Use appropriate art terminology

# **Assessment Tasks**

- Drawing Task: completion of a drawing task which shows development in observational drawing skills, including the application of tonal rendering and a major artwork.
- o Painting or Printing Task: a composition designed in a specific style that demonstrates an ability to mix and apply paint using a range of techniques.
- o Written Presentations: written reports based on research into a set topic to be supported by visual materials.

# 3D ART - CERAMICS AND SCULPTURE

# **OVERVIEW**

Students will explore a variety of 3D art materials such as clay and other mediums. Students will learn to design and create 3-dimensional artworks using clay. Construction, glazing and firing techniques will be taught. Other materials such as wire, and mixed media will be explored to create interesting sculptures. They will apply the design elements and principles of art to create individual art pieces. Research of a variety of sculptors will also accompany the practical component of the course.

### **Key Skills**

On completion of this course students are able to:

- Use a range of ideas to create 3D artworks and develop a personal style
- Explore themes, issues and ideas when making and presenting artworks
- Use a range of 3D materials and techniques
- o Analyse and interpret the work of a range of artists and their artworks
- Use appropriate art terminology

- Ceramic Tasks: completion of a series of hand-built clay pieces exhibiting various ceramic techniques
- Major Sculpture: completion of a sculpture using a range of materials, with relevant design process
- Written Presentation: written report/s based on research into a set topic to be supported by visual material

# **DIGITAL ART**

# **OVERVIEW**

Students will explore contemporary issues and ideas which will help them develop knowledge, skills and understanding when making digital artworks by using a variety of methods and programs. They will learn the basics of digital photography and make photographic and digital works informed by their understanding of Contemporary Art and apply these skills to enable the creation of various artworks. Research will also accompany the practical component of the course. They will look at a variety of contemporary artists and artwork such as Barbara Kruger and Cindy Sherman, as well as Protest Art and Installations

### **Key Skills**

On completion of this course students are able to:

- Use a range of ideas to create artworks and develop a personal style
- Explore contemporary themes, issues and ideas when making and presenting artworks
- Use a range of digital applications  $\circ$
- Analyse and interpret the work of a range of artists and their artworks
- Use appropriate art terminology

### **Assessment Tasks**

- Digital Photo Task: application of the design process to create a photographic artwork that explores contemporary issues.
- Digital Drawing Task: creation of a digital drawing, including all relevant development work.
- Written Presentations: written reports based on research into a set topic to be supported by visual materials.

# **GRAPHIC DESIGN**

# **OVERVIEW**

Students will undertake a range of creative tasks exploring the way graphic design uses images and type to communicate messages and ideas. They will apply the design process to develop designs to suit specific purposes and audiences. Students will consider the use of design elements and principles, typography and layout to develop design ideas. They will use both manual and digital methods to present final designs. The work of other designers will be analysed through theory tasks.

# **Key Skills**

On completion of this course students are able to:

- Demonstrate freehand drawing and rendering skills
- Apply the design process to develop graphic designs suitable for a set purpose
- Create effective design layouts
- Use both digital and manual techniques to develop and present final designs
- Analyse examples of visual communications

- Design Process Task: completion of a range of graphic design tasks, including all relevant development work
- Type in Design: folio of design tasks focusing on the application of type, including all relevant development work
- Written Presentation: a written report, completed individually

# **CREATIVE MEDIA**

# **OVERVIEW**

Students develop media production skills and enhance their understanding of the different forms of media, such as video and photography. They learn how to operate equipment and master techniques to enhance their creativity. They produce a series of short production exercises. Students produce a creative media product for an intended purpose and audience.

# **Key Skills**

On completion of this course students are able to:

- Plan and produce a range of creative media products.
- Use a range of media equipment and applications.
- Analyse media products using appropriate media language.

### **Assessment Tasks**

- o Practical Tasks: a series of media productions.
- o Media Design: plan and produce a media product.
- **Analysis response:** a written response to media texts.

# **FILMMAKING**

# **OVERVIEW**

Students develop filmmaking skills through a series of practical tasks. They learn how to produce short videos and how to operate a range of media equipment. They also learn lighting techniques, shot composition, how to record sound, and how to edit their productions.

# **Key Skills**

On completion of this course students are able to:

- Structure and plan short films
- o Record video and sound using filmmaking techniques.
- Use a range of media equipment and applications.
- Use media language to analyse films.

- Film Production: Short films and videos.
- Media Production Design: a written and visual plan for film production.
- Analysis Response: a written response to the media texts.

# PERFORMING ARTS

# MUSIC - MUSIC PERFORMANCE

# **OVERVIEW**

The magic element of performing comes to life with a purpose and an audience. This subject will enhance the playing skills of each participant whether a total beginner or advanced player by preparing music for performance to a specific audience. Students will explore different performance techniques and elements of preforming and critically reviewing a concert performance.

# **Key Skills**

On completion of this course students are able to:

- Prepare and present performances independently
- Display effective teamwork and leadership skills
- Analyse and interpret concepts of music through performance
- Use appropriate musical terms
- Translate theoretical concepts to performance practice
- Develop time management and presentation styles as a pathway for future learning

# **Assessment Tasks** (two of the following)

- Performance: perform a piece of your choice at a masterclass performance session at the end of the semester. Small Group and class Performance: present a series of small group performances and associated tasks.
- Event management: Learning the skills required to run an event at school including organising, evaluating, performing and review writing.
- Reviewing Performance: Demonstrating understanding of the elements involved in critically reviewing a performance.

# **MUSIC - SCREEN MUSIC**

### **OVERVIEW**

Are you a screen fan? Games, Movies, Netflix, all need music and sound effects to be effective. Students will spend time learning what works best in the variety of gaming, movie and TV based music and try this out both with instruments and digitally. They will use the free version of the program Musescore or Garageband and look at how to create effective music for their favourite game, screen show or movie.

# **Key Skills**

On completion of this course students are able to:

- Analyse and interpret music that has a specific purpose
- o Create their own music
- Understand musical structure
- o Understand digital programs
- o Source and use sound effects
- Develop independence and organization skills

# Assessment Tasks (two of the following)

- Create: Creating a soundscape for visual media
- Skill Mastery: Completing a series of screen music performance activities
- Research: Research into our screen composers creative process

# DRAMA – DRAMA MASTERCLASS

# **OVERVIEW**

This unit has been designed to help train young actors who aspire to perform both on the stage and in front of the camera. It will help students to develop their technique in acting through learning the basic performance skills of body language, mime, voice and improvisation. This will culminate in the presentation of a performance in front of the camera.

# **Key Skills**

On completion of this course students are able to:

- Understand theatre styles including naturalism and the techniques required to present these styles
- Use improvisation to develop a variety of dramas around specific themes and from a range of stimuli
- Build a performance using theatrical conventions and dramatic elements as stimuli for a recorded and a live performance

### **Assessment Tasks**

- Performance and class participation: an assessment of student's participation in practical workshops and class performances over the course of the semester
- o **Group performance:** presented live to an audience
- Group performance: presented in a digital format to an audience

# DRAMA – STAGE SCHOOL

### **OVERVIEW**

Over the semester, the Stage School class will work together to rehearse, stage and perform a small- scale production of a chosen play. Every student will take on an acting role (lead or minor) and will also be assigned to one of the following teams according to preference, interest and skills; Sets, Props, Hair and Makeup, Choreography, Assistant Directors, Costumes, Marketing and Sound/Lighting Design. Students will be responsible for ensuring that this element of the show is prepared for the performance. The cast will present the production to an audience at an evening performance. Students will also have the opportunity to view a professional live stage show. They will complete a critical review of the performance, detailing the effect the performance will have on their own.

# **Key Skills**

On completion of this course students are able to:

- o Understand and participate in the development of a small-scale production
- Interact with others in a stage context
- Manipulate the elements of stagecraft to enhance performance
- Use performance elements such as blocking, voice and character development to enhance their own performance

- **Group performance:** presented to an audience
- Folio: documentation of the skills acquired through the creative process of rehearsal and assigned production
- Live performance review: critical review of a live performance

# **TECHNOLOGY**

# **FOOD AND CULTURE**

# **OVERVIEW**

Students will explore a wide range of factors that influence food and culture. They will discover how the Indigenous people of Australia successfully lived off the land. Students will also explore how immigration and lifestyle changes over generations have shaped Australian cuisine. A global perspective is also examined when students research the cuisine of a chosen country. During both theory and practical classes, students will develop an understanding of different cooking techniques and ingredients.

# **Key Skills**

On completion of this course students are able to:

- o Investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas
- o Generate, develop, test and communicate design ideas, plans and processes for various audiences
- Effectively and safely use materials, tools and equipment
- Independently develop criteria for success to assess design ideas and processes
- Use organizational strategies when working individually and collaboratively

### **Assessment Tasks**

- o Research Report: a research report on a chosen country that highlights how that country's cuisine has been shaped
- Project: a project based on the design process
- **Bookwork:** an accurate and organized workbook
- Production: prepare sweet and savoury dishes using a wide range of skills and techniques

# **FOOD FOR LIFE**

# **OVERVIEW**

Students will explore a wide range of topics including health and nutrition, factors influencing food choices, healthy alternatives, ethical and sustainable food production, product development, marketing and reading food labels. They will consider the role that food plays in a social context and how it relates to everyday life.

### **Key Skills**

On completion of this course students are able to:

- o Investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas
- Generate, develop, test and communicate design ideas, plans and processes for various audiences
- o Effectively and safely use materials, tools and equipment
- Independently develop criteria for success to assess design ideas and processes
- Use organizational strategies when working individually and collaboratively

- o Research Report: a research report on a relevant topic
- Project: a project based on the design process
- Bookwork: an accurate and organized workbook
- Production: prepare sweet and savoury dishes using a wide range of skills and techniques

# **INVENT AND LEARN**

# **OVERVIEW**

In this unit, students will undertake a variety of design challenges, requiring creativity and innovative thinking. Exciting real-world challenges and problems will be explored, and students will create solutions using a variety of robotics, electronics, materials and programming. Invention and engineering will be crucial as students tinker with ideas and test prototypes.

# **Key Skills**

On completion of this course students are able to:

- Develop and explore inquiry questions
- Conduct extensive research using a variety of sources
- Create models and 3D prototypes and presentations
- Apply problem solving skills

### **Assessment Tasks**

- Creative Design: students work in groups to construct a project to suit a specific purpose
- Design Solution: using a range of equipment and materials (including electronics and computer programming software) students experiment to engineer a design solution
- Project Management: students undertake the design process to produce and evaluate an innovative solution to a set problem

# PROGRAMING BASICS

# **OVERVIEW**

In this unit, students will learn how to create a platform game by utilising a simplified version of the python language. They will learn the fundamentals of programming such as storing variables and control structures to create a fluid and engaging game, as well as experiment with a variety of applications to advertise their unique games. Students will also use microcontrollers to create digital solutions that have real world applications, such as controlling a prosthetic hand.

# **Key Skills**

On completion of this course students are able to:

- Create an interactive game using Gamefroot (or similar program)
- Utilise the basic functions of a variety of software applications
- Understand the foundations of Python language
- Add appropriate extensions to microcontrollers to perform complex tasks

- o Game development: creation of a finished platform game using code-based game software
- App development: development and presentation of a non-gaming application 0
- Coding modules: understanding and use of code to complete a range of tasks via a series of modules

# ROBOTICS

# **OVERVIEW**

Students will experience building and design tasks as well as an introduction to programming. Programmable equipment along with student friendly programming software will be used to teach students about the difference between a machine and a robot, viable building designs and how to master programming by manipulating a flow chart screen. Students will design and build a range of machines that use gears, motors and pneumatics that can fulfil certain task requirements. Students will learn how to use programming software to write short programs that can be loaded on to the Ev3 (command centre) on their robot. They will manipulate motors, light sensors, sound sensors and any attachments they create for their robot. The robots will be under the students' full control and will be programmed to compete a range of complex tasks from acting as dodgem cars to moving through mazes and dancing to music.

# **Key Skills**

On completion of this course students are able to:

- Identify key differences between a machine and a robot
- Follow instructional building guides to successfully build a range of Lego machines
- o Use their own innovation to design new machines to fulfil certain tasks
- Write basic programs that manipulate moving parts of their robot
- Edit complicated programs to allow their robot to compete a multitude of tasks

- Folio of Lego robots: completion of a range of building tasks along with reflections and written work on each
- o **Report:** written task evaluating the ethics of robots
- **Programming folio:** a design process to progressively develop gadgets

# ADDITIONAL/GENERAL

# **CREATIVE WRITING**

### **OVERVIEW**

Students will examine writing as a craft and explore the process by which good writing is produced. Students will build the specific skills required to write in a number of genres and forms. They will engage in the different steps involved in the writing process and learn to employ a variety of strategies to engage their target audience.

# **Key Skills**

On completion of this course students are able to:

- Write in a range of styles, forms, and genres
- Use a range of literary devices
- Understand the important elements of narrative writing
- o Develop an individual style and voice
- Use a range of software, including word processing programs, to create, edit and publish texts imaginatively

### **Assessment Tasks**

- Writing pieces: a variety of writing pieces in different genres and forms
- Writing Folio: completion of various skills building activities and reflections
- Written Presentation: a published work using an elected software to a target audience

# **ENVIRONMENTAL SCIENCE**

### **OVERVIEW**

Our environment is currently facing serious challenges, from changing climates to habitat loss, environmental degradation, species extinction and overpopulation. In this subject, students will study patterns and processes in the natural world and their modification by human activity. Students will explore the science of current environmental issues and consider social and economic factors relating to these issues. Student will develop creative solutions to environmental issues and educate their community.

# **Key Skills**

On completion of this course students are able to:

- Describe physical, biological and chemical patterns and processes in the natural world
- Collect and evaluate scientific data relating to current environmental issues
- Understand social and economic factors relating to environmental issues
- Design creative solutions to environmental issues, to create a sustainable environment for all
- Educate their community on environmental issues and encourage sustainable living

- Field and Practical Work: Collect and evaluate data
- o Research Projects: Undertake research projects exploring the science of environmental issues
- Design Projects: Develop and design solutions to environmental issues

# **FORENSIC SCIENCE**

### **OVERVIEW**

Students will apply scientific knowledge and techniques to investigate aspects of forensic science. This will include the collection and examination of physical evidence and identifying victims. They will engage in a range of practical activities to analyse evidence to solve a murder case.

# **Key Skills**

On completion of this course students are able to:

- o Explain how science inquiry skills are used to investigate and evaluate evidence
- Formulate their own hypotheses and conduct investigations in order to prove or disprove them
- o Distinguish between circumstantial forensics evidence and definitive evidence

### **Assessment Tasks**

- o **Projects:** major research and investigation tasks
- o Practical skills: assessment made on the ability to safely conduct a range of experiments as part of a group
- Case study booklet and report: accurate results and analysis from experiments undertaken throughout the course

# **SPORTS SCIENCE**

# **OVERVIEW**

Students will gain insight into science as a human activity and the relationship between science, technology and sport. This will develop students understanding of the body systems and their functions in sporting activities as well as external factors that can influence sporting ability.

Students will investigate a range of the following concepts: body movement, biomechanics, careers in sport science, sports medicine and drugs in sport, sports psychology and the evolution of sporting equipment and clothing.

# **Key Skills**

On completion of this course students are able to:

- Explain the internal systems of the body that allow for active movement
- o Evaluate their aerobic capacity in relation to their cardiovascular system and their fitness
- o Utilise a range of technologies and experimental processes to analyse data
- Discuss the short- and long-term effects of natural and synthetic drugs in sport
- Evaluate scientific developments in sporting equipment and clothing to predict future designs and materials

- **Topic Tests:** written tests on key concepts studied in each topic
- Modelling task and report: creation of a 3D model to explain key concepts with an attached report
- Projects: major projects including research and analysis

# YEAR 9 COURSE INFORMATION

# YEAR 9 COURSE ORGANISATION

The Year 9 program includes a combination of core subjects and elective subjects:

SUBJECT	PERIODS PER CYCLE
English	8
Health & Physical Education	4
Humanities	6
Mathematics	8
Science	6
Skillz @ Mullauna	8
Elective 1	5
Elective 2	5

# **ELECTIVE SUBJECTS**

In 2024, Mullauna College students will undertake combined Year 8 and 9 Elective subjects. This will enable students to select from a wider variety of subject choices.

Year 9 students will undertake two elective subjects each semester from the list below. Each elective subject will be timetabled for three periods per week. Students may not undertake the same elective twice in any year. Please note elective subjects will only run if selected by enough students.

Students electing to continue with German in Year 9 will undertake this elective for the entire year. It is strongly recommended that students proceed with their study of German through to VCE because of the increments this provides in boosting a student's Australian Tertiary Admission Ranking (ATAR) score.

Students who include German and Higher-Level Mathematics in their VCE studies are eligible to be awarded the VCE Baccalaureate. This is highly regarded by tertiary institutions when considering students for admission.

# 2024 ELECTIVE LIST

# General

- Creative Writing
- Environmental Science
- Forensic Science
- Sport Science

# Languages\_

o German

# **Performing Arts**

- Drama Masterclass
- Music Performance
- o Screen Music
- Stage School

# Technology\_\_\_\_

- o Programming Basics
- o Food and Culture
- Food for Life
- Invent and Learn
- Robotics

# Visual Arts

- o 2D Art (Draw, Paint, Print)
- o 3D Art (Ceramics & Sculpture)
- Architecture and Product Design
- o Creative Media
- o Digital Art
- Filmmaking
- o Graphic Design

# **EXCEL PROGRAM**

A program for high achievers operates in Year 9. This program aims to extend students' learning across all core subjects with most students operating 6-12 months ahead of expected level.

# **ASSESSMENT**

There are three modes of assessment at Year 9.

# 1. ASSESSMENT TASKS

A grade will be awarded for specific tasks and projects. The grades indicate how well the student is performing in these areas of the unit.

There will be a range of assessment tasks for each unit. Assessment tasks can include major projects, topic tests, written reports, oral presentations and folios. A grade will be awarded for each task.

To satisfactorily complete a unit, a student must obtain an 'N' in no more than one assessment task.

### 2. LEVEL OF ACHIEVEMENT AGAINST STATEMENT LEARNING STANDARDS

Students will be assessed against the Victorian Curriculum standards. This framework identifies eight learning areas and four general capabilities for the Foundation to Year 10 curriculum. The Learning Areas describe distinct disciplines, while the capabilities represent knowledge and skills that are developed and applied across the curriculum.

The Victorian Curriculum includes standards at ten levels. The level broadly associated with schooling at Year 9 is Level 9. Student achievement will be reported against the achievement standards indicating the level of attainment reached by each student and the age expected level of attainment.

# 3. WORK HABITS

Students are assessed in the Work Habits of Effort and Class Behaviour.

# **HOMEWORK**

Home study reinforces the development of skills in organisation, planning and self-management that are crucial in assisting students to become independent learners.

It is expected that students in Years 9 will complete a minimum of 8 to 10 hours of homework per week.

Students should set aside regular times in the week that will best suit their schedule of activities. This time should be used to ensure that all required work (set homework, incomplete classwork, assignments, and test revision) is completed and submitted for assessment by the due date. Mathematics and Language require regular practice, and, for English, it is essential that the reading of set texts and independently selected books is a nightly practice.

This Course Information Booklet should be kept in a safe place for reference throughout the year.



# YEAR 9 SUBJECT DESCRIPTIONS

COKE SUBJECTS		Creative ivieura	4/
English	_ 39	Filmmaking	48
Humanities			
Health & Physical Education	- 41	Performing Arts	
Mathematics	_	Music – Music Performance	49
		Music – Screen Music	49
Science		Drama – Drama Masterclass	50
Skillz @ Mullauna	_ 43	Drama – Stage School	50
ELECTIVE SUBJECTS		Technology	
		Food and Culture	51
Languages		Food for Life	51
German	44	Invent and Learn	
		Programming Basics	52
		Robotics	53
Visual Arts			
Architecture & Product Design	45	Additional/General	
2D Art – Draw, Paint, Print	45	Creative Writing	54
3D Art – Ceramics and Sculpture	46	Environmental Science	54
Digital Art	_ 46	Forensic Science	55
Graphic Design	47	Sports Science	50



# **CORE SUBJECTS**

The following section provides information on core subjects.

# **ENGLISH**

### **OVERVIEW**

English is the area in which students continue to practise, consolidate and extend what they have learnt from previous levels. Students study the craft of writing and use the English language in all its variations and develop a sense of its richness to evoke feelings, convey information, form ideas, persuade and argue. Students learn to write, create and reflect on complex and sophisticated texts. At this level, students are required to participate in oral language activities, whereby they present viewpoints and information in a variety of situations, listen attentively and respond constructively. They are encouraged to take responsibility for their learning and become independent learners.

# **Key Skills**

On completion of this course students are able to:

- Produce, in print and electronic forms, writing for a variety of purposes
- Read and view imaginative, informative and persuasive texts
- Produce a range of responses, including interpretive pieces and personal reflections
- Present creative, informative or persuasive responses to texts, themes and issues, as individuals or in groups
- Ask clarifying questions and build on the ideas of others

### **Assessment Tasks**

- Text response: a minimum of three texts studied and relevant assessment activities completed
- Wide reading: a minimum of two texts to be read independently and relevant assessment activities completed 0
- Writing: a variety of writing tasks for different purposes and audiences
- Oral presentation: a minimum of one oral activity per semester
- Examination: Semester 1: a 11/2 hour examination paper

Semester 2: a 2-hour examination paper

# **HUMANITIES**

### **OVERVIEW**

Students investigate significant events, individuals, beliefs and values of the Industrial era. They analyse the significance of colonisation in Australia and its effect on the First Australians. They evaluate the cause, events and consequences of World War I. They evaluate the different interpretations of the past and recognise the evidence used to support these interpretations. Students develop knowledge about a major natural system that is part of the biosphere and atmosphere. They study how people interact with their physical environments and the issues that have developed due to this. Students identify strategies to address these issues and explore ways of managing them.

# **Key Skills**

On completion of this course students are able to:

- Predict changes in the characteristics of places over time and identify the possible implications of change for the
- o Identify, analyse and explain significant interconnections within places and between places over time and at different scales, and evaluate the resulting changes and further consequences
- Select, organise and represent data and information in different forms, including by constructing special purpose maps that conform to cartographic conventions
- Analyse and evaluate the broad patterns of change over the period 1750-present
- Analyse the different perspectives of people in the past and evaluate how these perspectives are influenced by significant events, ideas, locations, beliefs and values
- o Evaluate different historical interpretations and contested debates
- Evaluate the historical significance of an event, idea, individual or place

- Source/Data Analysis: exercises based upon the collection, and analysis of historical sources and geographical  $\circ$
- Research Tasks: a research task/s on a selected topic/s
- Extended Responses: extended writing tasks requiring students to articulate and justify opinions about historical debates and geographical issues
- **Examination**: an examination at the end of the semester

# **HEALTH AND PHYSICAL EDUCATION**

### **OVERVIEW**

Health and Physical Education provides students with knowledge, skills and behaviours to enable them to develop and maintain their physical, mental and social health. Students demonstrate proficiency of movement skills during complex activities, with the emphasis being on strategic thinking and tactical knowledge to improve individual and team performance. They maintain regular participation in moderate to vigorous activity and analyse and evaluate their fitness levels.

### **Key Skills**

On completion of this course students are able to:

- Evaluate individual and group tactics, skills and movement patterns
- Employ games, physical activities and sports to improve performance
- Display leadership and teamwork skills in different situations
- Identify a range of issues associated with youth relationships
- Identify fitness components in a variety of sports

#### **Assessment Tasks**

- o Skill execution: ability to perform complex movement and manipulative skills
- Game sense: ability to combine motor skills, strategic thinking and tactical knowledge
- Laboratory reports: a practical investigation with the intention of gathering appropriate data to allow the participant to analyse and interpret the information and respond to a series of structured questions

# **MATHEMATICS**

### **OVERVIEW**

Students will use mathematics to model and investigate a broad range of mathematical situations. They will build on skills in the areas of number and measurement. Students will apply mathematical working to a variety of activities involved in the topics of space, algebra, probability and statistics, and graphing and measurement.

#### **Key Skills**

On completion of this course students are able to:

- Use a range of mathematical techniques to solve mathematical problems
- o Communicate their understanding using correct mathematical language and notation
- o Problem solve by employing a variety of strategies
- Define key mathematical concepts
- Select appropriate technologies as an integral part of their mathematical activities

- o Tests: complete tests within each topic
- o **Projects:** a range of mathematical investigations
- Analytical tasks: a range of in-depth analysis tasks
- **Examination:** an examination at the end of each semester

# **SCIENCE**

### **OVERVIEW**

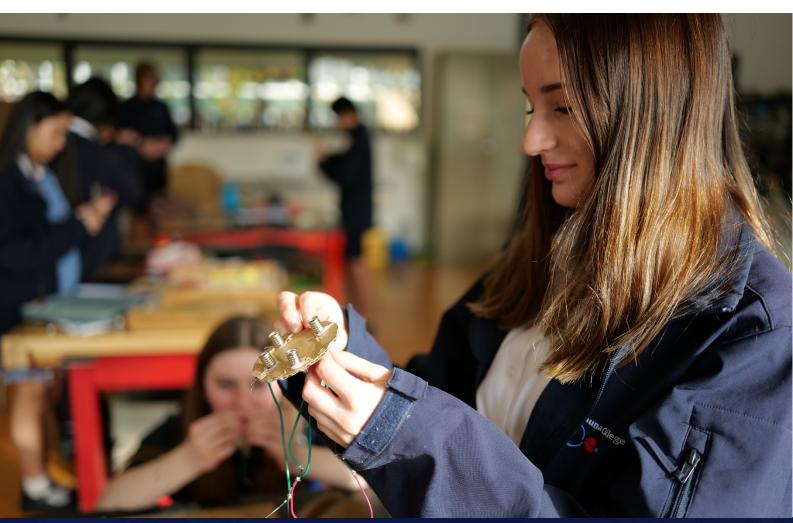
Students will cover topics including materials, atomic structure, chemical and physical changes, electricity, energy, ecosystems and body communication systems Students build on scientific ideas through investigations, research and experiments. They collect data, analyse information and discuss evidence to suggest solutions to their individual scientific questions and ideas. They understand that some scientific theories are never agreed upon, but they are powerful ways of explaining the world we live in.

# **Key Skills**

On completion of this course students are able to:

- Demonstrate safe and technical use of a range of instruments and chemicals
- Design and carry out their own ethical and safe experiments  $\circ$
- Understand the similarities and diversity of living things
- o Explore ways in which the human body as a system responds to its external environment
- Understand the major components of an ecosystem
- o Describe how different forms of energy such as heat, light, electricity and sound are transferred
- Describe the properties of different of synthetic and natural materials

- Tests: completion of a range of topic tests at the end of each unit  $\circ$
- **Projects:** major projects including research and/or analysis
- o Practical reports: written reports and posters, completed individually based on experiments and practical investigations run in class
- **Examinations:** an exam at the end of each semester



# **SKILLZ @ MULLAUNA**

#### **OVERVIEW**

All Year 9 students will be involved in this program for 8 periods per cycle. A different theme will be explored each term:

- Term 1: 'It's my life Make it a success'
- Term 2: 'It's my city Make it my backyard'
- Term 3: 'It's my future Make it one I want'
- Term 4: 'It's my community Make a difference'

For each theme, students will undertake a range of activities to develop skills that will help them to achieve success in Year 10 and beyond. Communication, teamwork, time management, self-reflection, empathy, job skills and more areas will be explored.

During each term, students will complete a major assessment task utilizing a range of ICT and multimedia programs. This work will be evaluated and then be displayed to celebrate the students' achievements.

A major component of the program will be excursions to the city and to various institutes as well as sessions and workshops run by guest speakers to explore the various themes. A 4-night challenge camp will be held in late November to develop individual and team skills.

### **Key Skills**

On completion of this course students are able to:

- Use a range of skills to communicate their ideas
- Access and use multimedia to present their assessment tasks
- Analyse and interpret information to develop an understanding of complex issues
- o Work independently and as a member of an effective team
- Manage their own learning
- Display an ability to self-reflect and measure their own success
- Independently navigate their way around our city with an understanding of its culture and history
- Apply enterprising job skills relevant to the future workforce
- Exhibit the confidence to engage with and tackle some of the world's big issues

- Actions for Success: students work on a variety of activities that aim to help students learn more about success, resilience and happiness, and develop their own
- Cover Letter and Resume: students create cover letters and resumes they can use to secure future work
- My Future Career: students need to deliver a video recorded speech that provides detailed information about an occupation that interests them
- Creative Melbourne representation: students conduct research into an aspect of Melbourne and represent what they find as a 3D model, canvas painting or digital media presentation
- 'It's My Community' project: in teams, students record a radio show for SYN Radio's 'Schools on Air' program AND create a one minute 'Video for Change' that aims to raise awareness and influence behaviour around an issue that affects our local, national or global community



# **ELECTIVE SUBJECTS**

The following section provides information on elective subjects.

# **LANGUAGES**

# **GERMAN**

### **OVERVIEW**

Students will continue to develop knowledge, confidence, communication skills and enjoyment in studying another language. This subject will promote awareness of the culture and way of life in German-speaking countries. Students will interact to exchange information and opinions on topics related to the world of adolescence such as shopping, eating out, games, travel, health and housing.

### **Key Skills**

On completion of this course students are able to:

- Identify relevant information and ideas from spoken and written texts, and use the language in new contexts
- Use a range of strategies to assist in listening comprehension
- o Participate in conversations related to specific topics, by modifying modelled language to express themselves
- Read authentic texts on a variety of topics
- Write in paragraphs using linked sentences
- Create original materials in speaking and writing for specific audience and purpose 0
- Read short, selected passages with fluency and apply their knowledge of appropriate pronunciation and expression

- Written work: a variety of exercises including creative writing
- Listening: written response to spoken texts
- Reading: a variety of texts with relevant questions answered 0
- Conversation: participation in role-plays

# VISUAL ARTS

# ARCHITECTURE AND PRODUCT DESIGN

### **OVERVIEW**

Students will undertake creative tasks exploring product design, interior design and architecture. They will apply the design process to develop designs to suit specific purposes and audiences. Students will explore technical and freehand drawing methods to communicate their ideas and use both digital and manual techniques to present their final designs. The work of other designers will be analysed through theory tasks.

# **Key Skills**

On completion of this course students are able to:

- Create technical drawings, such as perspective drawings an floorplans
- Demonstrate freehand drawing and rendering skills  $\circ$
- Apply the design process to develop 3D designs suitable for a set purpose
- Use both digital and manual techniques to present final designs
- Analyse examples of visual communications

#### **Assessment Tasks**

- o Environmental Design Task: completion of environmental design task, including all relevant development work
- Industrial Design Task: completion of industrial design task, including all relevant development work
- Written Presentation: a written report, completed individually

# 2D ART – DRAW, PAINT, PRINT

#### **OVERVIEW**

Students will explore a variety of art materials and learn skills in drawing, painting and printmaking. They will learn new techniques in drawing and apply the skills in a variety of interesting topics involving acrylic painting and printmaking. They will apply the design elements and principles of art to create individual art pieces. Research will also accompany the practical component of the course.

# **Key Skills**

On completion of this course students are able to:

- Use a range of ideas to create artworks and develop a personal style
- Explore themes, issues and ideas when making and presenting artworks
- Use a range of 2D materials and techniques
- Analyse and interpret the work of a range of artists and their artworks
- Use appropriate art terminology

- Drawing Task: completion of a drawing task which shows development in observational drawing skills, including the application of tonal rendering and a major artwork.
- o Painting or Printing Task: a composition designed in a specific style that demonstrates an ability to mix and apply paint using a range of techniques.
- Written Presentations: written reports based on research into a set topic to be supported by visual materials.

# 3D ART - CERAMICS AND SCULPTURE

### **OVERVIEW**

Students will explore a variety of 3D art materials such as clay and other mediums. Students will learn to design and create 3-dimensional artworks using clay. Construction, glazing and firing techniques will be taught. Other materials such as wire, and mixed media will be explored to create interesting sculptures. They will apply the design elements and principles of art to create individual art pieces. Research of a variety of sculptors will also accompany the practical component of the course.

### **Key Skills**

On completion of this course students are able to:

- Use a range of ideas to create 3D artworks and develop a personal style
- Explore themes, issues and ideas when making and presenting artworks
- Use a range of 3D materials and techniques
- o Analyse and interpret the work of a range of artists and their artworks
- Use appropriate art terminology

#### **Assessment Tasks**

- Ceramic Tasks: completion of a series of hand-built clay pieces exhibiting various ceramic techniques
- o Major Sculpture: completion of a sculpture using a range of materials, with relevant design process
- o Written Presentation: written report/s based on research into a set topic to be supported by visual material

# **DIGITAL ART**

# **OVERVIEW**

# **OVERVIEW**

Students will explore contemporary issues and ideas which will help them develop knowledge, skills and understanding when making digital artworks by using a variety of methods and programs. They will learn the basics of digital photography and make photographic and digital works informed by their understanding of Contemporary Art and apply these skills to enable the creation of various artworks. Research will also accompany the practical component of the course. They will look at a variety of contemporary artists and artwork such as Barbara Kruger and Cindy Sherman, as well as Protest Art and Installations

# **Key Skills**

On completion of this course students are able to:

- Use a range of ideas to create artworks and develop a personal style
- o Explore contemporary themes, issues and ideas when making and presenting artworks
- Use a range of digital applications
- Analyse and interpret the work of a range of artists and their artworks
- Use appropriate art terminology

- Digital Photo Task: application of the design process to create a photographic artwork that explores contemporary issues.
- Digital Drawing Task: creation of a digital drawing, including all relevant development work.
- Written Presentations: written reports based on research into a set topic to be supported by visual materials.

# **GRAPHIC DESIGN**

### **OVERVIEW**

Students will undertake a range of creative tasks exploring the way graphic design uses images and type to communicate messages and ideas. They will apply the design process to develop designs to suit specific purposes and audiences. Students will consider the use of design elements and principles, typography and layout to develop design ideas. They will use both manual and digital methods to present final designs. The work of other designers will be analysed through theory tasks.

### **Key Skills**

On completion of this course students are able to:

- Demonstrate freehand drawing and rendering skills
- Apply the design process to develop graphic designs suitable for a set purpose
- Create effective design layouts
- o Use both digital and manual techniques to develop and present final designs
- Analyse examples of visual communications

#### **Assessment Tasks**

- Design Process Task: completion of a range of graphic design tasks, including all relevant development work
- Type in Design: folio of design tasks focusing on the application of type, including all relevant development work
- o Written Presentation: a written report, completed individually

# **CREATIVE MEDIA**

### **OVERVIEW**

Students develop media production skills and enhance their understanding of the different forms of media, such as video and photography. They learn how to operate equipment and master techniques to enhance their creativity. They produce a series of short production exercises. Students produce a creative media product for an intended purpose and audience.

# **Key Skills**

On completion of this course students are able to:

- Plan and produce a range of creative media products.
- Use a range of media equipment and applications.
- Analyse media products using appropriate media language.

- o **Practical Tasks:** a series of media productions.
- Media Design: plan and produce a media product.
- **Analysis response:** a written response to media texts.

# **FILMMAKING**

### **OVERVIEW**

Students develop filmmaking skills through a series of practical workshops and tasks. They learn how to produce short videos and how to operate a range of media equipment. They also learn lighting techniques, shot composition, how to record sound, and how to edit their productions.

# **Key Skills**

On completion of this course students are able to:

- Structure and plan short films.
- o Record video and sound using filmmaking techniques.
- Use a range of media equipment and applications.
- o Use media language to analyse films.

- Film Production: Short films and videos.
- Media Production Design: a written and visual plan for film production.
- Analysis Response: a written response to the media texts.



# PERFORMING ARTS

# **MUSIC - MUSIC PERFORMANCE**

## **OVERVIEW**

The magic element of performing comes to life with a purpose and an audience. This subject will enhance the playing skills of each participant whether a total beginner or advanced player by preparing music for performance to a specific audience. Students will explore different performance techniques and elements of preforming and critically reviewing a concert performance.

### **Key Skills**

On completion of this course students are able to:

- Prepare and present performances independently
- Display effective teamwork and leadership skills
- Analyse and interpret concepts of music through performance
- Use appropriate musical terms
- Translate theoretical concepts to performance practice
- Develop time management and presentation styles as a pathway for future learning

### Assessment Tasks (two of the following)

- **Performance:** perform a piece of your choice at a masterclass performance session at the end of the semester. Small Group and class Performance: present a series of small group performances and associated tasks.
- Event management: Learning the skills required to run an event at school including organising, evaluating, performing and review writing.
- Reviewing Performance: Demonstrating understanding of the elements involved in critically reviewing a performance.

# **MUSIC - SCREEN MUSIC**

#### **OVERVIEW**

Are you a screen fan? Games, Movies, Netflix, all need music and sound effects to be effective. Students will spend time learning what works best in the variety of gaming, movie and TV based music and try this out both with instruments and digitally. They will use the free version of the program Musescore or Garageband and look at how to create effective music for their favourite game, screen show or movie.

#### **Key Skills**

On completion of this course students are able to:

- Analyse and interpret music that has a specific purpose
- o Create their own music
- o Understand musical structure
- Understand digital programs
- Source and use sound effects
- o Develop independence and organization skills

## Assessment Tasks (two of the following)

- Create: Creating a soundscape for visual media
- Skill Mastery: Completing a series of screen music performance activities

**Research:** Research into our screen composers creative process

# DRAMA – DRAMA MASTERCLASS

### **OVERVIEW**

This unit has been designed to help train young actors who aspire to perform both on the stage and in front of the camera. It will help students to develop their technique in acting through learning the basic performance skills of body language, mime, voice and improvisation. This will culminate in the presentation of a performance in front of the camera.

### **Key Skills**

On completion of this course students are able to:

- Understand theatre styles including naturalism and the techniques required to present these styles
- Use improvisation to develop a variety of dramas around specific themes and from a range of stimuli
- o Build a performance using theatrical conventions and dramatic elements as stimuli for a recorded and a live performance

#### **Assessment Tasks**

- Performance and class participation: an assessment of student's participation in practical workshops and class performances over the course of the semester
- o **Group performance:** presented live to an audience
- Group performance: presented in a digital format to an audience

# DRAMA – STAGE SCHOOL

#### **OVERVIEW**

Over the semester, the Stage School class will work together to rehearse, stage and perform a small- scale production of a chosen play. Every student will take on an acting role (lead or minor) and will also be assigned to one of the following teams according to preference, interest and skills; Sets, Props, Hair and Makeup, Choreography, Assistant Directors, Costumes, Marketing and Sound/Lighting Design. Students will be responsible for ensuring that this element of the show is prepared for the performance. The cast will present the production to an audience at an evening performance. Students will also have the opportunity to view a professional live stage show. They will complete a critical review of the performance, detailing the effect the performance will have on their own.

### **Key Skills**

On completion of this course students are able to:

- o Understand and participate in the development of a small-scale production
- Interact with others in a stage context
- Manipulate the elements of stagecraft to enhance performance
- Use performance elements such as blocking, voice and character development to enhance their own performance

- **Group performance:** presented to an audience
- Folio: documentation of the skills acquired through the creative process of rehearsal and assigned production
- Live performance review: critical review of a live performance

# **TECHNOLOGY**

# **FOOD AND CULTURE**

#### **OVERVIEW**

Students will explore a wide range of factors that influence food and culture. They will discover how the Indigenous people of Australia successfully lived off the land. Students will also explore how immigration and lifestyle changes over generations have shaped Australian cuisine. A global perspective is also examined when students research the cuisine of a chosen country. During both theory and practical classes, students will develop an understanding of different cooking techniques and ingredients.

### **Key Skills**

On completion of this course students are able to:

- Investigate, analyse and select from a range of materials, components, tools, equipment and processes to develop design ideas
- Generate, develop, test and communicate design ideas, plans and processes for various audiences
- Effectively and safely use materials, tools and equipment
- Independently develop criteria for success to assess design ideas and processes
- Use organizational strategies when working individually and collaboratively

#### **Assessment Tasks**

- o Research Report: a research report on a chosen country that highlights how that country's cuisine has been shaped
- Project: a project based on the design process
- Bookwork: an accurate and organized workbook
- Production: prepare sweet and savoury dishes using a wide range of skills and techniques

# **FOOD FOR LIFE**

### **OVERVIEW**

Students will explore a wide range of topics including health and nutrition, factors influencing food choices, healthy alternatives, ethical and sustainable food production, product development, marketing and reading food labels. They will consider the role that food plays in a social context and how it relates to everyday life.

### **Key Skills**

On completion of this course students are able to:

- Investigate, analyse and select from a range of materials, components, tools, equipment and processes to
- o Generate, develop, test and communicate design ideas, plans and processes for various audiences
- Effectively and safely use materials, tools and equipment
- Independently develop criteria for success to assess design ideas and processes
- Use organizational strategies when working individually and collaboratively

- **Research Report:** a research report on a relevant topic
- **Project:** a project based on the design process
- Bookwork: an accurate and organized workbook
- Production: prepare sweet and savoury dishes using a wide range of skills and techniques

# **INVENT AND LEARN**

#### **OVERVIEW**

In this unit, students will undertake a variety of design challenges, requiring creativity and innovative thinking. Exciting real-world challenges and problems will be explored, and students will create solutions using a variety of robotics, electronics, materials and programming. Invention and engineering will be crucial as students tinker with ideas and test prototypes.

# **Key Skills**

On completion of this course students are able to:

- Develop and explore inquiry questions
- Conduct extensive research using a variety of sources
- Create models and 3D prototypes and presentations
- Apply problem solving skills

#### **Assessment Tasks**

- Creative Design: students work in groups to construct a project to suit a specific purpose
- Design Solution: using a range of equipment and materials (including electronics and computer programming software) students experiment to engineer a design solution
- Project Management: students undertake the design process to produce and evaluate an innovative solution to a set problem

# PROGRAMING BASICS

# **OVERVIEW**

In this unit, students will learn how to create a platform game by utilising a simplified version of the python language. They will learn the fundamentals of programming such as storing variables and control structures to create a fluid and engaging game, as well as experiment with a variety of applications to advertise their unique games. Students will also use microcontrollers to create digital solutions that have real world applications, such as controlling a prosthetic hand.

# **Key Skills**

On completion of this course students are able to:

- Create an interactive game using Gamefroot (or similar program)
- Utilise the basic functions of a variety of software applications
- Understand the foundations of Python language
- Add appropriate extensions to microcontrollers to perform complex tasks

- o Game development: creation of a finished platform game using code-based game software
- App development: development and presentation of a non-gaming application 0
- Coding modules: understanding and use of code to complete a range of tasks via a series of modules

# **ROBOTICS**

### **OVERVIEW**

Students will experience building and design tasks as well as an introduction to programming. Programmable equipment along with student friendly programming software will be used to teach students about the difference between a machine and a robot, viable building designs and how to master programming by manipulating a flow chart screen. Students will design and build a range of machines that use gears, motors and pneumatics that can fulfil certain task requirements. Students will learn how to use programming software to write short programs that can be loaded on to the Ev3 (command centre) on their robot. They will manipulate motors, light sensors, sound sensors and any attachments they create for their robot. The robots will be under the students' full control and will be programmed to compete a range of complex tasks from acting as dodgem cars to moving through mazes and dancing to music.

# **Key Skills**

On completion of this course students are able to:

- Identify key differences between a machine and a robot
- Follow instructional building guides to successfully build a range of Lego machines
- o Use their own innovation to design new machines to fulfil certain tasks
- Write basic programs that manipulate moving parts of their robot
- Edit complicated programs to allow their robot to compete a multitude of tasks

- Folio of Lego robots: completion of a range of building tasks along with reflections and written work on each
- o **Report:** written task evaluating the ethics of robots
- Programming folio: a design process to progressively develop gadgets

# ADDITIONAL/GENERAL

# **CREATIVE WRITING**

#### **OVERVIEW**

Students will examine writing as a craft and explore the process by which good writing is produced. Students will build the specific skills required to write in a number of genres and forms. They will engage in the different steps involved in the writing process and learn to employ a variety of strategies to engage their target audience.

# **Key Skills**

On completion of this course students are able to:

- Write in a range of styles, forms, and genres
- o Use a range of literary devices
- Understand the important elements of narrative writing
- Develop an individual style and voice
- Use a range of software, including word processing programs, to create, edit and publish texts imaginatively

### **Assessment Tasks**

- Writing pieces: a variety of writing pieces in different genres and forms
- Writing Folio: completion of various skills building activities and reflections
- Written Presentation: a published work using an elected software to a target audience

# ENVIRONMENTAL SCIENCE

#### **OVERVIEW**

Our environment is currently facing serious challenges, from changing climates to habitat loss, environmental degradation, species extinction and overpopulation. In this subject, students will study patterns and processes in the natural world and their modification by human activity. Students will explore the science of current environmental issues and consider social and economic factors relating to these issues. Student will develop creative solutions to environmental issues and educate their community.

### **Key Skills**

On completion of this course students are able to:

- Describe physical, biological and chemical patterns and processes in the natural world
- Collect and evaluate scientific data relating to current environmental issues
- Understand social and economic factors relating to environmental issues
- Design creative solutions to environmental issues, to create a sustainable environment for all
- Educate their community on environmental issues and encourage sustainable living

- o Field and Practical Work: Collect and evaluate data
- Research Projects: Undertake research projects exploring the science of environmental issues
- Design Projects: Develop and design solutions to environmental issues

# **FORENSIC SCIENCE**

#### **OVERVIEW**

Students will apply scientific knowledge and techniques to investigate aspects of forensic science. This will include the collection and examination of physical evidence and identifying victims. They will engage in a range of practical activities to analyse evidence to solve a murder case.

### **Key Skills**

On completion of this course students are able to:

- Explain how science inquiry skills are used to investigate and evaluate evidence
- Formulate their own hypotheses and conduct investigations in order to prove or disprove them
- Distinguish between circumstantial forensics evidence and definitive evidence

#### **Assessment Tasks**

- o **Projects:** major research and investigation tasks
- Practical skills: assessment made on the ability to safely conduct a range of experiments as part of a group
- Case study booklet and report: accurate results and analysis from experiments undertaken throughout the course

# **SPORTS SCIENCE**

#### **OVERVIEW**

Students will gain insight into science as a human activity and the relationship between science, technology and sport. This will develop students understanding of the body systems and their functions in sporting activities as well as external factors that can influence sporting ability.

Students will investigate a range of the following concepts: body movement, biomechanics, careers in sport science, sports medicine and drugs in sport, sports psychology and the evolution of sporting equipment and clothing.

### **Key Skills**

On completion of this course students are able to:

- Explain the internal systems of the body that allow for active movement
- Evaluate their aerobic capacity in relation to their cardiovascular system and their fitness
- Utilise a range of technologies and experimental processes to analyse data
- Discuss the short- and long-term effects of natural and synthetic drugs in sport
- Evaluate scientific developments in sporting equipment and clothing to predict future designs and materials

- **Topic Tests:** written tests on key concepts studied in each topic
- Modelling task and report: creation of a 3D model to explain key concepts with an attached report
- **Projects:** major projects including research and analysis



456 Springfield Road, Mitcham, VIC 3132 **P:** (03) 9874 3422 **E:** mullauna.sc@education.vic.gov.au

W: mullauna.vic.edu.au