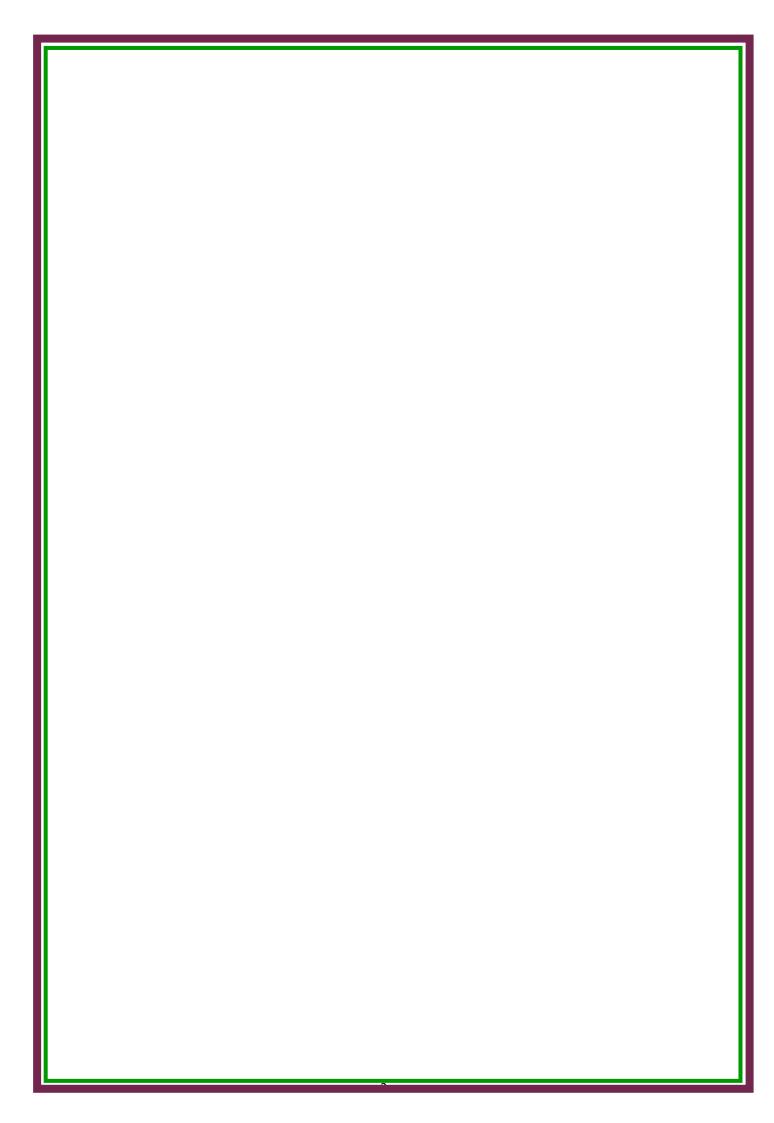
MUIRFIELD HIGH SCHOOL



STAGE 5 SUBJECT SELECTION HANDBOOK

Information for students and parents

Year 9 2021 — Year 10 2022



CONTENTS

	4
MUIRFIELD HIGH SCHOOL COURSES FOR YEAR 9 IN 2021	5
Mandatory Courses	5
ELECTIVE COURSES	5
ELECTIVE SUBJECT CONTRIUBTIONS FOR YEAR 9 IN 2021	6
MANDATORY COURSES	7
English	8
MATHEMATICS	9
Science	10
GEOGRAPHY	11
HISTORY	12
PERSONAL DEVELOPMENT, HEALTH AND PHYSICAL EDUCATION	13
Sport	14
SUBJECT SELECTION PROCEDURES	15
ELECTIVE COURSES	16
AGRICULTURE	17
COMMERCE	18
COMMERCE	19
COMMERCE DANCE	19 20
COMMERCE DANCE DESIGN & TECHNOLOGY	19 20 21
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA	
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA ELECTIVE HISTORY	
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA ELECTIVE HISTORY FOOD TECHNOLOGY.	
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA ELECTIVE HISTORY FOOD TECHNOLOGY INFORMATION & SOFTWARE TECHNOLOGY (COMPUTER STUDIES)	
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA ELECTIVE HISTORY FOOD TECHNOLOGY INFORMATION & SOFTWARE TECHNOLOGY (COMPUTER STUDIES)	
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA ELECTIVE HISTORY FOOD TECHNOLOGY INFORMATION & SOFTWARE TECHNOLOGY (COMPUTER STUDIES) iSTEM JAPANESE	
COMMERCE DANCE DESIGN & TECHNOLOGY DRAMA ELECTIVE HISTORY FOOD TECHNOLOGY INFORMATION & SOFTWARE TECHNOLOGY (COMPUTER STUDIES) ISTEM JAPANESE MUSIC	

INTRODUCTION

At Muirfield High School we have a broad curriculum to best meet the needs of all students. Every year we run a range of academic, creative and practical subjects.

In Stage 5 (Years 9 and 10) students study the mandatory courses (English, Mathematics, Science, PDHPE, History and Geography) as required by the NSW Educational Standards Authority (NESA). To complete their pattern of study, students undertake three other subjects for the two years of Stage 5. All mandatory and additional Stage 5 courses completed by the student, along with the grade awarded, will be recorded on the RoSA (Record of School Achievement) credentials, which are issued by NESA.

This booklet provides information about all courses offered at Muirfield.

In selecting subjects, students should consider their interests and abilities. It is important to be realistic about one's strengths and weaknesses.

In most cases, the electives undertaken do not restrict or limit student choices in Years 11 and 12. The exception is the study of Japanese.

Please note: some subjects have fees for equipment and consumables. Please consider these fees carefully in your selection of subjects for Years 9 and 10. The school offers fee-free courses for those who have difficulty meeting extra costs.

Please ensure that you read this booklet carefully and seek the advice of teachers if you need more information.

Jennifer Reeves Principal July 2020

Muirfield High School Courses for Year 9 in 2021

It is now time for you, as Year 8 students, to select your elective courses for Years 9 and 10. By now, you will have discovered information about different subjects from courses studied in Years 7 and 8, your teachers and other students. Read this booklet carefully and discuss your choice of electives with your parents and with your teachers.

You will need to choose electives sensibly, because you will undertake these subjects until the end of Year 10.

Mandatory Courses

In Year 9 and 10 the following courses are mandatory for all students:

- English
- Mathematics
- Science
- Geography
- History
- Personal Development, Health and Physical Education
- Sport

Elective Courses

At Muirfield students study three electives for a two-year period. Each elective is studied for four periods per cycle, i.e 4 x 80 minutes a fortnight. The following electives are offered at Muirfield:

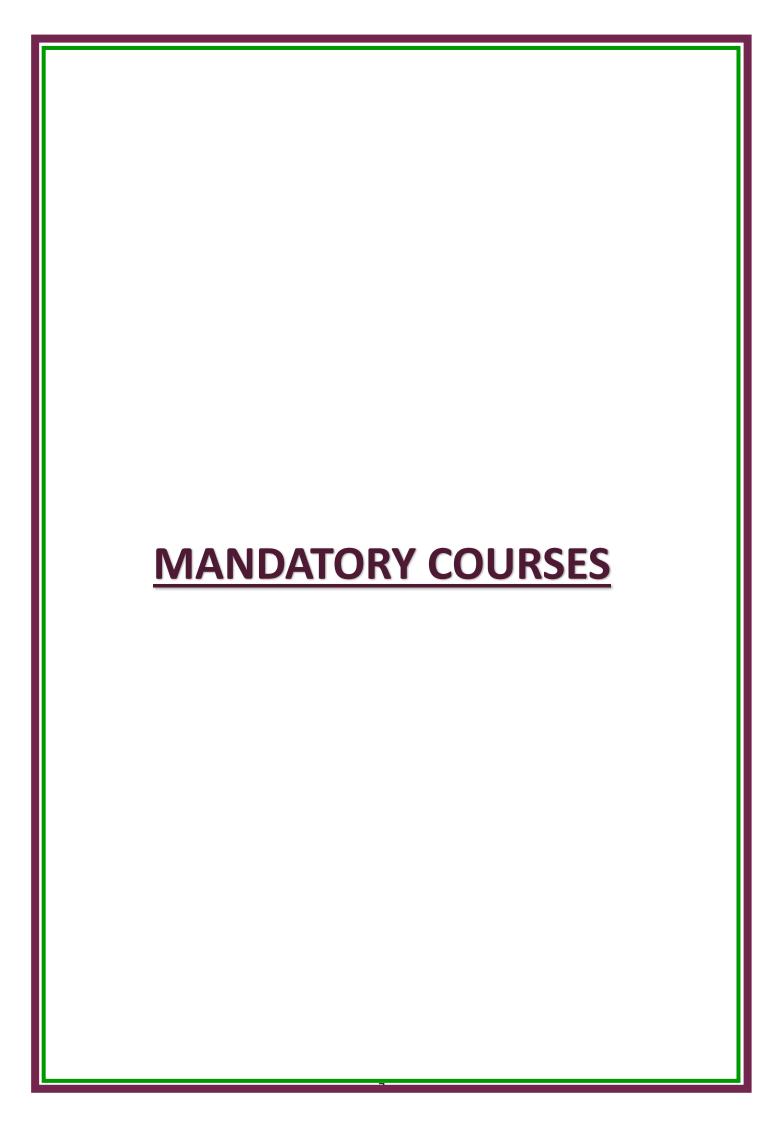
ENGLISH	MATHEMATICS/SCIENCE/ TAS	TAS
Japanese	iSTEM	Agricultural Technology
		Design & Technology
		Food Technology
HSIE	CAPA	Information & Software Technology
Commerce	Dance	
Elective History	Drama	
	Music	
PDHPE	Visual Arts	
Physical Activity & Sport Studies	Visual Design	

Elective Subject Fees for Year 9 in 2021

Please note: some subjects have fees for equipment and consumables. Please consider these fees carefully in your selection of subjects for Years 9 and 10. The school offers fee-free courses for those who have difficulty meeting extra costs.

Year 9 2021			
Payments for Elective Subjects			
Agricultural Technology	\$40		
Design & Technology	\$50		
Food Technology	\$70		
Information Software & Technology	\$50		
iSTEM	\$50		
Music	\$40		
Visual Arts	\$65		
Visual Design	\$65		

The SUBJECT SELECTION PROCEDURE is in this booklet. Students will be required to print out their selection form once they have entered the courses online, and have it signed by their parents, before returning to the Office, on or before the required date.



ENGLISH

Language shapes our understanding of our world, ourselves and is the primary means by which we relate to others, this is the focus of English in Stage 5.



Students work towards demonstrating these outcomes:

- Responding to and composing texts with increasing sophistication.
- Using critically assessing a range of processes to compose and respond to texts in different media and technologies.
- Selecting, using, describing and explaining the affect of different text structures and technologies and how these shape meaning.
- Using language appropriately for different audiences and purposes.
- Applying understanding of language concepts to new contexts.
- Using critically assessing a range of processes to compose and respond to texts in different media and technologies.
- Selecting, using, describing and explaining the affect of text structures and technologies and how these shape meaning.
- Experimenting with different ways of transforming ideas and experiences into texts.
- Thinking critically and interpretively to compose and respond to texts.
- Investigating the relationship between and among texts.
- Demonstrating the ways texts reflect personal and public worlds.
- Questioning, challenging and evaluating cultural assumptions in texts and their effects on meaning.
- Using, reflecting on and assessing their own learning process.

Students complete common assessment tasks that are based on these outcomes. Class activities encompass the modes of reading, writing, listening, speaking and viewing. Through composing and responding to texts, past and present, students learn about the power, value and art of the English language for communication, knowledge and pleasure.

The aim of the course is to provide opportunities to extend students' competence in using language, specifically related to reading, writing, speaking, listening and awareness of the mass media.

The program is based around themes or literary studies linked to a range of texts including novel, poetry, drama and multimedia. Thematic studies incorporate a variety of texts focusing on a central issue. All students are also involved in wide reading and writing activities. Students will work individually and in small groups strengthening literacy skills across a range of different text types.

Developing students' confidence in a range of speaking tasks is also an important objective of the course, with opportunities for discussion, public speaking and debating provided. Assessment is based on class work, assignments and examinations. The class that a student is placed in will be determined by the student's progress in English, his or her achievement of outcomes and their consistent application.

MATHEMATICS

The study of Mathematics provides opportunities for students to learn to describe and apply patterns and relationships; reason, predict and solve problems; calculate accurately both mentally and in written form; estimate and measure; and interpret and communicate information presented in numerical, geometrical, graphical, statistical and algebraic forms.

Students will have the opportunity to develop an appreciation of mathematics and its applications in their everyday lives and in the worlds of science, technology, commerce, the arts and employment. The study of the subject enables students to develop a positive self-concept as learners of mathematics, obtain enjoyment from mathematics, and become self-motivated learners through inquiry and active participation in challenging and engaging experiences.

Year 9 and Year 10 is considered to be Stage 5 of the K-12 continuum for Mathematics.

At Muirfield Years 9 and 10 classes are divided into 2 groups:

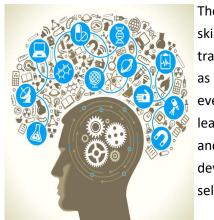
- 5.3: The most advanced course and the most appropriate course to study for the Stage 6
 Advanced Mathematics and Extension courses.
- 5.1/5.2: Students in the other classes will be mixed and work will be pitched at the most relevant level, depending on the topic. 5.2 is a good preparation for Standard Mathematics in senior school and applicable for further study in TAFE and non-mathematical based fields.

Students will be placed in Year 9 classes based on their Year 8 achievement. A students' position may be reviewed up until second semester Year 9 to allow students who need and wish to achieve at 5.3 level to be placed in the most appropriate level.

Students in 5.2 wishing to choose courses in Advanced Mathematics would need to undertake supplementary units of work to prepare for this transition. Whilst rare, these changes are only successful if this extra work is undertaken and submitted to ensure the pre-requisites are achieved.



SCIENCE



The study of Science develops students' scientific knowledge and understanding, skills and values and attitudes within broad areas of science that encompass the traditional disciplines of Physics, Chemistry, Biology and the Earth Sciences. As well as acquiring scientific knowledge and skills, students apply their understanding to everyday life and develop an appreciation of science as a human activity. Students learn about the need to conserve, protect and maintain the environment, the use and importance of technology in advancing science and the role of science in developing technology. Students also develop an appreciation of, and skills in, selecting and using resources and systems to solve problems.

Science has accumulated a body of knowledge that leads to explanations for a variety of phenomena and interactions in our surroundings. Science investigates phenomena over a range of scales from the subatomic to the cosmological, from events that take place almost instantaneously to processes that occur over millions of years, from the origins of the universe to contemporary phenomena, and it extrapolates to future events.

Science provides learning experiences through which students will:

- acquire scientific knowledge and skills and develop understanding about phenomena within and beyond their experience;
- develop an appreciation of science as a human activity and apply their understanding to their everyday
 life;
- develop positive values about and attitudes towards themselves, others, lifelong learning, science and the environment.

Students will develop knowledge and understanding of:

- the history of science;
- the nature and practice of science;
- applications and uses of science;
- implications of science for society and the environment;
- current issues, research and development;
- models, theories, laws, structures and systems related to the physical world, matter, the living world and earth and space;
- interactions within the physical world, matter, the living world and earth and space.

Students will develop skills in:

- planning investigations;
- conducting investigations;
- communicating information and understanding;
- developing scientific thinking and problem-solving techniques;
- working individually and in teams.

The class that a student is placed in for Year 9 will be determined by the student's performance in Science, his or her achievement of outcomes and his or her overall course position at the completion of Year 8. At various times throughout the year during Year 9 student performance will be reviewed and some class changes may be made.

GEOGRAPHY

Geography is the study of places and the relationships between people and their environments. It is a rich and complex discipline that integrates knowledge from natural sciences, social sciences and humanities to build a holistic understanding of the world. Students learn to question why the world is the way it is, reflect on their relationships with and responsibilities for the world and propose actions designed to shape a socially just and sustainable future.



Geography emphasises the role, function and importance of the environment in supporting human life from local to global scales. It also emphasises the important interrelationships between people and environments and the different understandings of these relationships. The wellbeing of societies and environments depends on the quality of interactions between people and the natural world.

Geographical inquiry involves students acquiring, processing and communicating geographical information. Through an inquiry approach students explain patterns, evaluate consequences and contribute to the management of places and environments in an increasingly complex world. This process enables them to apply inquiry skills including: asking distinctively geographical questions; planning an inquiry and evaluating information; processing, analysing and interpreting that information; reaching conclusions based on evidence and logical reasoning; evaluating and communicating their findings; and reflecting on their inquiry and responding, through action, to what they have learned. Engagement in fieldwork and the use of other tools including mapping and spatial technologies are fundamental to geographical inquiry.

The study of Geography enables students to become active, responsible and informed citizens able to evaluate the opinions of others and express their own ideas and arguments. This forms a basis for active participation in community life, a commitment to sustainability, the creation of a just society, and the promotion of intercultural understanding and lifelong learning. The skills and capabilities developed through geographical study can be applied to further education, work and everyday life.

Stage 5 Geography studies:

- Sustainable Biomes
- Changing Places
- Environmental Change and Management
- Human Wellbeing

HISTORY

History is a disciplined process of inquiry into the past that helps to explain how people, events and forces from the past have shaped our world. It allows students to locate and understand themselves and others in the continuum of human experience up to the present. History provides opportunities for students to explore human actions and achievements in a range of historical contexts. Students become aware that history is all around us and that historical information may be drawn from the physical remains of the past as well as written, visual and oral sources of evidence.

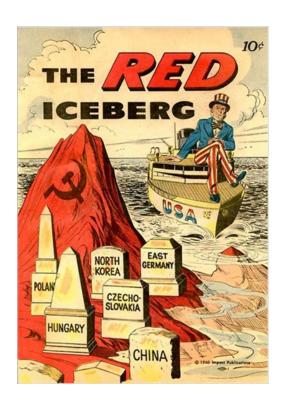
Year 9

- Overview The making of the Modern World.
- Depth Study Australians at War (WWI and WWII)
- Depth Study Making a Nation



Year 10

- Overview The Modern World and Australia.
- Depth Study Core Rights and Freedoms (1945-present)
- Depth Study The Cold War Era 1945-1991



PERSONAL DEVELOPMENT, HEALTH & PHYSICAL EDUCATION

PDHPE is a compulsory 3 periods per cycle course that integrates health theory and physical activity which aims to develop student's capacity to enhance personal health and well being, enjoy an active lifestyle, maximise movement potential and advocate lifelong health and physical activity.



The Course Content is divided into four strands:

- Self and Relationships
- Movement Skill and Performance
- Individual and Community Health
- Lifelong Physical Activity

All students are required to participate in all components, outlined above of the course. Students are expected to bring their sport uniform for all practical lessons.

Students in Year 9 & 10 will study Health topics which include Healthy Decision Making, Empowering Individuals, Road Safety, Drug Use, Mental & Sexual Health (including STI's), Health Consumerism, Relationships, and Healthy Eating and Food Habits.

In the practical components of PDHPE, students will actively participate in Fitness, Athletics, Racquet sports and an extensive number of ball sports such as Volleyball, Netball, European Handball, Basketball, Softball, AFL, Soccer, Touch and Oztag.

SPORT

In Year 9 and 10 students participate in Sport on Wednesday afternoons. They may choose from a selection of traditional competitive grade sports or recreational sports.



Grade teams participate in the Hills Zone competition in summer and winter sports, and may incur a fee for transportation. Teams meet in a play off series to determine the Zone Champions. Grade sports offered include:

Winter			
Boys	Girls		
Soccer	Soccer		
Volleyball	Basketball		
Oztag	Touch Football		
Mixed Ultimate Frisbee	Grade Tennis		
Summer			
Boys	Girls		
Cricket	Volleyball		
Basketball	Netball		
Touch Football	Oztag		
Baseball			

Participants in recreational sports may also incur transport and venue hire costs. Recreation Sports are selected on a 10 or 20 week cycle. Selections of particular sports take place prior to each sporting season. Students can select to participate in free recreational sports and will rotate between:

Fitness

Table Tennis

Walking

Tennis and the school gym are also available but at a cost to students.

Attendance and participation in Sport, as well as the School Swimming, Cross Country and Athletics Carnivals are requirements for the award of the RoSA.

ELECTIVE COURSES

The following courses are offered at Muirfield and studied for two years.

Students nominate five courses they wish to study and rank their choices: first, second, third, fourth and fifth.

In over 95% of students, the three electives studied are from the five nominated courses. In a very few number of cases, students may be required to select a different course after the lines are drawn. Courses may not run due to insufficient interest from students or a clash when lines are developed.

Please note: line structure is determined by a software program that works to ensure most student choices do not clash.

Subject Selection Procedure

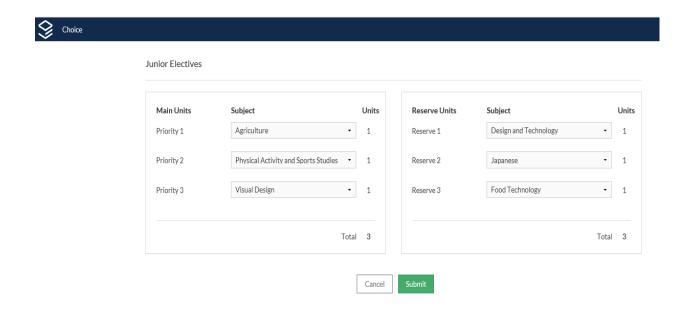
Students will be e-mailed a link to select their subject preferences.

E-mails will be sent to students on Tuesday, July 28. Students have until July 30 to make their selections. Any issues with accessing subject preferences and selecting subjects should be notified immediately to Mrs Hosen. We recommend students choose their preferences as soon as possible to ensure they are received.

The Process is:

- 1. Students should check they can access their Department of Education email by July 28.
- 2. When the e-mail has been received (July 28), click on the link.
- 3. Check the preference drop down menus have the Y9 elective subjects for 2021.
- 4. Select from the drop down menu your 6 preferences (no later than July 31). These should reflect your preference order. You should have three priority subjects and three reserve subjects.
- 5. Submit the form. Only do this when you are certain you have ordered your preferences correctly.
- 6. Print the form and have your parents sign.
- 7. Return form to the front office by Wednesday August 5.
- 8. Subjects will be finalised by the end of Term 3.

Your link is a distinct code that only you can access. Other students cannot access to change your preferences.



AGRICULTURE



The Year 9 Agriculture course comprises 4 x 80 minute periods per cycle. This makes up the first half of a 2 year course which enables students to achieve accreditation in this subject in the RoSA. It is a course designed to reinforce the scientific and theoretical components of study with hands on student involvement in practical activities. Students are able to achieve satisfying learning outcomes around their personal learning styles whether this be practically orientated, scientifically orientated or both

The emphasis for students taking Agriculture is to "learn by doing" and have fun doing it. Agriculture students will study a range of animal and plant production systems focusing on both the theory and practical aspects of each enterprise. Students achieve a range of valuable skills through their involvement in these areas of study. The plant and animal production topics covered also reinforce students knowledge in other areas of study such as science and biology.

Students studying Agriculture have the opportunity to enter a range of satisfying career areas. With the skills and knowledge covered, graduating students are well prepared for various apprenticeships (through their skills with working with various small farm machinery and hand tools), greenkeepers and parks and gardens positions (through their knowledge of plant production), any animal husbandry field (due to their understanding and skills with working with animals). Beyond this, students are well prepared to enter the HSC in this subject and continue to achieve consistent above average state results from Muirfield, enter tertiary study and professional fields of research, private industry and education.

COMMERCE



Commerce is about making money, running a business, jobs and buying goods and services.

Commerce provides the knowledge, skills, understanding and values that form the foundation on which young people make sound decisions on consumer, financial, business, legal and employment issues.

It is about the relationships between consumers, businesses and governments in the overall economy. Students develop the capacity to apply problem-solving strategies which incorporate the skills of analysis and evaluation. Students engage in the learning process which promotes critical thinking, reflective learning and the opportunity to participate in the community.

To function competently in our democratic and pluralistic society, students need to develop the ability to research information, evaluate options, and participate in collaborative decision-making within the commercial and legal framework and acquire the necessary skills to become self-directed lifelong learners.

Commerce provides for a range of learning styles and experiences that suit the interests and needs of all students. It emphasises the potential and use of **information and communication technologies.** Students gain greater competence in problem-solving and decision-making by evaluating the range of consumer, financial, business, legal and employment strategies. In examining these they also develop attitudes and values that promote ethical behaviour and social responsibility and a commitment to contribute to a more just and equitable society.

Year 9 Commerce studies:

Core

- Consumer Choice
- Personal Finance

Options

- Investing
- Promoting and Selling
- E-commerce
- Global Links
- Towards Independence
- Political Involvement

Year 10 Commerce studies:

Core

- Law and Society
- Employment Issues

Options

- Travel
- Law in Action
- Our Economy
- Community Participation
- Running a Business
- School-developed Option

DANCE

The study of dance as an art form is the philosophical base of the Dance Years 9-10 Syllabus.

The conceptual basis of the study of dance as an art form centres on the three practices of performance, composition and appreciation of dance as works of art. Equal emphasis is placed on the processes of experience and end products.

Dance involves the development of physical skill as well as aesthetic, artistic and cultural understanding. Students learn both movement principals and stylised techniques, and they learn through both problem-solving and directed teaching.

Dance encourages the creative and confident use of technologies, including traditional, contemporary and emerging applications in information and communication technologies (ICT).



Dance caters for students with a high level of prior knowledge, skills and experience in dance as well as those without prior knowledge and experience. Dance in Years 7-10 provides a pathway to the study of Dance at Stage 6, and encourages participation in and enjoyment of dance throughout life. This is a performance elective, and its is expected that students will participate in MADD and SummerArts productions (costumes cost incurred).

The elective is divided into three major areas:

Performance

Students will gain confidence and expertise in a range of dance techniques and styles.

Composition

Students are given the opportunity to express and communicate ideas and feelings through the use of dance composition.

Appreciation

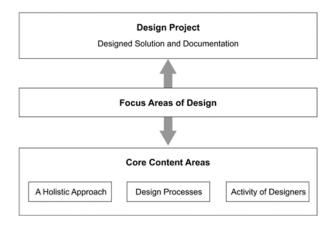
Making informed judgements and reporting on group and individual dance performances. Students will study historical perspectives of varying dance styles. Students will have the opportunity to observe and critique a number of professional performances.

DESIGN AND TECHNOLOGY

The study of Design and Technology will assist students to appreciate and be informed about design and technological innovation. Students will learn to critically analyse and reflect on the implications of design in order to develop understanding of why some designs, technologies and processes perform better than others in meeting their intended purpose. Students will develop knowledge, appreciation and applied skills for understanding the interrelationships of design, technology, society, the individual and the environment for an increasingly knowledge-based economy and lifestyle.

What will students learn?

Design and Technology involves designing, producing and evaluating quality designed solutions. Students will learn a range of practical skills during the development of design projects. The core content of design processes and the activity of designers is developed during each design project.



What will students learn to do?

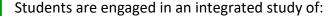
A design project is the main learning activity of students and culminates in the designed solution and documentation. Students will be required to develop and document design projects from the following Focus Areas of Design:

=							
•	accessory	•	aeronautical	•	agricultural	•	architectural
•	packaging	•	digital media	•	engineering	•	environmental
•	fashion	•	food	•	furniture	•	graphical
•	industrial	•	information systems	•	interior	•	jewellery
•	landscape	•	marine	•	medical	•	transport systems
•	promotional	•	software	•	structural	•	communication systems



DRAMA

Drama is a two year course commencing in Year 9 and following through into Year 10 where students explore experiences and situations through enactment. Drama provides a particularly valuable means of increasing self-confidence and social awareness.



The elements of drama through the practices of making, performing and appreciating.



With the context of a range of dramatic forms, performance styles and their dramatic techniques and theatrical conventions.

Students must also complete research assignments, learning logs, design projects and be prepared for written and performance assessments.

There are no prerequisites to this course.

The course includes the compulsory unit of Playbuilding to be studied in Year 9 and 10.

Other units of work that may be covered are chosen from the following areas:

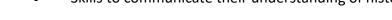
- Mime
- Movement
- Improvisation/Role play
- Voice
- Character Analysis
- Play Building
- Design
- Performance Skills
- History of the Theatre
- Script Analysis
- Mask
- Physical Theatre
- Shakespearian Theatre
- Melodrama
- Comedian Dell'arte
- Acting Skills and Characterisation

ELECTIVE HISTORY

In History (Elective) students develop:

Students will value and appreciate:

- A knowledge and understanding of history and historical inquiry
- A knowledge and understanding of past societies and historical periods
- Skills to undertake the processes of historical inquiry
- Skills to communicate their understanding of history



- History as a study of human experience
- The opportunity to develop a life-long interest and enthusiasm for history
- The nature of history as reflecting differing perspectives and viewpoints
- The opportunity to contribute to a just society through informed citizenship
- The contribution of a past and present peoples to our shared heritage.

Students will undertake 200 hours of study in History Elective in Stage 5. Students will study from the following topics areas.

- Biography
- Family History
- Film as History
- Historical Fiction
- Heritage and Conservation
- History and the Media

- Local History
- Museum and/or Archives Studies
- Oral History
- Historical Reconstructions
- A history website/CD-ROM
- Archaeology of the Ancient World
- Literature of the Ancient World
- Medieval and Early Modern Europe
- The Ottoman Empire
- An Asian Study

- The Americas
- The Pacific
- Africa
- A 19th century study
- A 20th century study: Nazi Germany

- Children in History
- Heroes and Villains
- Religious Beliefs and Rituals through the Ages
- Sport and Recreation in History
- War and Peace

- Crime and Punishment
- Music through History
- Slavery
- Terrorism
- Women in History
- School-developed study



FOOD TECHNOLOGY

Food Technology aims to actively engage students in learning about food in a variety of settings, enabling them to evaluate the relationships between food, technology, nutritional status and the quality of life. Students will develop confidence and proficiency in their practical interactions and decisions regarding food.

Students will complete two major projects each year with a practical focus where they design and choose their own practical application to meet a specified brief or need.

Students will also complete a written component that will justify the practical choices made.



Topics Studied	Focus
Food in Australia	Practical experiences in the development of our Australian cuisine including the use of Indigenous (bush tucker) foods and Multicultural influences in contemporary foods. Students then create their own contemporary dish.
Food Selection and Health	Students prepare a variety of nutritious dishes and investigate the role of food in the body.
Food for Special Needs	Students learn to prepare foods for special needs which include various cultural groups and health related issues such as allergies, anaemia, diabetes, anorexia, heart disease and other nutritional requirements.
Food for Special Occasions	Students plan a special event and prepare and plan food for these occasions including decorate a cake for this occasion.
Food Service and Catering	This unit explores the service of food and the larger scale production and preparation. Also industry roles, employment opportunities, menu planning and considerations when catering for larger numbers are explored with a variety of practical activities.
Food Product Development	During this unit students design and create an innovative product that meets the needs of a client. Students learn about sensory evaluation (taste testing), packaging and labelling implications for the consumer.
Food Trends	Students will investigate current food trends and the influences on these trends while the focus will be on presenting and decorating food in a modern style during practical applications.
Food Equity	Students will learn to prepare foods with a variety of foods including new and different staples. This focuses on unequal distribution of food in Australia and the world.

INFORMATION & SOFTWARE TECHNOLOGY (COMPUTER STUDIES)

The study of Information and Software Technology Years 9–10 assists students to develop the knowledge, understanding and skills to solve problems in a real life context using computer technology. Through experiential and collaborative tasks, students engage in the processes of analysing, designing, producing, testing, documenting, implementing and evaluating information and software technology-based solutions.

The course is broken down into core and elective units as shown in the table below:

Core Content

Design, Produce and Evaluate

Data Handling

Hardware

Issues

Past, Current and Emerging Technologies

People

Software



Projects Used to integrate Core Content with Options

Options

Artificial Intelligence, Simulation and Modelling

Authoring and Multimedia

Database Design

Digital Media

Internet and Website Development

Networking Systems

Robotics and Automated Systems

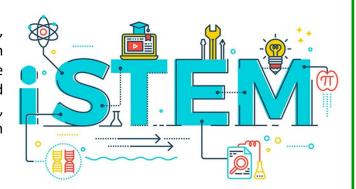
Software Development and Programming

As a result of studying this course, students will be better equipped to make appropriate use of and informed choices about the uses of information and software technology, both at a personal level and in the workplace. Students will be prepared for future developments and directions in the exciting and challenging field of information and software technology. They can develop interest in, enjoyment of and critical reflection about information and software technology as an integral part of modern society.



iSTEM

The iSTEM course promotes the areas of science, technology, engineering and mathematics though inquiry and project based learning. Students are provided opportunities to raise questions and explore ideas whilst developing their creativity, critical thinking, collaboration and communication skills.



The iSTEM course utilises a practical integrated approach with engineering and technology combined with science and mathematics. Students will learn by doing, using a range of tools, techniques and processes, including relevant technologies, in order to develop solutions to a wide variety of real-world problems. They will be challenged in not only their understanding of these key subjects, but also to manage projects and work in teams.

In Stage 5 iSTEM, teachers from Mathematics, Science and TAS, who are specialists in their own fields, plan the lessons collaboratively to combine the different disciplines. Students will learn in our newly built, state-of-the-art STEM rooms, equipped with a variety of technologies and computer programs. Community partnerships are fostered to help students gain an insight into how future focused skills development can be applied to real world situations.

The core and elective modules may include:

STEM fundamentals	STEM Projects
Mechatronics	Surveying
Aerodynamics	Design for space
Motion	Statistics in Action
3DCAD/CAM	Biomedical innovation

JAPANESE

The Year 9-10 Elective Japanese course provides students with the opportunity to further their proficiency and increase their communication skills from the Stage 4 Japanese mandatory course studied in Year 8.

In this course students study a range of topics including:

- Family
- Likes and Dislikes
- School life
- Sport and Leisure
- Daily routine
- Describing people
- Transport
- Shopping
- Seasons and Weather
- Clothing
- Food and Culture.



Students will further develop their skills to communicate in Japanese through speaking, listening, reading and writing activities necessary for effective interaction. They will also develop knowledge of cultures within the Japanese communities, as well as and an understanding of the interdependence of language and culture, thereby encouraging reflection and appreciation on their own cultural heritage.

Muirfield High School offers the opportunity for students of Year 10 and 11 to participate in an overseas excursion to Japan every second year as part of a cultural and language experience. As part of the program, students will not only gain a greater understanding of the Japanese culture through immersion, they will also be able to put their language skills into practice.

Through the development of communicative skills in a second language and understanding of how language works as a system, students further develop literacy in English, through close attention to detail, accuracy, logic and critical reasoning. Language learning also exercises students' intellectual curiosity, and enhances critical and creative thinking.

Stage 5 Japanese is regarded as a prerequisite for the HSC Japanese Continuers Course.

MUSIC

Elective 5 Music opportunities for students to further improve their musical skills and abilities. Year 9 and 10 music students will continue to develop their note reading skills and gain a better understanding and application of musical concepts through composing, performing and analysing music from a diverse range of genres and styles. Students will also have the opportunity to perform publically at school events such as MADD Night and Summer Arts.



Topics studies include:

- Pop
- Rock
- Jazz
- Baroque and Classical Period
- Australian Music
- World Music
- Music and Technology

Students develop their skills and techniques as soloists and ensemble members. Some of the projects include:

- Composing music in various musical styles
- Arranging music
- Recording and editing music
- Scoring for short films
- Performance studies
- Aural skills development

If you enjoy music and the performing arts, then Stage 5 Music is for you. Challenge yourself and take your musical abilities to the next level.



PHYSICAL ACTIVITY & SPORTS STUDIES (PASS)

This elective is designed to enhance students' capacity to participate effectively in physical activity and sport, leading to improved quality of life for themselves and others. It incorporates a wide range of lifelong physical pursuits, competitive and non-competitive games, individual and group physical fitness activities and the use of physical activity for therapy and remediation.



The course content is divided into the following areas of study:

- Foundations of Physical Activity
- Physical Activity and Sport in Society
- Enhancing Participation and Performance

This course will appeal to those students who feel that their physical activity needs are not fully satisfied within the existing 3 periods per week of PDHPE. It will have special appeal for students with specific interest in the science of fitness and training to maximise their performance in sport. This course integrates theory and physical activity components into the one course. Students who select this course will find it to be a useful introduction to the 2 Unit PDHPE course, and for VET Sport Coaching in Years 11 and 12. PASS students will be expected to trial for Wednesday Sport Grade teams.

VISUAL ARTS

This course is about making art and studying art. It builds on and extends the range and depth of experiences in the mandatory course completed in Years 7/8. Students learn about the range of art practices and how to make and to critically and historically interpret artworks. The aim of this course is to enable students to develop and enjoy greater independence in art practices, including making artworks and developing ideas to communicate effectively to the audience. Students learn to appreciate the different beliefs that affect meaning and significance, value their own engagement in the practice of the visual arts and understand how the visual arts are open to a range of different interpretations.



Students will have the opportunity to explore 2D, 3D and 4D art forms. Here are some examples:

- 2D forms include: painting, printmaking, photography and digital media, graphics, collage, drawing
- **3D forms include:** ceramics, sculpture, installation, textiles, designed images and environments, objects, interior and exterior environments, jewellery, and wearables
- 4D forms include: performance works, time based installation works, video, digital animation.

Across all forms, opportunities to engage in ICT experiences exist and are actively supported.

The emphasis of the course is students producing artworks and bodies of work which can then be selected, arranged and exhibited for an audience. Students are also required to keep a Visual Arts Process Diary.

Visual Arts places great value on the development of students' intellectual and practical autonomy, reflective action, critical judgement and understanding of art in art making and in critical and historical studies of art. Visual Arts plays an important role in the social, cultural and spiritual lives of students. It offers a wide range of opportunities for students to develop their own interests, enhance their skills in problem solving, to be self-motivated and active learners who can take responsibility for and continue their own learning in school and post-school settings.

Students wishing to elect Visual Arts in Stage 6 are strongly encouraged to do Visual Arts in Stage 5.

VISUAL DESIGN

In this course students learn about the practice and conventions of making and studying visual design works. Students will have the opportunity to explore visual design in Print, Object and Space-Time forms. Here are some examples:



Print forms include:

- advertising and communication, (eg layout, design of fonts, lettering and logos)
- illustration and cartooning
- interactive and multimedia
- publications and information (eg magazine covers, posters, postcards)

Object forms include:

- clothing, jewellery and accessories
- ceramic and glassware
- textiles,
- commercial and industrial design (eg chairs, containers, interiors, lighting)

Space-Time forms include:

- web design and interactives (eg virtual worlds)
- video and animation
- structures and environments (eg architecture of interior and exterior spaces, site specific installations and exhibitions

Students are required to produce a folio of work that is compiled of resolved visual design works. The folio also shows the student's understanding of the ways visual designers work. Students are also required to keep a visual design journal, which is a record of the development and making of visual design artworks in a structured sequence. The journal can take various forms and essentially allows for reflection, evaluation and assessment by the student and teacher.

Important skills developed in this course are collecting, analysing and organising information; communicating ideas and information; planning and organising activities; working with others and in teams; using mathematical ideas and techniques; solving problems and using technology.

Visual Design is aimed at students who hope to pursue a career or TAFE studies in functional art, but it is also appropriate for students who plan to study Stage 6 Visual Arts.



Muirfield High School

Barclay Road

North Rocks 2151

Tel: 9872 2244

Fax: 9871 4106

Email: <u>muirfield-h.school@det.nsw.edu.au</u>

WEB: www.muifield-h.school.nsw.edu.au