



Stage 4 Technology (Mandatory)

Murray High School

Rationale

Murray High School is situated in Albury, a rural city on the NSW/Victoria border. Murray High School is a comprehensive school with a current enrolment of 940. The school population includes a small number of Aboriginal students, and special needs students integrated into mainstream classes.

The school has facilities to support a range of technologies including metal, wood, food, textiles and computing. Classes also have access to an agricultural farm and a photography room. The syllabus will be delivered by a team five teachers, from backgrounds including industrial arts, home economics, and visual arts.

Computer generated reporting is done on a semester basis. Year 7 students have an additional interim report in week 6 of Term 1.

The Ministers' Young Designers Awards are incorporated into both Year 7 and Year 8 patterns of study as long term homework activities building upon learning undertaken in the classroom.

Agreed purpose statement

The aim of Technology teachers at Murray High School is to develop students' ability to identify, design, produce and evaluate a solution to a need while enhancing students' understanding of a range of materials, tools and techniques. Skills and knowledge gained in the classroom is intended to be readily transferred to activities undertaken within the home or work place.

Organisational plan

The areas of study, design specialisations and technologies integrated in this teaching and learning program have been selected with consideration to the following:

1. Facilities available at our school.
2. Resources available.
3. Skills of various teachers.
4. Present timetable structure and student numbers.

Students will complete 8 design projects over two years which suits the timetabling and reporting requirements for Murray High School. All students have 4 lessons per week, each 40 minutes in length. Technology lessons are structured to include computer access one lesson each week.

Year 7

Design-related content and essential technologies-specific content is addressed at the same time by all classes (allocated to design projects). Classes remain with the same teacher all year.

Year 8

Design-related content and essential technologies-specific content is addressed at the same time by all classes but in different design projects. Projects chosen depend upon teacher expertise and rooming. In Semester two classes rotate with teachers.

**Murray High School: Course plan Technology (Mandatory)**

Year 7	Semester 1 Term 1	
	Title: Name of the game	Duration: 10 Weeks
	Area of study: Information and communications	
	Design specialisation: Communication systems design	
	Technologies: Information technologies	
	Preliminary description of the design project: Technological advancement has led to improved working conditions and fewer hours in the working week. Most people now have time for recreation and leisure to balance their lifestyles. Design, produce and evaluate a board game including a set of instructions that is suitable for students starting high school. The game must: <ul style="list-style-type: none"> – educate about OH&S issues – be interesting and challenging – be played by 2-4 players. 	
	Focus outcomes for reporting: 4.1.1, 4.3.2	
	Contributing outcomes: 4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.3.1, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	

Year 7	Semester 1 Term 2	
	Title: Package design	Duration: 10 weeks
	Area of study: Information and communications	
	Design specialisation: Promotional design	
	Technologies: Information technologies	
	Preliminary description of the design project: Modern day consumers have a wide range of products available for purchase in order to meet their needs. Packaging and promotional design are important in gaining market share of sales. Design and construct a packet to safely contain one of the following: <ul style="list-style-type: none"> – 50 gram serving of a breakfast cereal – Two golf balls – A small consumable item determined by the class teacher. 	
	Focus outcomes for reporting: 4.1.1, 4.2.1, 4.4.1	
	Contributing outcomes: 4.1.2, 4.1.3, 4.2.2, 4.3.2, 4.5.1, 4.5.2, 4.6.1, 4.6.2	



Year 7	Semester 2 Term 3	
	Title: Child's toy	Duration: 10 weeks
	Area of study: Products	
	Design specialisation: Industrial design	
	Technologies: Mixed materials technologies	
	Preliminary description of the design project: Toys provide an enjoyable opportunity for young children to learn many of the skills needed in life. In groups, design a toy suitable for a particular age group of young children e.g. 1-2 yrs, 5-7 yrs. The cost of the materials is not to exceed \$4. A needs analysis of the identified age group is to be carried out using children from a local infant/preschool class or a parent of a young child.	
	Focus outcomes for reporting: 4.1.2, 4.2.1, 4.5.1, 4.5.2	
	Contributing outcomes: 4.1.1, 4.1.3, 4.2.2, 4.3.1, 4.3.2, 4.4.1, 4.6.1, 4.6.1	

Year 7	Semester 2 Term 4	
	Title: Body adornment	Duration: 10 weeks
	Area of study: Products	
	Design specialisation: Jewellery design	
	Technologies: Mixed materials technologies	
	Preliminary description of the design project: Since the beginning of human societies, people have adorned their bodies with jewellery using a wide range of materials and techniques. a. From one design create two pieces of jewellery, one using natural materials and the other using man-made (synthetic) materials. b. Design and produce two piece matching set of jewellery.	
	Focus outcomes for reporting: 4.1.2, 4.2.1, 4.5.1, 4.5.2	
	Contributing outcomes: 4.1.1, 4.1.3, 4.2.2, 4.3.1, 4.3.2, 4.4.1, 4.6.1, 4.6.2	



Year 8

Year 8	Semester 1 Term 1	
	Title: Bridge design	Duration: 10 weeks
	Area of study: Built environments	
	Design specialisation: Structural design	
	Technologies: Model making technologies	
	Preliminary description of the design project: Identify a local area in need of a bridge for functional or aesthetic reasons. Design, produce and evaluate a bridge to meet this need. Demonstrate your bridge design using a model.	
	Focus outcomes for reporting: 4.1.3, 4.2.1, 4.3.2	
	Contributing outcomes: 4.1.1, 4.1.2, 4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	

OR

	Title: Kitchen design	Duration: 10 weeks
	Area of study: Built environments	
	Design specialisation: Interior design	
	Technologies: Model making technologies	
	Preliminary description of the design project: In many instances, kitchens form the hub of family activity in which so many different activities take place. It is the place to store, prepare and cook food and often it is the family meeting place. Design a kitchen interior for the given floor plan and construct a three dimensional model.	
	Focus outcomes for reporting: 4.1.3, 4.2.1, 4.3.2	
	Contributing outcomes: 4.1.1, 4.1.2, 4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	

OR

	Title: Small animal shelter	Duration: 10 weeks
	Area of study: Built environments	
	Design specialisation: Structural design	
	Technologies: Timber technologies	
	Preliminary description of the design project: Humans have lived with animals since evolution or creation. All animals require shelter from natural elements. Identify a small animal in your home environment that has a need for a shelter and then design and construct a shelter to meet that need.	
	Focus outcomes for reporting: 4.1.3, 4.2.1, 4.3.2	
	Contributing outcomes: 4.1.1, 4.1.2, 4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	



Year 8	Semester 1 Term 2	
	Title: Recycling project	Duration: 10 weeks
	Area of study: Built environments	
	Design specialisation: Environmental design	
	Technologies: Graphics technologies	
	Preliminary description of the design project: Design, produce and evaluate a model or system which promotes better recycling within the school.	
	Focus outcomes: 4.1.3, 4.2.1, 4.6.1	
	Contributing outcomes: 4.1.1, 4.1.2, 4.2.2, 4.3.1, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.2	

Year 8	Semester 2 Term 3	
	Title: Fashion accessory	Duration: 10 weeks
	Area of study: Products	
	Design specialisation: Accessories design	
	Technologies: Textiles technologies or metal technologies or polymer technologies	
	Preliminary description of the design project: Design, produce and evaluate a fashion accessory to wear to a particular function.	
	Focus outcomes for outcomes: 4.2.2, 4.3.2	
	Contributing outcomes: 4.1.1, 4.1.2, 4.1.3, 4.2.1, 4.3.1, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	

OR

Year 8	Title: Canteen busters	Duration: 10 weeks
	Area of study: Products	
	Design specialisation: Food design	
	Technologies: Food technologies	
	Preliminary description of the design project: The role of the canteen in promoting nutrition is assuming greater importance. Research and present data which reflects the nutritional value of teenage food consumption trends based on daily eating / purchasing habits of foods at the school canteen. Design, produce and evaluate a snack food which is low in fat, salt, and sugar and high in fibre and suitable for sale at the school canteen.	
	Focus outcomes for reporting: 4.2.1, 4.6.2	
	Contributing outcomes: 4.1.1, 4.1.2, 4.1.3, 4.2.2, 4.3.1, 4.3.2, 4.4.1, 4.5.2, 4.6.1	



Year 8	Semester 2 Term 4	
	Title: Herbs	Duration: 10 weeks
	Area of study: Built environment	
	Design specialisation: Landscape design	
	Technologies: Plant production technologies	
	Preliminary description of the design project: For thousands of years people have used selected plants to flavour food, cure ills, promote good health and for religious purposes. Design and produce a fragrant garden in an area within the school grounds that your year group could enjoy. Write an article for the school newsletter informing parents about the garden, outlining common plants, their description and uses.	
	Focus outcomes for reporting: 4.2.2, 4.3.2	
	Contributing outcomes: 4.1.1, 4.1.2, 4.1.3, 4.2.1, 4.3.1, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	