Stage 4 Technology (Mandatory)

Ryde Secondary College

Rationale

School profile

Ryde Secondary College is a co-educational high school with an academically selected cohort. Currently it has an enrolment of 630 students, which is expected to increase to over 900 by 2006. The college is committed to offer a diverse range of courses in both junior and senior years.

All students complete the mandatory design & technology course (to be replaced with Technology (Mandatory) in Years 7 and 8. The TAS department offers electives in wood, metal, graphics, textiles and food technologies. In the senior years courses in hospitality, metal engineering, design & technology, community & family studies, engineering studies and textiles & design are also offered.

The college is undergoing a refurbishment of facilities. This has resulted in the construction of an industrial kitchen with a dining room facility. Two of the industrial arts practical rooms have now been refurbished to reflect the current DET facilities code. A graphics room is now available with computer access. These facilities aim to provide students with practical experiences in the study of industry, technology and design.

Organisation matters

The course plan has the following features:

- A tri semester allocation of design projects. Students will rotate at the end of each 13 week design project.
- An attempt to provide a theme to unite the three design projects. One theme for year 7 and another theme for year 8.
- Assessment being conducted across the year group assessing design related content and within the class the design project.
- The explicit assessment of six focus outcomes in year 7 and six different focus outcomes in year 8 for reporting purposes.

Progression of learning

Across the cohort assessment

Focus outcomes were selected at various stages to show progression of learning (design related content and skills). The outcomes were carefully selected to build on students' knowledge and to avoid repetition of teaching and assessment throughout the 200 hour mandatory course. These outcomes will be used to formally assess students across the cohort. There will be 6 assessment tasks in year 7 and six in year 8.

Class assessment

Each design project will be assessed within the class. Marking criteria will be devised by the class teacher highlighting and outlining specific tasks in relation to the design project and contributing outcomes.

Technology booklet

The students will be introduced to a common Technology (Mandatory) booklet, which will include exercises and activities on the focus outcomes, units of work relating to the design projects and assessment tasks. In addition students will be asked to keep records of design projects in the form of a design folio.

Pedagogy model

All staff have been inserviced in teaching methods for selective students. The faculty has based the development and implementation of content on Blooms Taxonomy, as this complimented the design methodology utilised.

Assessment and lesson presentation have been designed to reflect the adoption of this model. This is modified according to teacher assessment of the ability of students to meet the specified outcomes.

Ryde Secondary College: Course plan Technology (Mandatory)

Year 7	Theme: *Space age*

Trimester 1	Unit 1 (13 WEEKS)
Focus outcomes	4.1.2, 4.1.3
Summary of design related content	• Definitions of design • Factors affecting design • Work & training opportunities Use of design folio
Common assessment	• Assessment task 1 • Assessment task 2
Contributing outcomes	4.6.1, 4.1.1, 4.5.2, 4.3.2, 4.3.1, 4.2.1, 4.2.2 4.4.1, 4.5.1, 4.6.2

Teacher: A Class: 7.1
Area of study: Built Environment
Design Specialisation: Interior Design
Technologies- specific content: Mixed materials technologies
Design Project: Off the wall

Teacher: B Class: 7.2
Area of study: Products
Design Specialisation: Agricultural product design
Technologies- specific content: Plant production technologies
Design Project: Future harvest

Teacher: C Class: 7.3
Area of study: Information and communications
Design Specialisation: Promotional design
Technologies- specific content: Information technologies
Design Project: Adventures in space

Trimester 2	Unit 2 (13 WEEKS)
Focus outcomes	4.2.1, 4.3.2
Summary of design related content	• Methods used to generate design ideas • Contribution of female / male design • Communication methods • Using ICTs to plan & develop and document design projects
Common assessment	• Assessment task 3 • Assessment task 4
Contributing outcomes	4.6.1, 4.1.1, 4.5.2, 4.3.1, 4.1.2, 4.1.3, 4.2.2 4.4.1, 4.5.1, 4.6.2

Teacher: A Class: 7.2
Area of study: Built Environment
Design Specialisation: Interior Design
Technologies- specific content: Mixed materials technologies
Design Project: Off the wall

Teacher: B Class: 7.3
Area of study: Products
Design Specialisation: Agricultural product design
Technologies- specific content: Plant production technologies
Design Project: Future harvest

Teacher: C Class: 7.1
Area of study: Information and communications
Design Specialisation: Promotional design
Technologies- specific content: Information technologies
Design Project: Adventures in space

Unit 3 (13 WEEKS)	
Focus outcomes	4.5.1, 4.4.1
Summary of design related content	• Innovation & emerging technologies • Resource availability • Management techniques
Common assessment	• Assessment task 5 • Assessment task 6
Contributing outcomes	4.6.1, 4.1.1, 4.5.2, 4.3.2, 4.3.1, 4.1.2, 4.1.3 4.2.1, 4.2.2, 4.6.2

Teacher: A Class: 7.3
Area of study: Built Environment
Design Specialisation: Interior Design
Technologies- specific content: Mixed materials technologies
Design Project: Off the wall

Teacher: B Class: 7.1
Area of study: Products
Design Specialisation: Agricultural product design
Technologies- specific content: Plant production technologies
Design Project: Future harvest

Teacher: C Class: 7.2
Area of study: Information and communications
Design Specialisation: Promotional design
Technologies- specific content: Information technologies
Design Project: Adventures in space

Ryde Secondary College: Course plan Technology (Mandatory)

Year 8	Theme: *Lets go to the circus*

Trimester 1	Unit 1 (13 WEEKS)
Focus outcomes	4.1.1, 4.6.1
Summary of design related content	• Design processes • Needs & opportunities in area of study • Developing criteria • Ongoing & final evaluation
Common assessment	• Assessment task 1 • Assessment task 2
Contributing outcomes	4.5.2, 4.3.2, 4.3.1, 4.4.1, 4.1.2, 4.1.3, 4.2.1 4.2.2, 4.5.1, 4.6.2

Teacher: A Class: 8.1
Area of study: Products
Design Specialisation: Food design
Technologies- specific content: Food technologies
Design Project: Festival time

Teacher: B Class: 8.2
Area of study: Products
Design Specialisation: Fashion design
Technologies- specific content: Textile technologies
Design Project: Clown around

Teacher: C Class: 8.3
Area of study: Information and communications
Design Specialisation: Digital media design
Technologies- specific content: Media technologies
Design Project: Circus net

Trimester 2	Unit 2 (13 WEEKS)
Focus outcomes	4.2.2, 4.5.2
Summary of design related content	• Experimentation & testing of design ideas • Research methods • Suitable materials • Skill development
Common assessment	• Assessment task 3 • Assessment task 4
Contributing outcomes	4.1.1, 4.1.2, 4.1.3, 4.2.1, , 4.3.1, 4.3.2, 4.4.1, 4.5.1, 4.6.1, 4.6.2

Teacher: A Class: 8.2
Area of study: Products
Design Specialisation: Food design
Technologies- specific content: Food technologies
Design Project: Festival time

Teacher: B Class: 8.3
Area of study: Products
Design Specialisation: Fashion design
Technologies- specific content: Textile technologies
Design Project: Clown around

Teacher: C Class: 8.1
Area of study: Information and communications
Design Specialisation: Digital media design
Technologies- specific content: Media technologies
Design Project: Circus net

Unit 3 (13 WEEKS)	
Focus outcomes	4.6.2, 4.3.1
Summary of design related content	• Ethical & responsible design • Environmental & sustainability considerations • Range of contemporary & appropriate tools, materials & technologies with competence
Common assessment	• Assessment task 5 • Assessment task 6
Contributing outcomes	4.1.1, 4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1

Teacher: A Class: 8.3
Area of study: Products
Design Specialisation: Food design
Technologies- specific content: Food technologies
Design Project: Festival time

Teacher: B Class: 8.1
Area of study: Products
Design Specialisation: Fashion design
Technologies- specific content: Textile technologies
Design Project: Clown around

Teacher: C Class: 8.2
Area of study: Information and communications
Design Specialisation: Digital media design
Technologies- specific content: Media technologies
Design Project: Circus net

Program Registration

Design Project:_____ Theme:_____

Teacher:_____	Year:_____	Date:_____

Area of study (PLEASE TICK APPROPRIATE BOX)

❑ Built environments	❑ Products	❑ Information & communications

Design Specialisations: (THE FOCUS AREA/S FOR THIS PROJECT)

❑ Accessories design	❑ Agricultural product design	❑ Architectural design	❑ Communication systems design
❑ Digital media design	❑ Environmental design	❑ Fashion design	❑ Food design
❑ Industrial design	❑ Information systems	❑ Interior design	❑ Jewellery design
❑ Landscape design	❑ Promotional design	❑ Software design	❑ Structural design

Tick appropriate outcome	Teacher initial	Outcomes	
❑		4.1.1	Applies design processes that respond to needs and opportunities in each design project
❑		4.1.2	Describes factors influencing design in the areas of study of Built Environments, Products, & Information & Communications
❑		4.1.3	Identifies the roles of designers and their contribution to the improvement of the quality of life
❑		4.2.1	Generates and communicates creative design ideas and solutions
❑		4.2.2	Selects, analyses, presents and applies research and experimentation from a variety of sources
❑		4.3.1	Applies a broad range of contemporary and appropriate tools, materials, and techniques with competence in the development of design project
❑		4.3.2	Demonstrates responsible and safe use of a range of tools, materials and techniques in each design project
❑		4.4.1	Explains the impact of innovation and emerging technologies on society and the environment
❑		4.5.1	Applies management processes to successfully complete design projects
❑		4.5.2	Produces quality solutions that respond to identified needs and opportunities in each design project
❑		4.6.1	Applies appropriate evaluation techniques throughout each design project
❑		4.6.2	Identifies and explains ethical, social, environmental and sustainability considerations related to design projects