

SAMPLE COURSE OUTLINE DESIGN GENERAL YEAR 11

Copyright

© School Curriculum and Standards Authority, 2014

This document – apart from any third party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that the School Curriculum and Standards Authority is acknowledged as the copyright owner, and that the Authority's moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the *Copyright Act 1968* or with prior written permission of the School Curriculum and Standards Authority. Copying or communication of any third party copyright material can be done only within the terms of the *Copyright Act 1968* or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the <u>Creative</u> <u>Commons Attribution 4.0 International licence</u>.

Disclaimer

Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course.

Sample course outline

Design – General Year 11

Unit 1 and Unit 2

Semester 1 – Design fundamentals

Week	Key teaching points	Syllabus content
1–5	Overview of unit 1 (Design fundamentals) A look at the course assessments, timeline for submissions and expectations of each assessment's requirements What is Design? A look into what designers do and the different context in which they can work Skype® call with an architect or designer/or YouTube® video about the life of a designer and a guest visit to a local architect or designer. Develop a set of questions discussing what their jobs involve and the processes they work through when coming up with solutions to the projects they are given Investigate how the elements and principles are utilised to present these codes and conventions and how they may differ across different demographics (e.g. British versus Australian). Provide evidence as to why these conventions are important Look at codes and conventions in design and how they vary based on the contexts. Commence Task 1: Codes and Conventions Creation Development of 2–3 pages of architectural codes and conventions that are used in the creation of design drawings in architecture. Work should also relate to appropriate Australian Standards Construct a collection of drawings/diagrams that highlight the requirements for architectural drawings Development of different symbols used in architectural drawings, such as wall types, components such as doors and windows, and semiotics used in these symbols Research into Australian standards and how they are associated with various symbols required on drawings, such as dimensioning techniques symbols for section views Due Week 5 Task 1: Codes and Conventions Creation	 Design Characteristics of elements of design and their application in design Characteristics of unifying principles of design and their application in design Communication Forms of communication: visual and non-visual Effect of codes and conventions on communications Introduction to basic concepts of semiotics relevant to the design context Design Introduction to and create diagrams, layouts, plans and drawings
6—9	 Introduction to Task 4: Portfolio for Unit 1: Product Branding – Architectural Company Logo Overview of the requirements of the assessment Product Branding – Architectural Company Logo Production of a brand logo for a start-up company called 'Seablox'. Work through the design process to complete 6–10 page A3 portfolio showcasing the design solution for the company Unpacking the brief and how the design process fits into the task. Break down the steps of the design process with exemplars of what is required at each stage: research/investigation, ideation, development, refinement, production and reflection 	Design Interpretation of a design brief Introduction to and application of a design process and basic documentation of each of the following stages: research and/or investigation, ideation, development, refinement, production and reflection

Week	Key teaching points	Syllabus content
	Introduction to the research and investigation stage Techniques that can be used at this stage: What is brainstorming and mind mapping? Provide examples of well-structured brainstorms, looking at the different levels of the tool and how it is used to develop initial thoughts and ideas	Communication Identification of stakeholders Communication Effect of codes and
	Brainstorm what makes a good logo, how elements and principles are used for impact	conventions on communication
	What are stakeholders? What would they be looking for in their branding logo?	Introduction to basic concept of semiotics relevant to the design context
	Introduction to representation and how it can be used to project meaning to an audience. What is stereotyping and how can it be used in the construction and delivery of their designs?	Introduction to copyright and personal responsibilities
	Collect a number of logos relevant to the context and analyse the images in regards to elements and principles used and the codes and conventions presented in the designs. Do they meet the objectives of the company they represent? Are they easily recognisable?	Design Visual development process from thumbnails through to development roughs with basic annotation
	Introduction to copyright and what it means. Work through the process of recognising the work others. Ensure that relevant acknowledgement and referencing is made throughout	Introduction to design skills in design development
	Ideation in design Exploration of ideation techniques	Reflection of solutions to design problems
	Look at the advantages of quick sketching to present initial ideas and finding patterns and shapes that might suit the brief	
	Incorporation of inspiration pieces that help develop suitable and unique ideas for the brief given	
	Assemble a collection of concepts that showcase possible solutions for the architectural brand logo	
	Encourage creativity with the various elements and principles of design when completing sketches to show experimentation with the ideas and how various techniques will provide different solutions	
	Showcase best four concepts to the group for feedback. Share thoughts on which ones have the most impact visually and are most likely to suit the brief. Complete a reflection on designs based on the feedback, looking at which ideas can be developed further	
	Due Week 9 Task 2: In-class response on codes and conventions in design Complete an in-class response. Describe the use of codes and conventions in the provided stimulus and discuss how codes and conventions, including the elements and principles, have been used to construct a message in the image	

Week	Key teaching points	Syllabus content
10	Design development Commence work on refining designs Introduction to illustration techniques related to the context, such as Copic markers and other rendering techniques. Develop two final concepts that meet the brief and are based on the feedback provided from the group Demonstrate use of elements and principles and provide evidence of reasons for choices	Design Introduction to design skills development Production Introduction to relevant production processes, methods, skills and techniques to the defined context Design Characteristics of elements of
		design and their application in design Characteristics of unifying principles and their application in design
11–15	Introduction to production techniques suited to the task Introduction to Adobe Illustrator® as a vector production programme. Work though tutorials on the basics of the programme in preparation for own design solution	Design Introduction to design skills development
	Commence work on developing digital prototyping of brand logo for the company. Provide a minimum of two digital solutions that show experimentation and evidence of the use of elements and principles in ideas	Production Introduction to relevant production processes, methods, skills and techniques to the defined
	Due Week 13 Task 3: In-class response (Design process) Complete a set of questions relating to the development of a solution relative to a simple design brief and provided stimulus	context Introduction of formats of presentation for design solutions
	Presentation of solutions Examples of ways in which final design solutions can be presented for logo designs, e.g. posters and flyers on products	Design Characteristics of elements of design and their application in design
	Develop a set of images representing final chosen solution in a way that provides a contextual example of the design in use by the company	
	Due Week 15 Task 4: Portfolio for Unit 1: Product Branding – Architectural Company Logo. Present a portfolio in the form of 6–10 A3 pages showcasing the design process employed to complete the design of the brand logo	Characteristics of unifying principles and their application in design
Examination weeks 16–17		

Semester 2 – Personal design

Week	Key teaching points	Syllabus content
	Introduction to Unit 2 – Overview of the unit (Personal Design) A look at the course assessments, timeline for submissions and expectations of each assessment's requirements	Design Interpretation of a design brief
1–3	 Introduction to Task 8: Portfolio for Unit 2: Shipping Container Housing Project Identify and outline the purpose of the project and its constraints. How are sea containers built and what is their purpose? How can recycling of these containers impact on architectural design? Discussion around what aspects of the containers would need to be altered in order to be suitable for long term living Investigate benefits and constraints of using containers instead of traditional building methods and materials Determine the audience. Who has a say in this design and what should be taken into account when reflecting on the end user? Introduction to the communication model theory Look at how the various models are used to assist in the delivery of information and building communication with the various stakeholders and the target audience 	Introduction to and application of a design process and basic documentation of each of the following stages: research and/or investigation, ideation, development, refinement, production and reflection Communication Identification of stakeholders Representation amd stereotype and how they relate to the design brief Introduction to basic communication models
1-3	Investigate the Shannon Weaver and Berlo models, breaking down the various components and how they relate back to projects Work through initial stages of the design brief for the Sea Container portfolio. Look at the investigation/research and the ideation stages of the design process Introduction to prototyping techniques	relevant to design Purposes of communication: personal and social
	Examine both laser cutting and 3D printing and their benefits as part of the design and production process Revise concept sketching from Unit 1 in order to complete a number of quick concepts of designs for chess pieces based on a provided theme Work in groups to develop the set designs	Production Development of production processes, methods, skills and techniques to the defined context
	Using the software Autodesk Fusion 360 or similar to develop concepts for Task 5: Chess piece prototype . Introduce tutorial outlining some of the basic tools required, such as mirroring and the revolve tool	Formats of presentation for design solutions
	Investigate the output requirements for both machines and the importance of correct design layout in order to complete efficient prototypes that consider safety and material efficiency	Selection of materials and their application to the design brief
4–5	Completion of the CAD prototypes for the chess pieces as well as introduction to the laser cutter through a guided walkthrough and cutting of sample chess boards to be used for presentation	
	Demonstrate the safe use of 3D printing and the appropriate checks prior to printing	
	Examine what risk assessment schedules are and the importance of safe operating procedures	
	Export files as STL's (stereolithography format), set up and 3D print chess prototypes ready from submission along with concept drawings	
	Due Week 2 Task 5: Chess piece prototype	

Week	Key teaching points	Syllabus content
6—8	Continue Task 8 Work through concept development and introduce Graphisoft ArchiCAD [™] software through tutorials in preparation for the production stage Commence Task 6: OSH in the Design industry	Production Occupational safety and health (OSH) concepts relevant to applied production process
	Complete a Risk Assessment Schedule for either the 3D printer or the laser cutter, in relation to their prototype project. Construct a 'Safer Operating Procedure' document designed to be posted next to either machine outlining proper PPE requirements, set-up and operating requirements and clean-up, shutdown procedures	Design Colour theory – colour meanings and their application in design
	Investigate appropriate semiotics that would assist in the delivery of this information on the document, such as PPE symbols	
	Colour theory The importance of colour in design and its impact on the viewer, relating back to how it can be used in warning signs as well as create feeling and meaning within in interior design	
	Due Week 6 Task 6: OSH in the Design industry	
9–13	Production time for the refinement of their Sea Container designs. Continuation of tutorials for Graphisoft ArchiCAD. Move to the construction stage of CAD prototypes for Sea Container project	Design Creation of diagrams, layouts, plans and drawings
	Creation of final floor plans outlining evolution of ideas and changes. Final presentation sketches of main solutions, giving illustrated overview of how the final solution(s) might look. Appropriate annotations that highlight changes and key aspects of the design that are part of meeting the brief	Visual development process from thumbnails through to development roughs with basic annotation
	Discussion around effective and relevant OSH practices when working on long-term digital designs	Control and manipulation of design skills
	Reflection on the design process used in projects throughout the year	Reflection of solutions to design problems
	Commence Task 7: Infographic Poster Revise the elements and principles, along with basic semiotics to develop an infographic that highlights and outlines the stages of the design process.	Production Occupational safety and health (OSH)
	 Produce an infographic utilising appropriate symbolism and principles to assist in delivering the right messages clearly and simply. Draw on examples of own journey through the design process as part of the presentation Utilisation of tools, such as Canva[™] and Adobe Illustrator, to complete aspects of the semiotics required for the infographic that help in the representation of each stage of the design process. 	Design Characteristics of elements of design and their application in
		design Characteristics of unifying principles and their application
	Due Week 13 Task 7: Infographic/Poster	in design Communication Introduction to basic concepts of semiotics relevant to the design context
		Design Creation of diagrams, layouts, plans and drawings

Week	Key teaching points	Syllabus content
14–15	Production stages of Task 8 Work through final stages of the production of final solution for the Sea Container task	Design Creation of diagrams, layouts, plans and drawings
	Use ArchiCAD to complete a set of floor plans, elevations, sections and perspective views that showcase students' solution to the brief Provide justification for material choices and why they have been applied to the solution. Part of the drawings also show how the number of Sea	Visual development process from thumbnails through to development roughs with basic annotation
	Containers have been used in a way to best provide a liveable solution Plan for presentation of final solution(s)	Control and manipulation of design skills
	Utilise possible modelling materials while considering relevant workplace practices and OSH compliance with regards to the tools used	Reflection of solutions to design problems
	Use Microsoft [®] or Google Forms [®] to provide a survey in which peers will provide feedback on the final solution. Investigate the types of questions that would provide appropriate feedback to assist in any final changes or recommendations for finding a solution	Production Development of production processes, methods, skills and techniques to the defined context
	Present feedback as part of reflection and evaluation of portfolio and final design solution	Formats of presentation for design solutions
	Present, in Week 4, their final design solution in chosen medium (Model/VR/ CAD walkthrough) as part of a class display. Space made available for walkthrough of the display during Week 5 examination period	Selection of materials and their application to the design brief
	Due Week 15 Task 8: Portfolio for Unit 2: Shipping Container Housing Project	Occupational safety and health (OSH) concepts relevant to applied production process
Examination weeks 16–17	Walkthrough of class display	