DESIGN

GENERAL COURSE

Year 11 syllabus

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

Content

Rationale

'Design is the human power to conceive, plan, and realise products that serve human beings in the accomplishment of any individual or collective purpose.' (Richard Buchanan, Carnegie Mellon University)

Design involves the strategic development, planning and production of visual and tactile communication. It deals with the effective and efficient communication of ideas, values, beliefs, attitudes, messages and information to specific audiences for specific purposes and with specific intentions.

Design has its own set of theories and practices and incorporates a wide range of principles, methods and techniques drawn from a variety of different disciplines such as psychology, communication studies, digital design, technical graphics, art, engineering, architecture, sociology, cultural studies, marketing and economics. The disciplined application of these elements forms a design process that guides the development of creative and functionally effective solutions to identified possibilities or problems.

We live in a diverse and constantly changing information-rich society and culture, constantly immersed in design communication. Sometimes the intention of design is to inform, express, educate or entertain. Often the intention is also to influence or persuade. An understanding of design and how it works can enhance an individual's ability to interact with their environment, to learn from it and to grow within it. It also empowers the individual by making them more discerning of, and therefore less susceptible to, manipulation and influence via design.

The goals of the Design General course are to facilitate a deeper understanding of how design works; and how ideas, beliefs, values, attitudes, messages and information are effectively communicated to specific audiences with specific intentions or purposes via visual media forms. This course aims to achieve these goals by exposing students to a variety of communication forms and a thorough exploration of design.

Design projects allow students to demonstrate their skills, techniques and application of design principles and processes; to analyse problems and possibilities; and to devise innovative strategies within design contexts. There is potential for students to develop transferable skills and vocational competencies while devising innovative designs.

In this course, students develop a competitive edge for current and future industry and employment markets. This course also emphasises the scope of design in professional and trade based industries allowing students to maximise vocational and/or university pathways.

Course outcomes

The Design General course is designed to facilitate achievement of the following outcomes.

Outcome 1 – Design understandings

Students understand that design theory, audience response, and design principles are reflected in design.

In achieving this outcome, students:

- understand that communication theories are demonstrated in design

- understand that design and audience behaviours are related.

Outcome 2 – Design process

Students apply the design process to develop design solutions.

In achieving this outcome, students:

- generate ideas to develop design solutions

- refine the development of design solutions.

Outcome 3 – Application of design

Students use skills, techniques and methods to plan, construct and produce design creations.

In achieving this outcome, students:

- use interpretative skills when constructing design creations

- use design skills, techniques and methods to construct creations

- use planning and production methodologies to construct design creations.

Outcome 4 – Design in society

Students understand the relationship between design, society and culture.

In achieving this outcome, students:

- understand how values, beliefs and attitudes are communicated and learned through design

- understand responsibilities and issues in developing design

- understand relationships between social practices and design.

Organisation

This course is organised into a Year 11 syllabus and a Year 12 syllabus. The cognitive complexity of the syllabus content increases from Year 11 to Year 12.

Structure of the syllabus

The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair. The notional time for each unit is 55 class contact hours.

Unit 1 – Design fundamentals

The focus of this unit is to introduce design process and practice. Students learn that design can be used to provide solutions to design problems and communication needs.

Unit 2 – Personal design

The focus of this unit is personal design. Students learn that they visually communicate aspects of their personality, values and beliefs through their affiliations and their manipulation of personal surroundings and environments.

Each unit includes:

* a unit description – a short description of the focus of the unit

* unit content – the content to be taught and learned.

Organisation of content

Four different contexts have been defined in this course: Photography, Graphic Design, Dimensional Design and Technical Graphics. Students can enrol in more than one context in this course. The course units in each context have different codes.

Photography context

In this context, design may use analogue, and/or digital photographic systems and/or digital media.

Graphic Design context

This context may include elements of digital media, interactive media, graphics technology, technical graphics and visual communication. Whilst these fields share a common link through digital technology, graphics also includes traditional two dimensional design media.

Dimensional Design context

Dimensional Design may include elements of fashion, textiles, architecture, furniture design and 3D graphics, including computer-aided design. This context enables the design and production of objects having three dimensional content, including models, glass, jewellery, ceramics, sculpture or a series of design drawings in which any of the three dimensional examples are represented.

Technical Graphics context

Technical Graphics uses conventions of technical drawing and computer-aided design to create designs that deal with mainly three dimensional subjects, usually of an industrial nature.

Representation of the general capabilities

The general capabilities encompass the knowledge, skills, behaviours and dispositions that will assist students to live and work successfully in the twenty-first century. Teachers may find opportunities to incorporate the capabilities into the teaching and learning program for the Design General course. The general capabilities are not assessed unless they are identified within the specified unit content.

Literacy

Literacy is of fundamental importance in the study of the Design General course. Students will access design content through a variety of print, oral, visual, spatial and electronic forms, including data books, texts, computer software, images, and written technical materials. They learn to investigate, interpret and apply design principles from a variety of sources to design solutions for tasks. They analyse and evaluate information for reliability, relevance and accuracy. They learn to monitor their own language use for accuracy in the use of design terms for clarity of ideas, processes and explanations of design activities and development and evaluation of functioning products.

Numeracy

Numeracy is fundamental in calculating materials quantities and evaluating design process costs. Students develop their understanding and skills of numeracy while undertaking tasks to produce, test and evaluate products. Common and context specific theory continues to be studied to forge greater understanding of the scientific, mathematical and technical concepts that explain how designed products function.

Information and communication technology capability

Information and communication technology (ICT) capability is important in all stages of the design process. Students use digital tools and strategies to locate, access, process and analyse information. They use ICT skills and understandings to investigate and devise design ideas. Students access information from websites and software programs to develop design solutions. Students use computer-aided drawing software and computer control software to produce products.

Critical and creative thinking

Critical and creative thinking is integral to the design process. The design thinking methodologies are fundamental to the Design General course. Students develop understandings and skills in critical and creative thinking during periods of evaluation at numerous stages of the design process. They devise plausible solutions to problems, and then through interrogation, critically assess the performance of the most efficient solution. Students identify possible refinements in their design solutions and analyse, evaluate and modify the developing solution to create a prototype.

Personal and social capability

Personal and social capability skills are developed and practiced in the Design General course by students enhancing their communication skills and participating in teamwork. Students have opportunities to work collaboratively during stages of investigation and production of products. Students develop increasing social awareness through the study of the impact of the use of materials and manufacturing technology in society and on the environment.

Ethical understanding

Students have opportunities to explore and understand the diverse perspectives and circumstances that shape the design process, actions and possible motivations of people in the past compared with those of today. Students have opportunities both, independently and collaboratively, to explore the values, beliefs and principles that have influenced past design achievements, and the ethical decisions required by global design processes of today.

Intercultural understanding

Students have opportunities to explore the different beliefs and values of a range of cultural groups and develop an appreciation of cultural diversity. Students have opportunities to develop an understanding of different contemporary perspectives with regard to design inspiration, product styles, building materials, energy supply and use, and design influences on different groups within society, and how they contribute to individual and group actions in the contemporary world.

Representation of the cross-curriculum priorities

The cross-curriculum priorities address contemporary issues which students face in a globalised world. Teachers may find opportunities to incorporate the priorities into the teaching and learning program for the Design General course. The cross-curriculum priorities are not assessed unless they are identified within the specified unit content.

Aboriginal and Torres Strait Islander histories and cultures

Students may have opportunities to explore Aboriginal and Torres Strait Islander development and use of design and the interconnectedness between design, purpose and innovation, and how these relate to identity, People, Culture and Country/Place.

Asia and Australia's engagement with Asia

Students may have opportunities to explore traditional, contemporary and emerging design achievements in the countries of the Asia region. Students explore Australia's rich and ongoing engagement with the peoples and countries of Asia to create appropriate products and services to meet personal, community, national, regional and global needs.

Sustainability

Students take action to create more sustainable patterns of living. They develop knowledge, understanding and skills necessary to choose design solutions with regard to costs and benefits. They evaluate the extent to which the process and designed solutions embrace sustainability. Students reflect on past and current practices and assess new and emerging designs from a sustainability perspective.

Unit 1 – Design fundamentals

Unit description

The focus of this unit is to introduce design process and practice. Students learn that design can be used to provide solutions to design problems and communication needs. They are introduced to basic design skills and a range of techniques within a defined context to demonstrate control over the elements and principles of design.

Defined contexts

Within each context, teachers can choose a learning focus. The list of learning foci below is not exhaustive:

- Photography: calendar design (the seasons), photography magazine design, poster design, tourism brochure, photography masters book cover

- Graphic Design: set of pictograms and/or name styles for horoscope, cosmetics, music, traffic signs, animals, internet; packaging design for chosen product, for example, perfume/cosmetics, food/drinks; skateboard deck design, greeting card series, swing tags and wrapping paper, seasonal calendar images, labels for different varieties of tea, credit card series

- Dimensional Design: a series of small design tasks exploring the elements and principles of design resulting in 3D jewellery pieces from found and recycled materials, design and produce a simple felted toy or hat, new age chess set, 3D educational resource aimed at teaching about the elements and principles to a young child, alphabet blocks

- Technical Graphics: freehand sketching and presentation techniques to include rendering skills, tone and line work; CAD and instrument drawing skills; 2D/3D introduction, study tools and equipment, drawing layout, conventions, orthographic projection, perspective drawing and engineering drawing. Possible projects could include simple to more complex 2D and 3D designs such as; logos, T-shirt graphics, skateboard deck designs, posters, fishing lures, music/jewellery boxes, plastic mazes, medallions, clocks, toys, kitchen appliances or items of furniture.

Unit content

This unit includes the knowledge, understandings and skills described below.

Design

Design elements and principles

- characteristics of elements of design and their application in design:
  - line
  - shape
  - value
  - 3D form
  - space
  - colour
  - type
  - texture

- characteristics of unifying design principles and their application in design:
  - balance
  - contrast
  - emphasis
  - repetition
  - movement
  - rhythm
  - scale and proportion
  - unity
  - variety
  - pattern
  - volume
  - harmony
- colour theory and its application in design

Design process and methods

- introduction to a design brief

- introduction to and application of a design process, including basic documentation of each of the following stages: research and/or investigation, ideation, development, refinement, production and reflection

- introduction to and creation of diagrams, layouts, plans and drawings

- visual development process from thumbnails through to development roughs with basic annotation

- introduction to design skills in design development

- reflection of solutions to design problems

Communication

Communication theories

- forms of communication: visual and non-visual, verbal and non-verbal

- effect of codes and conventions on communication

Stakeholders

- identification of stakeholders

- representation and stereotype and how they relate to the design brief

- introduction to copyright and personal responsibilities

Production

Production processes and methods

- introduction to relevant production processes, methods, skills and techniques to the defined context

- introduction of formats of presentation for design solutions

Materials and technologies

- introduction to materials and their application to the design brief

- occupational safety and health (OSH) concepts relevant to applied production process

Unit 2 – Personal design

Unit description

The focus of this unit is personal design. Students learn that they visually communicate aspects of their personality, values and beliefs through their affiliations and their manipulation of personal surroundings and environments. Students explore design elements and principles and the design process in a project communicating something of themselves. Students increase familiarity with basic production skills and processes, materials and technologies.

Defined contexts

Within each context, teachers can choose a learning focus. The list of learning foci below is not exhaustive:

- Photography: scrapbook design, exhibition invitation or poster, portfolio website, book cover, advertising photography, fashion model z card, alternative printing techniques, book/magazine cover, Polaroid collage

- Graphic Design: T-shirt/hoodie design, personal logo and stationery, personal invitation, front cover and/or illustration design for children's story using self-portrait, magazine advertisement for object of personal taste, for example, shoes, fashion, bikes, food; character design and promotional poster

- Dimensional Design: personalised T-shirt design, my costume or costume design for a dress up day at school, personal jewellery set, accessories, re-designing my dream room, including model making and mood board or swatching

- Technical Graphics: application of design fundamentals to design geometric figures, logo design, shelter design, architectural buildings, interior design , shop design, building conventions, wrist watches, jewellery items, bachelor pad, bedroom design, sales posters, toys, customised bicycles, skateboard ramps, jewellery boxes, perfume bottles, basic furniture

Unit content

This unit builds on the content covered in Unit 1.

This unit includes the knowledge, understandings and skills described below.

Design

Design elements and principles

- characteristics of elements of design and their application in design:
  - line
  - shape
  - value
  - 3D form
  - space
  - colour
  - type
  - texture

- characteristics of unifying design principles and their application in design:
  - balance
  - contrast
  - emphasis
  - repetition
  - movement
  - rhythm
  - scale and proportion
  - unity
  - variety
  - pattern
  - volume
  - harmony
- colour theory – colour meanings and their application in design

Design process and methods

- 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
- creation of diagrams, layouts, plans and drawings
- visual development process from thumbnails through to development roughs with basic annotation
- control and manipulation of design skills
- reflection of solutions to design problems

Communication

Communication theories

- introduction to basic communication models relevant to design: Shannon and Weaver – sender (encoding), signal (transmission), noise, receiver (decoding)
- introduction to basic concepts of semiotics relevant to the design context
- purposes of communication: personal and social
- effect of codes and conventions on communication

Stakeholders

- investigation of audience as a stakeholder
- representation and stereotype and how they relate to the design brief
- introduction to copyright and personal responsibilities

Production

Production processes and methods

- development of production processes, methods, skills and techniques relevant to the defined context

- formats of presentation for design solutions

Materials and technologies

- selection of materials and their application to the design brief

- occupational safety and health (OSH) concepts relevant to applied production process

School-based assessment

The *Western Australian Certificate of Education (WACE) Manual* contains essential information on principles, policies and procedures for school-based assessment that needs to be read in conjunction with this syllabus.

Teachers design school-based assessment tasks to meet the needs of students. The table below provides details of the assessment types for the Design General Year 11 syllabus and the weighting for each assessment type.

Assessment table – Year 11

Type of assessment	Weighting
Production Extended production project in response to a design brief. Students investigate, explore ideas and follow a design process, collating evidence of choices and solutions. This will be completed in a format suitable for presentation to the client. Formats can include digital presentation, display board, prototypes.	70%
Response Students apply their knowledge and skills in responding to a series of stimuli or prompts related to the unit content, including the extended production project. Responses can include short answers, oral presentation, multimodal presentation, flowcharts and diagrams.	30%

Teachers are required to use the assessment table to develop an assessment outline for the pair of units (or for a single unit where only one is being studied).

The assessment outline must:

- include a set of assessment tasks

- include a general description of each task

- indicate the unit content to be assessed

- indicate a weighting for each task and each assessment type

- include the approximate timing of each task (for example, the week the task is conducted, or the issue and submission dates for an extended task).

In the assessment outline for the pair of units, each assessment type must be included at least once over the year/pair of units. In the assessment outline where a single unit is being studied, each assessment type must be included at least once.

The set of assessment tasks must provide a representative sampling of the content for Unit 1 and Unit 2.

Assessment tasks not administered under test/controlled conditions require appropriate validation/authentication processes.

Grading

Schools report student achievement in terms of the following grades:

Grade	Interpretation
A	Excellent achievement
B	High achievement
C	Satisfactory achievement
D	Limited achievement
E	Very low achievement

The teacher prepares a ranked list and assigns the student a grade for the pair of units (or for a unit where only one unit is being studied). The grade is based on the student's overall performance as judged by reference to a set of pre-determined standards. These standards are defined by grade descriptions and annotated work samples. The grade descriptions for the Design General Year 11 syllabus are provided in Appendix 1. They can also be accessed, together with annotated work samples, through the Guide to Grades link on the course page of the Authority website at www.scsa.wa.edu.au.

To be assigned a grade, a student must have had the opportunity to complete the education program, including the assessment program (unless the school accepts that there are exceptional and justifiable circumstances).

Refer to the *WACE Manual* for further information about the use of a ranked list in the process of assigning grades.

Appendix 1 – Grade descriptions Year 11

A	Interprets the design brief and communicates effectively to an intended audience.
	Explores and experiments with effective design solutions throughout the design process.
	Selects and applies design elements and principles effectively and with purpose.
	Provides clear and detailed reflection of design thinking.
	Executes control and manipulation of skills and techniques relevant to the design brief.

B	Interprets the design brief and communicates to an intended audience.
	Explores and experiments with design solutions to some effect throughout the design process.
	Selects and applies design elements and principles with purpose.
	Provides clear reflection of design thinking.
	Executes control of most skills and techniques relevant to the design brief.

C	Satisfies the design brief and communicates to an intended audience.
	Explores some design solutions throughout the design process.
	Selects and applies design elements and principles with some purpose.
	Provides some reflective comments of design thinking.
	Executes control of some skills and techniques relevant to the design brief.

D	Responds to aspects of the design brief in a limited way.
	Provides basic design solutions throughout the design process.
	Uses design elements and principles in a limited way.
	Provides brief and/or superficial comments of design thinking.
	Executes limited control of skills and techniques relevant to the design brief.

E	Does not meet the requirements of a D grade and/or has completed insufficient assessment tasks to be assigned a higher grade.