

Appendix 2 – Glossary

This glossary is provided to enable a common understanding of the key terms in the Design course syllabuses.

Advanced Design Processes	The incorporation of more customised stages in a design process to gain an in-depth understanding of the design problem. An effective design solution can be created through the inclusion of purposeful, continuous critical analysis/reflection.
Annotate	To write a note next to an image/diagram/visual that adds an explanation or makes comment.
Audience	A group of people, including the client, identified by a set of characteristics and demographics to which the design brief solution is aimed. They are also included in the stakeholder group.
Benefits of Particular Production Processes	Advantages gained in some aspect of the design solution by using a particular production process. Advantages may relate to areas such as sustainability, safety, performance, efficiency, costing, life cycle, appearance, perceived value and others.
Brainstorming	The technique for generation of many ideas with the purpose of finding a creative solution to a design problem. The most effective brainstorms involve a large quantity of ideas, withhold criticism of ideas, welcome wild ideas and ultimately combine and improve ideas. Brainstorming methods may include different approaches such as word lists, concept maps, mind maps, and other creative thinking techniques such as those associated with random words, SCAMPER, synectics etc. See Mind Map.
Codes	Codes are strategies used to create meaning. In Design, they can be symbolic, technical or written. Symbolic codes refer to deeper meanings within a design work, such as the choice of setting, objects/images/body language, materials, colours and other design elements and principles used. Technical codes refer to techniques, methods, processes and standards associated with the creation of a design. This may involve using technical drawing standards, photographic camera/lighting techniques, or a magazine cover structure/layout. Written codes used in a design can give a deeper insight into its purpose or meaning and will support other codes used.
Colour	Colour is one of the most dominant elements of design exerting great influence over our moods and behaviour. Colours can also convey symbolic cultural meaning to communicate a message.
Colour Theory	A visual model or colour wheel is used to visually explain the relationships between colour and the results of mixing of primary and secondary colours. This includes those such as: analogous colours; harmonious colours; complementary colours; triadic etc. Colour theory also considers the effect of and concepts associated with colour choices and combinations when designing. In Design there are two main colour

	systems to consider additive and subtractive. If working on a computer, the colours seen on the screen are created with light using the Additive colour method (RGB). When mixing colours in paint, or during the printing process, the Subtractive colour method is applied (CMYK).
Commercial Design Process	The extension of the design process where the solution considers the commercial implications of the design product. The commercialisation processes consists of manufacturing, marketing and distribution and takes place once a production-ready design is complete. Although a sub-process of the design process, it still needs to be considered in conjunction with the design of the solution and the stakeholders.
Communication Environment	Refers to the conditions or settings within particular environments that can affect the communication of a message. Environments may include: physical, economic, social, cultural, geographic and interpersonal. In Design these environments may interfere with how the audience interprets an intended message or meaning.
Communication model	A conceptual model used to help designers focus their thoughts and explore the different ways humans send and receive information. Communication models include the Shannon and Weaver model, Berlo/SMCR model, Schramm's Comparative Experience model and others. See <i>Shannon and Weaver</i> .
Communication Strategies/Visual Devices	Strategies and devices strategically used by a designer in order to engage or persuade a specified audience. These are often referred to as those that create an emotional response or grab attention to enhance the communication of a design solution. Such strategies include: shock tactics, humour, metaphor and emotion.
Composition	The arrangement of the elements of design using the principles of design in a design work in order to create a particular effect or message. Some compositional techniques and rules that may be applied to Design include focal point, visual hierarchy, cropping, overlapping, rule of thirds, balance such as symmetrical/asymmetrical, applying a grid, negative space and others.
Constraints of Particular Production Processes	Restrictions or limitations to some aspect of the design solution by using a particular production process. Disadvantages may relate to areas such as sustainability, safety, performance, efficiency, costing, life cycle, appearance, perceived value and others.
Contemporary Trends	A current general direction or fashionable idea related to a process/method/material/technology.
Conventions	Conventions are the established and long accepted way of applying codes for specific purposes or to create meaning in design. These might include industry standards as applied to technical drawings; formats to make a design suitable for manufacture such as 300dpi, CMYK, PDF or camera angles and lighting set ups.
Copyright	Legislation designed to prevent people making money or reputation from other designer's work. Many designs will qualify as artistic works under the Copyright Act. This protects a design's visual features, which can refer

	to shape, three dimensional configuration, two dimensional pattern or ornamentation. Copyright is infringed if there is direct or indirect copying of a “substantial part” of the artistic work. Copyright protection of an artistic work generally lasts for the author’s lifetime plus 70 years.
Critical Analysis, Critical Reflective Analysis, Critical Reflection	Critical Analysis describes the observations, judgements and evaluation of the effectiveness and suitability of all aspects of a design work. Usually considered a more complex and higher level of thinking; developing and resolved designs are judged in relation to the design brief and design process to ascertain their success and to inform future practice.
Demographics	The statistical data and its analysis collected from a population of a particular group, used to define an intended audience. Information collated may include average age, gender, ethnic diversity, education levels, interests, spending habits etc. and will often be used to inform design decisions.
Design Brief, Design Problems	The written or verbal instruction to a designer outlining a design task. An effective design brief may have variations of the following components: <i>Scope of the design:</i> What exactly is required? What should be included? <i>Audience:</i> Who is this design for? Includes demographics and psychographics. <i>Style:</i> What is the theme? Does it relate/respond to something? <i>Budget:</i> How much should it cost? Will this limit the design choices? <i>Deadline:</i> How much time should it take? Allow for adequate planning. <i>Client likes/dislikes:</i> What colours, images, current examples are relevant.
Design Elements	The basic components that are used to construct a design composition: line; shape; value; 3D form; space; colour; type; texture.
Design Principles	The principles describe how the elements of design are applied to a design composition: balance; contrast; emphasis; repetition; movement; rhythm; scale and proportion; unity; variety; pattern; volume; harmony. This also included Gestalt design principles such as similarity, proximity, continuation, closure, figure/field, layout principles, alignment, modular/grids, correspondence, visual hierarchy, proportion and unity.
Design Process and Methods	A systematic series of stages in the planning, development and production of designs in response to a brief. A basic structure of a design process could include the following stages: <i>Analysis of the design brief:</i> As interpreted by the designer in consultation with the client <i>Research and investigation:</i> May include intended audience surveys and background research on the client, analysis of similar/competing designs. <i>Brainstorming and ideation methods:</i> Producing a large quantity of ideas to work from and refine. <i>Visualisation of concepts:</i> Refining the best ideas and drawing/sketching multiple/various design solutions with annotations. <i>Application of inquiry processes:</i> Used to consolidate meaning including application of creative thinking techniques, exploration/experimentation with design elements and principles, exploration/experimentation with skills, techniques, materials and technologies and audience research. <i>Reflective practice:</i> Critically analysing possible design solutions in

	<p>reference to the design brief, in consultation with the client and/or intended audience. May include surveys or questioning with feedback.</p> <p><i>Refinement of solution:</i> Adjusting and altering the design solution/s in response to reflective practice responses.</p> <p><i>Planning and production:</i> Exploration of relevant production methods and techniques as well as material selections. Sustainability, costing, OSH and alternative materials may also be explored.</p> <p><i>Final presentation of resolution in 2D or 3D formats:</i> Applying codes and conventions of design to present solution/s for production.</p> <p><i>Evaluation of the solution/s:</i> Critically analysing design solutions in reference to the design brief, the client and/or intended audience. Discussions should include the application and selection of elements and principles of design as well as provide justification for design decisions made.</p>
Design Skills and Techniques	The ability to use techniques, materials, tools, methods and concepts to create original designs. A group of skills and techniques available to a designer in different design contexts to create design solutions. For example: sketching, photography, use of design related computer software and construction methods.
Development (of a Design Process), Design Development, Idea Development, Visual Development, Development Roughs	The evolution and refinement of an idea through systematic exploration, experimentation and testing. The combined application of elements and principles of design, communication strategies, materials and techniques to communicate a message to a specified audience. Visual development is depicted through imagery instead of words, and roughs refers to hand drawn sketches or initial, quick digital mock ups to represent these explorations and tests.
Diagrams, Drawings, Layouts, Plans, Visuals, Thumbnails, Development Roughs	Two dimensional images usually created by hand but also in digital form to visualise an idea or concept relative to the design brief.
Documentation	Any proof of process including drawings/mock ups, notes, design development (including those on paper or in electronic form), which documents the development of an idea/s in a design process. This documentation is a legal record of proof of originality by the designer.
Ergonomics	The design of products that considers the study of the actions, limitations, functions and needs of the human body.
Evaluation	The judgement or appraisal of the worth of an action or decision in the design or production process.
Form Follows Function	A term associated with Modernist architecture and industrial design of the 20th century. A design ideal in which the form (or appearance) of a design should be informed or determined primarily by its function. In favour of order and simplicity, the function of a design is more important than its form or appearance.
Formats of Presentation	The submission or delivery of the final solution and/or design process in a format appropriate for the attention of the client and to enable

	production of the design solution. What the final solution would look like if it were to be produced in any or all its applications (billboards, magazine, business card etc.) and how it would be suitably presented for viewing and approval by the client or another stakeholder. This presentation may incorporate some of the design process if necessary to briefly explain the idea from its inception to completion.
Future Trends	The predicted or foreseen general direction or fashionable idea related to a process/method/material/technology.
Gestalt Design Principles	A branch of psychology known as Gestalt Theory that seeks to explain how and why people organise visual information into patterns and shapes and how this affects their behaviour. Gestalt theory used in Design presents a series of principles to assist how a design can be presented to maximise the reaction of the intended audience. Some principles include similarity proximity, continuation, closure, figure/field, correspondence etc.
Ideation, Idea Generation	The techniques and processes of generating original and innovative ideas to satisfy the design brief. Ideation is the combination of the two words, 'idea' and 'generation'.
Inquiry Processes	Where problems or questions are posed to extend greater meaning to any aspect of a design brief and then researched/investigated to enable creative, meaningful resolutions.
Intellectual Property	Productive and often intangible new ideas that are the result of creativity, such as inventions, designs, artistic works, patents, copyrights, etc.
Life Cycle Costing	The total costs of a product, service, system over the course of its useful life. This generally includes costs that are both recurring and one-time costs related to planning, design, manufacture, purchase, installation, operational, maintenance, upgrading and remaining value or salvage costs.
Materials, Production Materials, Alternative Materials, Advanced Materials	The physical substance that you specify or use in the production of a design. Advanced materials are new/modified materials with improved performance characteristics.
Mind Maps	A method used to graphically represent connections between thoughts/ideas/associations. Developed by Tony Buzan, mind maps usually take the form of a centralised word/concept with related thoughts and associations branching out from this centre point. Each branch follows its own idea or theme and continues branching out with subtopics and related themes, growing exponentially. Detailed and high quality mind maps should explore ideas in at least three levels: <i>Level 1:</i> The Brain-dump (primary ideas) – here, the importance is on the quantity of ideas and not quality, even strange ideas are welcome. <i>Level 2:</i> Divergent thinking (secondary ideas) – in this phase most ideas focus on concepts and the links between ideas. By making variations and combinations between ideas, we can generate new ideas.

	<i>Level 3:</i> Creative ideation (tertiary ideas) – now the previous ideas become inspiration for actual solutions. The aim is to explore the more inspiring ideas through to original and new design possibilities.
Occupational Safety & Health (OSH)	The responsibilities and procedures to protect the safety, health and welfare for both employers and employees in the workplace for themselves and others.
Personal Responsibilities	The moral and legal obligation of designers to establish professional conduct and ethical practices such as: knowing the local censorship laws, codes of practice, enforcement initiatives by governments, confidentiality agreements, conflict of interest and criticism of other design work.
Planning	The activities and time schedules that ensure the production of the design solution or prototype in the most efficient and economical manner available. Tools such as a time blocking, sequencing of tasks or creating a Gantt chart linked to the design process stages can help meet design deadlines.
Production Planning	The planning for a proposed design that considers the materials and technologies, processes and methods that will be used to produce/ manufacture the final product, in the order that they will occur. For example, identifying what is required to get a document ready for commercial printing processes; creating lighting plans, equipment lists, model release forms and other documentation for a photo-shoot; identifying what needs to be specified to mass-produce a 3D jewellery piece; producing annotated technical drawings for the accurate construction of a bus shelter. This may also include creating a mock-up or prototype of the proposed design.
Production Processes	Occurs as part of the design process. When decisions are made about how a proposed design will be manufactured as a product ready for use. This occurs after the design of the concept, however, it may result in the re-designing of aspects of the original design in consideration of the production process selected. For example, the recycled paper/inks chosen for commercial printing may not create the desired vibrant colour palette; a small component of the 3D jewellery piece may be too weak when cut on commercial machinery; the scale of the bus shelter design may not work when installed in a site mock-up. In these cases, alternative materials or processes may need to be selected, or designs may need to be modified.
Refinement	To make small changes that improve, enhance and make clearer the communication in a design work.
Reflection, Analysis, Reflective Analysis	Reflective analysis describes what has been done and reasons why the whole or parts of a design work and/or the design process are considered successful or not.
Representation	Representation is the visual description or portrayal of someone or something. Representation in Design is when the elements and principles are used to create something recognizable, to communicate an idea or message that the audience can understand.

Semiotics	The study of symbols, signs and images and how they are used to create meaning. It attempts to explain how these are interpreted usually within one of three ways; what the sign shows; the larger system the sign belongs to and the context it is presented in. The two major founders of semiotics (or semiology) Peirce and Saussure use different terms to explain their theories.
Shannon and Weaver model of communication	The Shannon and Weaver model of communication was designed to develop effective communication between sender and receiver. A Design example of the model in use could be: <i>Information source</i> : the designer. <i>Transmitter (encoder)</i> : the completed design solution created from the design brief. <i>Channel (signal)</i> : the form of the design solution (e.g. poster, magazine advertisement, piece of jewelry, item of furniture.) <i>Noise</i> : The “noise” concept includes anything that interferes with the signal. Within the context of this model, in terms of Design, this could include both external (physical) sources of noise such as glare, poor printing/construction, colour/font choice etc. or internal noise such as different meanings coming from the receiver’s own knowledge, attitudes and beliefs affecting different meanings that can be associated with words, phrases, signs, and symbols. <i>Receiver (decoder)</i> : the client, they approve the design solution. <i>Destination (recipient)</i> : the intended audience and viewers/users of the design solution.
Stakeholders	A person with an interest or concern, financial or otherwise, in the project at any stage of the design process or production; may include the client, designer, audience, manufacturer, government bodies and others.
Stereotype	A simplification of the differences in people by putting them into categories based on knowledge and perceptions. These can be based on popular opinion and assumption and can have both positive and negative connotations.
Sustainability	The consideration a designer gives to minimising or eliminating negative environmental, economic or social impacts that may arise through the design process or production of a design solution.
Synectics	A problem solving method used to link disconnected concepts and stimulate creativity.
Time Management	The schedule and associated implications of how much time is allocated to complete a set task or project and the strategies used to ensure deadlines are met. For example, time blocking; sequencing of tasks and the creation of a detailed Gantt chart.
Type	Type refers to letterforms while the art and technique of arranging type is called Typography. It can be one of the most influential elements and used thoughtfully, can establish the character and emotional attributes of a design. The visual form it takes can dramatically affect the meaning of a design and how an audience reacts towards it.

Viewpoints	An opinion or attitude about a topic.
Visual Codes	Visual codes include the design elements and principles and the way in which these are applied within compositions.
Visual Communication	The communication of 2D or 3D concepts using visual symbols, form, images, colour, typography etc. It is the most used of the three types of communication along with verbal and non-verbal.
Visual Research, Investigation	Research to build understanding of any aspect of the design brief using a variety of sources either visual or text-based. For example, conducting intended audience surveys; background research on the client; analysis of similar/competing designs; collection of inspirational images/mood boards and more.