

COURSE CONTENT

Course Code	DR2002
Course Title	Issues in Product Design Practice
Pre-requisites	NIL
No of AUs	3
Contact Hours	39 hours studio contact

Course Aims

In this intermediate level course, you will be introduced to unique and topical issues in product design. You will explore one or more issues, conduct analysis and exploration, and produce designs that address a specific aspect that you have identified. This course builds upon the learning of other courses as it prepares the way for creating unique product designs.

Intended Learning Outcomes (ILO)

By the end of the course, you should be able to:

1. Describe methods for developing designs for a given product design topic.
2. Develop a range of techniques and processes for developing designs for a given product design topic.
3. Apply techniques and processes to create prototypes for a given product design topic.
4. Describe your design development and projects in a clear and cohesive manner using visual presentations and virtual or physical objects.
5. Contribute constructively to discussion and critique on the context, issues, and techniques of the given product design topic employed in your own work and the work of your peers.

Course Content

In this course you will be required to respond to any one of a broad range of issues in product design. The topics may range from historical to contemporary and are selected for their relevance to product design. The topic and exploration you will experience in this course is independent and represents a unique opportunity to explore an area not commonly covered.

At the beginning of the course you will be presented with the product design topic. This topic will describe the context, issues, technical area to be explored, and the form that your final work may take. Example topic areas include (but are not limited to) bio-design, furniture design, generative design, interaction design, mobility/ transportation design, service design, spatial design, sustainable design, user experience design, user interface design, wearable design... or any form that allows experimentation and exploration in the general area of product design.

You will develop a unique research pathway as you explore the context, processes and techniques to allow you to create original designs to the requirements of the specified topic. You will explore a range of idea development and research methods to support your design process that may include traditional approaches as well as contemporary and experimental approaches.

Finally, you will present your design, describing your analysis, strategy, process, and your proposed design solution.

Class activities, discussions and critique will contribute towards continuous assessment.

Assessment (includes both continuous and summative assessment)

Component	ILO Tested	Programme LO	Weighting	Team/ Individual
Continuous Assessment 1 (20%) Exploration and experimentation	1,2,3,4	--	20%	Individual
Continuous Assessment 2 (20%) Technique and process learning	1,2,3,4	--	20%	Individual
Final Project (40%) Process and development 20% Implementation and prototype 20%	2,3,4	--	40%	Individual
Participation (20%)	4,5	--	20%	Individual
Total			100%	

Reading and References

1. Agkathidis, Asterios. *Generative design*. Laurence King Publishing, 2015.
2. Aranda, Benjamin, and Chris Lasch. *Pamphlet Architecture 27: Tooling. No. 27*. Princeton Architectural Press, 2006.
3. Buxton, Bill. *Sketching user experiences: getting the design right and the right design*. Morgan Kaufmann, 2010.
4. Colin, Kim, ed. *Extra Spatial*. Chronicle Books Llc, 2003.
5. Löwgren, Jonas and Stolterman, Erik. *Thoughtful Interaction Design: A Design Perspective on Information Technology*. The MIT Press, 2004.
6. Negroponte, Nicholas. *Being Digital*. Knopf, 1995.
7. Papanek, Victor, and R. Buckminster Fuller. *Design for the real world*. Thames and Hudson, 1972.
8. Penin, Lara. *An introduction to service design: designing the invisible*. Bloomsbury Publishing, 2018.
9. Sterling, Bruce. *Shaping Things*. The MIT Press, 2005.

Course Policies and Student Responsibilities

(1) General

You are expected to complete all assigned readings, activities, assignments, attend all classes punctually and complete all scheduled assignments by due dates. You are expected to take responsibility to follow up with assignments and course related announcements. You are expected to participate in all project critiques, class discussions and activities.

(2) Punctuality

You are expected to be punctual for all classes. If you are more than 30 minutes late, you will be deemed as absent and will not be able to sign on the attendance register.

(3) Absenteeism

In-class activities make up a significant portion of your course grade. Absence from class without a valid reason will affect your participation grade. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies. There will be no make-up opportunities for in-class activities.

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the [academic integrity website](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Planned Weekly Schedule*

*Subject to adjustment by instructor according to the teaching situation, students' progress, public holidays and unforeseeable circumstances. A revised schedule will be issued to students at the start of the semester.

Week	Topic	Course LO	Readings/ Activities
1	Establishment of topic Overview of product design topic for this course. Discussion of principles, context, methods, techniques, processes and tools.	1,2,3	Introductory Lecture In-class discussion
2	Exploration Exploration of aspects, user and design considerations. Investigations into how to analyze and understand the topic.	1,2,3	Discussion and group interactions Explorations of processes and techniques

3	Exploration Exploration of aspects, user and design considerations. Investigations into how to analyze and understand the topic.	1,2,3	Class exercises to develop analysis and exploration.
4-6	Skills and Knowledge Development	1, 2, 3, 4	Workshops and studio sessions Explore and develop proficiency with working in product design topic.
7	Skills and Knowledge Development	1, 2, 3, 4	Preparation for Presentation. Discussion and preparation of key achievements.
8	Project Concept Presentation	1, 2, 3, 4, 5	Students present project concepts To show concept, analysis, development, design strategy, possible ways forward.
9-11	Project development	1,2,3,4	Students develop their design project Individual discussion and feedback
12	Project development	1,2,3,4	Preparation for Presentation. Discussion and preparation of key achievements.
13	Final Presentation and submission	1,2,3,4,5	Final Presentation and submission