Research & Design Process

Course Code:
Level: 1
Credits: 4
Pre-Requisite: None
Duration Contact Hours:
i. Theory: Nil
ii. Practical: Nil
iii. Self-Study/Project/Industry: 60 (2x1.5 x20)

Aim

The aim of the subject is to develop awareness of Design and Design Process, understand the importance and relevance of Research in design process and its application in the projects.

Expected Learning Outcomes

At the end of the course, the student is expected to be able to:

1. Learn and develop research questions for Design.
2. Enhancing observational skills is essential to appreciate design.
3. Demonstrate inquiries of Design through different print and digital media.
4. Demonstrate research explorations through case studies and project activities.
5. Communicate Research and Design through Design Narrative and Concept Note.

Learning and Teaching Strategy
The course is delivered via face-to-face mode; Classes will consist of lectures, studio work critiques, discussions, presentations, field trips, case studies, exercises, project reviews, Individual and team works.

Course Content

Unit I: Introduction to Design Process
Definition of Design. Difference between Design and Design Thinking
Introduction to the Design Thinking Process Methods- Empathize, Define, Ideate, Prototype & Execute
Exploration of the design discipline and its multidisciplinary nature. Comprehend users and context; Relevance and value of design and how it impacts society, industry and the environment is established.

Unit II: Introduction to Basic Research Methods & Terminologies
Introduction to Primary & Secondary research methods and application in design.
Basics of Quantitative & Qualitative Research Methods
Study of basic terminologies like Stakeholders, Focus Groups, Case Studies, Literature reviews, etc.

Unit III: Developing Questionnaire and Using of other Research Tools.
Conducting Case Studies & Literature reviews – Live and Literature
Conducting Surveys & Interviews

Unit IV: Design Problem
Define the Problem Statement.
Outreach and co-ordinate between industry for projects and research for innovative products.
Take the Design project in a collaborative approach with different stakeholders through lectures, case studies and project activities.

Unit V: Design Solution
Demonstrate innovations done by Design through lectures, case studies and project activities. Present ideas & prototypes. Discuss the Execution part.

Suggested Assessment Scheme

Assessment 1:Design Process   40%
Assessment 2: Research Report   60%

References

Aspelund, K. (2015). The Design Process-3rd Edition. Fairchild Books
Vaux, D.E. & Wang, D.(2020). Research Methods for Interior Design: Applying Interiority

Reference Texts

R1: Ansell, C & Torfing J (eds) (2014). Public Innovation through Collaboration and Design. London and New York: Routledge.
R2: Antonneli, Paola (2005). Humble Masterpieces: everyday marvels of Design. Harper Collins Publishers.
R3: Baxter, Mike (1995). Product Design. London Glasgow New York: Chapman & Hall.
R4: Brown, Dan M (2013). Designing Together. New Riders.
R5: Doordan, Dennis (ed) (2000). Design History: An Anthology. Cambridge, London: MIT Press.
R6: Heskett, John (2002). Design: a very short introduction. Oxford University Press.
R7: Geist, Valerius (1978). Life Strategies, Human Evolution, Environmental Design: towards a biological theory of health . New York, Heidelberg, Berlin: Springer-Verag Lawson, Brian (2006).
R8: How Designer's Think: The design process demystified. Routledge.
R9: Highmore, Ben (ed) (1975). The Design Culture Reader. London and New York: Routledge.
R10: Kepes, Gyorgy (ed) (1966). The Man-Made Object. Studio Vista London.
R11: Norman, Don (2013). The Design of Everyday Things. Hachette UK.
R12: Papanek, Victor J (1984). Design for the Real World: Human Ecology and Social Change. Academy Chicago.
R13: Essi Salonen Designing Collaboration Link
R14: Gupta, Anil K, Grassroots Innovation: Minds On The Margin Are Not Marginal Minds Link
R15: Brown Tim, Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation Link
R16: D'Source, IDC, IITBombay: http://www.dsource.in/