NIRMA UNIVERSITY

Institute: Institute of Design				
Name of Programme:	Bachelor of Design (Product and Interaction Design Prog.)			
Course Code:	2DD304CC25			
Course Title: Design Project - II (Design for Play)				
Course Type:	Core			
Year of introduction:	2025-26			

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Course Learning Outcomes (CLO):

At the end of the course, the student will be able to:

- Analyze cultural and psychological aspects of play to evaluate diverse play artifacts
 Conduct user-centered research to identify needs and opportunities in play-based design
 Develop and prototype inclusive play concepts that foster engagement and creativity
- 4. Evaluate prototypes through structured user testing and iterative (BL 5) refinement

Contents

Teaching Hours (Total 90)

Unit 1 Understanding Play – Context, Culture, and Psychology

- 18
- Theories of play: Why people play; cognitive, social, and emotional functions.
- Iconic toys and play artifacts: Historical and contemporary references.
- Vernacular and indigenous play objects: Local materials, cultural narratives, and traditions.
- Play for all senses: tactile, auditory, visual and kinesthetic engagement.
- Play across life stages: children, adolescents, adults, elderly.
- Special needs and inclusive play: designing for accessibility and diverse abilities.
- Psychology of play: motivation, creativity, and imagination.

Unit 2 Research and Insights for Play-Based Design

30

- Defining focus areas: age groups, learning, entertainment, inclusivity and skill development
- Research methods: ethnography, observation, interviews, and participatory approaches.



- Framing problem statements: articulating opportunities for play-centered design.
- Synthesising research: identifying user needs, behavioural patterns, and cultural influences.
- Generating insights to guide concept directions.

Unit 3 Concept Development, Prototyping, and User Testing

42

- Concept generation: ideation methods tailored for play artifacts.
- Low- and mid-fidelity prototyping: form, function, and interaction.
- Iterative prototyping: testing concepts with users at different stages.
- Evaluating engagement, usability, and inclusivity through structured feedback.
- Refining concepts based on user testing outcomes.
- Final prototype development and design documentation for presentation.

Self Study:

Suggested Readings/References:

Books:

- 1. Norman, D. (2013). *The Design of Everyday Things (Revised & Expanded)*. Basic Books.
- 2. Sutton-Smith, B. (1997). The Ambiguity of Play. Harvard University Press.
- 3. Brown, S. (2010). Play: How It Shapes the Brain, Opens the Imagination, and Invigorates the Soul. Penguin.
- 4. Ulrich, K. & Eppinger, S. (2015). *Product Design and Development*. McGraw-Hill Education.
- 5. Fullerton, T. (2019). Game Design Workshop: A Playcentric Approach to Creating Innovative Games. CRC Press.

Online Resources:

- 1. LEGO Foundation Articles on Play & Learning *Research on play behavior and cognitive development*.
- 2. MIT OpenCourseWare Toy Product Design *Lecture series on designing play experiences*.
- 3. GDC (Game Developers Conference) Talks on Toy Design *Insights from professionals in interactive toy development*.
- 4. Toy Industries of Europe (TIE) Guidelines *Understanding toy manufacturing and safety regulations*.

