

	School of Planning and Architecture: Vijayawada	
	(An institution of National Importance under the Ministry of Education, Govt. of India)	
	Survey No.4/4, ITI Road, Vijayawada-520008, Andhra Pradesh, India	

	Department of Architecture	
Course:	MDES 111: M.Des. Design Studio – I (Foundation Studio)	Class: M. Des. 1st Year I - Semester 2026-27 (Odd Sem.)
Faculty/ Instructors:	Dr. Khuplianlam Tungnung Ar. Murikinati Sai Sumanth	Internal Assessment: 50
		External Theory Exam: 50
Contact Periods/ week: 03 periods. (55 min each period)		Total Marks: 100
Time Table:	As per schedule/Time-table	Credits: 15 (12+3)

Objective: Develop understanding of product design process, sustainable ergonomics, and user-centered design as an approach to improving product-user interaction and relationships towards enhance user experience. Acquire knowledge of materials and manufacturing techniques, and apply sustainable design practices. Cultivate creativity and enable students to use creative tools for idea generation. Develop visual presentation and interaction skills through sketching, rendering, and 3D modelling software.

Week	Lecture Plan	Remarks/Topic of Assignment
Week 1	Introduction to the course and syllabus overview. Module-I: Assignment 1 - Design product/oeuvre study and critique: Choose a design product/interiors/design elements of an object or oeuvre for everyday use (at home, streets, schools, universities, markets, etc.)	Lecture + Interaction
Week 2	Module-I: Assignment I - Design product/oeuvre study and critique:	Lecture + Interaction/Tutorial

Week 3	Study and critique selected case study individually or in groups based on application of intuitive (qualitative) or quantitative processes and articulate the same based on any or all of the following: • Design principles (universal design, discoverability, signifiers, use-centered, user-centered design, interactive, etc.) • Sustainable ergonomics (age-group specific design – Kids, Teens, Adult, Elderly) • Materials selection & manufacturing techniques (sustainable design, light weight, durable, tolerance for error) • Product design process & methodology (human-centered iterative design or DD process, etc.) • Prototyping and testing (Iterative design process)	
Week 4		Lecture + Interaction/Tutorial
Week 5		Lecture/Interaction/Presentation (Assessment-Rubric based)
Week 6	**Module II: Assignment 2: Smart City Solutions (Options) – Design for New Lifestyle Xperience’s pleasantness and delight, health and well-being, Urban Mobility (Land-Air-Water), Smart Home Monitoring/ Control Systems Problem Space - Diverge and Converge - to find the right problem Study of products and systems design – Universal and User-Centric Design based on Systematic Design Thinking Process - in contexts of place and society (including Module-I, III, and IV). The study could evolve and develop and may include the following points – • User and Design study, Lifestyle survey: Gain insight into the daily lives of users, understanding their routines, challenges, and priorities and the designs’ possible impact. • Identify key activities and elements that impacts lifestyles and well-being. • Propose value-added solutions and sustainability to streamline daily tasks, improve efficiency, and enhance overall quality of life. • Application of design principles, ergonomics, sustainable materials, design processes and methods of prototyping, etc., can be surveyed and studied.	Interaction with sites: survey, analysis, questionnaires, discussion, sketches, data-collection, etc.
Week 7		Interaction with sites: survey, analysis, questionnaires, discussion, sketches, data-collection, etc.
Week 8	Module II: Study Tour Problem Space - Diverge and Converge - to find the right problem • Explore opportunities for innovation and development of existing or new design to create sustainable solutions tailored to the needs of the society and contexts. • Get first-hand experience on design works, user perspectives, design thinking, etc.	Interaction/ On-Site Workshops
Week 9		Interaction/ On-Site Workshops

Week 10	• Present the solutions in a compelling manner, emphasizing their feasibility, scalability, and potential to enhance the overall quality of life in the city.	Lecture/Interaction/Presentation (Assessment-Rubric based)
Week 11	Module-III: Assignment 2: Smart City Solutions (Options) – Design for New Lifestyle Xperience’s pleasantness and delight, health and well-being, Urban Mobility (Land-Air-Water), Smart Home Monitoring/ Control Systems Solution Space - Ideation and Prototyping to design the right solution of a Future Ready Product Design (Imagine its future) • Survey & analyse the urban built environment to identify challenges faced by selected residents (user-centered) with a focus on prevalent issues, such as mobility, energy shortage, safety walkability, health and well-being, and accessibility to community or household essentials including parks and markets.	Lecture + Interaction/Tutorial
Week 12		Lecture + Interaction/Tutorial
Week 13	Module-III: Assignment 2: Smart City Solutions (Options) – Design for New Lifestyle Xperience’s pleasantness and delight, health and well-being, Urban Mobility (Land-Air-Water), Smart Home Monitoring/ Control Systems Solution Space - Ideation and Prototyping to design the right solution of a Future Ready Product Design (Imagine its future)	Interaction/Presentation (Assessment)
Week 14		Interaction/Assessment:
Week 15	*Module IV: 8-10 hours’ Time-Problem or complete any modules unfinished (if required), Preparation/Make-Up Classes, if any required.	Lecture/Interaction/Presentation (Assessment)
Week 16		

S. No.	Stages of Evaluation	Weightage
1	Assessments (Assignments)	10
2	Mid Semester Examination	20

3	Assessments (Assignments)	10
4	Time-Problem	10
	Total	50

Outcomes:

Students will be able to conceptualised and develop a design object/artefact through pertinent design process & methods, incorporate sustainable ergonomics, forms and usability as an approach to improving product-user interaction and relationships towards enhance user experience. Be able to empathize why and how to afford design products or oeuvres that are intuitively conducive to user experiences to afford pleasure, joy, and reduce frustration. Acquire knowledge of materials and manufacturing techniques, and apply sustainable design practices to design and develop products through systematic design thinking and ideation. The studio is expected to develop and cultivate creativity, overcome blocks, and use creative tools for idea generation and development of products in the form of sketching, rendering, and 3D modelling software.

Faculty/Instructors: sd/- (Dr. Khuplianlam Tungnung) (Ar. Murikinati Sai Sumanth)	Head of Department: sd/- (Dr. Amitava Sarkar)
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NOTES:

1. The type of project and number of hours for time problem is to be confirmed, as required.
2. Study Tour: The date and location of Interaction with Sites: survey, analysis, questionnaires, discussion, sketches, data-collection, etc., are to be confirmed and adjustable as per relevant schedules, activities, and convenience of all concerned.
3. All details for all assignments, at all stages, are to be analysed and articulated and developed/modified as per actual case studies of each team, individual as the class progress.