UNIVERSITI TEKNOLOGI MARA

IDE450: INDUSTRIAL DESIGN II

Course Name (English)	INDUSTRIAL DESIGN II APPROVED
Course Code	IDE450
MQF Credit	3
Course Description	This studio-base course is to expose students to the principle & fundamental that involves in furniture and transport design. In this course, students will get an opportunity to experience the design process in designing furniture and transport. Students will be able to understand the theoretical and terminology used, and the foundation of practical application in furniture and transport design and its development process. Student will also learn basic skills of presentation and research which enable students to produce three dimensional models. They will also be introduced to working in teams and what it takes to come to a consensus. The course will end with students using the design process to design furniture and transport.
Transferable Skills	Design process, communication skill
Teaching Methodologies	Lectures, Studio, Demonstrations, Tutorial, Discussion, Presentation, Workshop
CLO	CLO1 Assist and expose them in understanding the principle & fundamental of Design CLO2 Understand the foundation, theoretical and terminology of practical application in furniture and Transport design CLO3 Recognize technical and functional aspects of designing
Pre-Requisite Courses	No course recommendations

Topics
1. INTRODUCTION TO FURNITURE & TRANSPORT DESIGN 1.1) Introduction to course outline, objective and design project 1.2) History of Furniture & transport Design 1.3) Principle and Fundamental in Design 1.4) Categories of transport & Furniture
2. INTRODUCTION TO DESIGN RESEARCH 2.1) Design Methodology
3. ANALYZING CONTEXT 3.1) Establish Design Concept for both project 3.2) Analysis on Data Finding
4. CONCEPT DEVELOPMENT 4.1) Design & Concept Sketching 4.2) Idea and development stage - Aesthetics description, Initial ideas
5. FINAL CONCEPT DEVELOPMENT 5.1) Final design proposal 5.2) Final design Development
6. TECHNICAL DRAWING / GA / PACKAGE DRAWING 6.1) Measurement consideration 6.2) Establish appropriate material / system
7. 3D IDEATION PROPOSAL 7.1) Final Mock up Design 7.2) CAID drawing/ Digital Rendering
8. MOCK - UP CONSTRUCTIONS 8.1) Final Design Proposal 8.2) Material / System / Ergonomic / Proportion / Jointing Selection

9. PROTOTYPE / MODELING CONSTRUCTIONS 9.1) 3D model 9.2) Material Selection
10. FINISHING - MODEL 10.1) Finishing technique proposal

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment

Assessment Type	Assessment Description	% of Total Mark	CLO
Assignment	CRITIC SESSION (1) - Understanding and Analyzing context (Product analysis)	10%	CLO1
Assignment	CRITIC SESSIONS (2) - Concept Development	10%	CLO1
Assignment	CRITIC SESSIONS (3) Concept development (form studies)	10%	CLO2
Assignment	CRITIC SESSIONS (4) - Concept Development (Design Criteria and Development)	10%	CLO2
Assignment	CRITIC SESSIONS (5) - Concept Development (Final Development)	10%	CLO2
Assignment	CRITIC SESSIONS (6) Feasibility	10%	CLO3
Final Project	FINAL PRODUCT DESIGN PRESENTATION : Idea Development & Design Process, Aesthetic, Technical Understanding, Visual and Verbal Presentation	40%	CLO3

Reading List

Reference Book Resources

- **Lewin, Tony; Borroff, Ryan; Callum Ian 2010, *How to Design Cars Like a Pro, New Edition*, MBI Publishing Company USA**
- **Trants, Kate; Williams, Austin 2004, *The Macro World of Micro Cars*, Black Dog Publishing**
- **Toromanoff, Agatha 2016, *Chairs by Architect*, Thames & Hudson London, UK**
- **Postell, Jim 2008, *Furniture Design (Second Edition).*, Hoboken, NJ: John Wiley & Sons, Inc.**
- **Johnson, Alex 2012, *Bookshelf*, Thames & Hudson London, UK**
- **Cheryl Dangel Cullen, Lynn Haller 2004, *Design Secrets: Products 2*, Ed., , Rockport Publishers, Inc [ISBN:]**
- **Cuffaro, Et all 2006, *Process, Materials, Measurements, Massachuset*, Ed., , Rockport Publishers, Inc [ISBN:]**
- **Thomson, Rob; Kim, Young Yun 2011, *Product and Furniture Design*, Thames & Hudson London, UK**
- **Hudson, J 2008, *Process; 50 Product Design from Concept to Ma*, Ed., , Laurence King Ltd [ISBN:]**
- **Noll, Terrie 2009, *The Joint Book, The Complete Guide to wood Joinery*, Chartwell Books . Northfield Avenue, NJ**
- **Koos Eissen, Roselien Steur 2011, *Sketching - The Basics*, Ed., , Page One Publishing Pte Ltd [ISBN:]**
- **Cristian Campos 2010, *Product Design Now: Renderings*, Ed., , Harper Collins Publishers**

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources