

Product Design 3

DESCRIPTION OF COURSE UNIT

Program Studi Sarjana (S1) Desain Produk
Bachelor of Industrial Design (BOLD)
2018-2023



Description of Course Unit
according to the ECTS User's Guide 2015

Course unit title	Product Design 3
Course unit code	DP184625
Type of course unit	Compulsory
Level of course unit	First cycle Bachelor
Year of study when the course unit is delivered	5 th year
Semester/trimester when the course unit is delivered	6 th semester
Number of ECTS credits allocated	11,2 ECTS Credits
Name of lecturer	Drs. Taufik Hidayat, M.T.
Learning outcomes of the course unit	Students will be able to design various products equivalent to furniture based on comprehensive premises: engineering, functionality, and aesthetics (concept, design, costing, materials, processes, and aesthetics).
Mode of delivery	face-to-face
Prerequisites and co-requisites	-
Course content	<p>Product Design 3 is a core course that covers designing products equivalent to furniture with the premises of engineering, functionality, and aesthetics.</p> <ul style="list-style-type: none"> • Introduction to furniture product design and analyzing phenomena related to product design problems. • Title creation, problem definition, and limitations. • Search for methods suitable for the problem. • Types of joints: wood, rattan, metal, and others. • Types of furniture accessories and/or furniture. • Preservation processes for natural materials (wood, rattan) • Furniture manufacturing processes and finishing. • Types of simple mechanics in furniture. • Introduction to several material characteristics. • Methods of analysis - problem-solving analysis. • Furniture design concepts. • Functionality premises: Needs, activities, anthropometrics, ergonomics, weight and volume, layout, study of item treatment/nature of the item. • Engineering premises: Structure and construction,

	<p>mechanical movement, manufacturing processes, tools or machines, components or accessories, materials, and processes.</p> <ul style="list-style-type: none"> • Aesthetic premises: Form and color of designed furniture. • Use of data from both psychological and sociological perspectives. • Application of rule-based data in other furniture product designs. • Prototype creation. • Standardization of presentations, both verbal, visual, model, and/or prototype. • Display and/or exhibition.
Recommended or required reading and other learning resources/tools	<ul style="list-style-type: none"> • Dreyfuss, Henry, 1999, The Measure of man, human factor in design, Whitney Library of Design, New York • Alvin R. Tilley, 1993, The Measure of man and woman, Human factors in design, The Whitney Library of design, New York • Ernest, J, Mc Cormic, 1996, Human factor in engineering and design, Tata Mc Graw-Hill, New York • Kimberly, Elam, 2001, Geometry of design, studies in Proportion and composition, Princeton Architectural Press, 37 East 7th Street, New York, new York 10003
Planned learning activities and teaching methods	Discovery Learning; Project Based Learning; Case Method
Language of instruction	Indonesia
Assessment methods and criteria	Assignment, Project, Midterm Evaluation and Final Evaluation

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Course Details

DP184625

Desain Produk 3

Product Design 3

7 credits

Coordinator: Drs. Taufik Hidayat, M.T.

Course Form

Course Type

Minimum Passing Grade

:

:

:

Tidak Ada

C

Course Description

Mata kuliah inti yang mendesain/merancang berbagai macam benda produk setara furnitur berdasarkan premis: rekayasa, fungsi dan estetika secara komprehensif meliputi konsep, desain, biaya, bahan, proses dan estetika.

Course that design various kinds of products equivalent to furniture based on the premises: engineering, function and aesthetics comprehensively covering concepts, designs, costs, materials, processes and aesthetics

LO

CLO

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Learning Outcomes Charged by the Course

Mohon untuk mengecek kurikulum yang lain juga pada pilihan di bawah ini (lalu klik **Tampilkan**). Kemudian mohon pastikan centang CPL telah sesuai dengan yang dibutuhkan oleh CPMK.

Curriculum:

Kurikulum 2018 S-1 Desain Produk

Show

No.	Description
<input type="checkbox"/>	1. Mampu menyusun konsep desain dengan mengidentifikasi sumber masalah, menganalisis, dan mensintesis kebutuhan dengan mempertimbangkan aspek estetika, kenyamanan dan keselamatan pengguna pada suatu produk <i>Able to develop design concepts by identifying problem sources, analyzing, and synthesizing needs by considering aesthetic, comfort and user safety aspects of a product</i>
<input type="checkbox"/>	2. Mampu merancang sistem produk dan benda produk berdasarkan penguasaan metoda desain, cara produksi dan sistem distribusi, untuk menghasilkan produk yang dapat dipertanggungjawabkan terhadap kaldah desain, dampak pada lingkungan hidup, dan isu-isu sosial budaya <i>Able to design product systems and product objects based on mastery of design methods, production methods and distribution systems, to produce products that can be accounted for by design principles, impacts on the environment, and socio-cultural issues</i>
<input checked="" type="checkbox"/>	3. Mampu membuat model untuk menyelesaikan masalah desain yang kompleks secara kreatif berdasarkan prinsip-prinsip desain dan rekayasa, dengan mempertimbangkan faktor ekonomi, keamanan, keselamatan, dan kelestarian lingkungan <i>Able to create models to solve complex design problems creatively based on design and engineering principles, taking into account economic, security, safety, and environmental sustainability factors</i>
<input type="checkbox"/>	4. Melakukan kolaborasi dalam bidang kerja yang multi disiplin dengan memanfaatkan pengetahuan dan kemampuan desainnya <i>Collaborating in multi-disciplinary work areas by utilizing design knowledge and skills</i>
<input checked="" type="checkbox"/>	5. Memahami konsep teoretis desain: 1. fungsi, 2. estetika, 3. ekonomi, 4. sosial dan, 5. teknologi secara umum <i>Understand the theoretical concepts of design: 1. function, 2. aesthetics, 3. economy, 4. social and, 5. technology in general</i>
<input checked="" type="checkbox"/>	6. Ketramampilan presentasi lisan, tulisan dan multimedia dan teknologi presentasi secara umum <i>Oral, written and multimedia presentation skills and general presentation technology</i>
<input checked="" type="checkbox"/>	7. Ketramampilan rekabentuk dan visualisasi 2 dan 3 matra secara mendalam <i>Design skills, 2 and 3 dimension visualization in depth</i>
<input type="checkbox"/>	8. Prinsip dan metodologi desain secara mendalam <i>Design principles and methodologies</i>
<input checked="" type="checkbox"/>	9. Konsep user centered design secara mendalam <i>The concept of user centered design in depth</i>
<input checked="" type="checkbox"/>	10. Sejarah dan perkembangan desain produk secara mendalam <i>The history and development of product design in depth</i>
<input checked="" type="checkbox"/>	11. Wawasan budaya dan perkembangan tren secara mendalam <i>Insight into culture and trend developments in depth</i>
<input checked="" type="checkbox"/>	12. Prinsip dan isu terkini dalam teknologi manufaktur secara umum <i>Current principles and issues in manufacturing technology in general</i>
<input type="checkbox"/>	13. Bisnis dan pemasaran, kewirausahaan, kode etik dan HAKI (Hak atas Kekayaan Intelektual) secara umum <i>Business and marketing, entrepreneurship, code of ethics and IPR (Intellectual Property Rights) in general</i>
<input checked="" type="checkbox"/>	14. Konsep dan prinsip pelestarian lingkungan secara umum <i>Environmental conservation concepts and principles in general</i>

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Course Details

DP184625

Desain Produk 3

Product Design 3

7 credits

Coordinator: Drs. Taufik Hidayat, M.T.

Course Form

:

Course Type

: Tidak Ada

Minimum Passing Grade

: C

Course Description

Mata kuliah inti yang mendesain/merancang berbagai macam benda produk setara furnitur berdasarkan premis: rekayasa, fungsi dan estetika secara komprehensif meliputi konsep, desain, biaya, bahan, proses dan estetika.

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LO CLO Assessment & Evaluation Plan Lesson Plan

Course Learning Outcomes

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Curriculum: Kurikulum 2018 S-1 Desain Produk Show

Code	Description of CLO	Mapping of CLO to LO										Weight of CLO
		LO 3	LO 5	LO 6	LO 7	LO 9	LO 10	LO 11	LO 12	LO 14		
CLO-1	Mampu mengidentifikasi urgensi, tujuan dan manfaat, batasan masalah, serta kesesuaian desain akhir dengan kebutuhan dan permasalahan <i>Able to identify urgency, goals and benefits, problem limitations, and suitability of the final design with needs and requirements problem</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15%	
CLO-2	Mahasiswa mampu menganalisis meliputi kesesuaian tolok ukur, kesinambungan analisis dengan kebutuhan, kewajaran dan kelengkapan kriteria desain. <i>Students are able to analyze including the suitability of benchmarks, continuity of analysis with needs, fairness and completeness of design criteria.</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15%	
CLO-3	Mampu mempresentasikan desain secara lisan, tulisan, dan multimedia dalam bentuk abstraksi dan visual, secara detil fungsinya <i>Able to present designs orally, in writing, and multimedia in the form of abstractions and visuals, in detail their functions</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15%	
CLO-4	Mampu mengaplikasikan teknologi dan peralatan yang berkaitan dengan representasi desain secara multi-dimensional (2D dan 3D), dalam pengembangan desain <i>Able to apply technology and equipment related to multi-dimensional (2D and 3D) design representation, in design development</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15%	
CLO-5	Mampu mengusulkan solusi terbaik dengan mengevaluasi alternatif-desain, melakukan tes dan menyempurnakan solusi untuk menyelesaikan masalah desain berdasarkan pertimbangan manufaktur, efisiensi produksi <i>Able to propose the best solution by evaluating design-alternatives, conducting tests and refining solutions to solve design problems based on manufacturing considerations, production efficiency</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20%	
CLO-6	Mampu membuat model dan prototype sebagai bahan studi dan simulasi operasional dan aktivitas <i>Able to make models and prototypes as study object, operational and activity simulations</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20%	
Total Weight		11%	11%	11%	6%	17%	6%	17%	17%	6%	100%	

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DP184625

Desain Produk 3

Product Design 3

7 credits

Coordinator: Drs. Taufik Hidayat, M.T.

Course Form :

Course Type : Tidak Ada

Minimum Passing Grade : C

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Assessment & Evaluation Plan

No.	Evaluation Plan	CLO-1	CLO-2	CLO-3	CLO-4	CLO-5	CLO-6	Total Weight
1	Pemenuhan Kebutuhan dan Masalah <i>Fulfillment of Needs and Problems</i> Studi Kasus Case Method	5%	0%	5%	0%	0%	0%	10%
2	Ketajaman Analisis Desain <i>Accuracy of Design Analysis</i> Kognitif - Tugas Cognitive - Assignment	0%	5%	0%	0%	2.5%	2.5%	10%
3	Inovasi Produk <i>Product Innovation</i> Kognitif - Tugas Cognitive - Assignment	5%	0%	0%	0%	2.5%	2.5%	10%
4	Mekanisme Sistem <i>System mechanism</i> Studi Kasus Case Method	0%	0%	2.5%	2.5%	2.5%	2.5%	10%
5	Material dan Struktur <i>Material and Structure</i> Studi Kasus Case Method	2.5%	2.5%	0%	2.5%	0%	2.5%	10%
6	Gambar Kerja dan Assembly <i>Drawing and Assembling</i> Kognitif - Tugas Cognitive - Assignment	0%	0%	2.5%	5%	2.5%	0%	10%
7	Struktur Laporan <i>Report Structure</i> Kognitif - Tugas Cognitive - Assignment	2.5%	2.5%	5%	0%	0%	0%	10%
8	Model/prototype <i>Model/prototype</i> Hasil proyek Team-based Project	0%	5%	0%	5%	10%	10%	30%
TOTAL		15%	15%	15%	15%	20%	20%	100%
Target		15%	15%	15%	15%	20%	20%	100%

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LO CLO Assessment & Evaluation Plan Lesson Plan

Lesson Plan

Weeknum	Course Material	Learning Method	
1	Kontrak kuliah, jadwal, aturan kuliah Despro 3 dan membuat usulan judul dengan premis, estetika, fungsi dan rekayasa <i>Lecture contract, schedule, course rules Despro 3 and make a title proposal with premise, aesthetics, function and engineering</i>	Metode SCL lainnya	 
2	Mencari data guna kelayakan dan mampu membuat identifikasi masalah, batasan, tujuan dan manfaat <i>Looking for data for feasibility and able to identify problems, limitations, goals and benefits</i>	Metode SCL lainnya	 
3	Membuat analisis-sintesis data-data survey dan produk eksisting <i>Make analysis-synthesis of survey data and existing products</i>	Case method	 
4	Membuat analisis-sintesis data dari hasil survei, sketsa awal dan studi bahan untuk model <i>Make data analysis-synthesis from survey, preliminary sketches and study materials for models</i>	Metode SCL lainnya	 
5	Membuat analisis-sintesis data desain terdahulu, dan produk pesaing setara <i>Perform analysis-synthesis of previous design data, and equivalent competitor products</i>	Metode SCL lainnya	 
6	Membuat gambar skala satu banding satu, dan mampu membuat beberapa komponen <i>Creates one-to-one scale drawings, and is able to create multiple components</i>	Metode SCL lainnya	 
7	Membuat eksplorasi sketsa ide dan alternatif desain <i>Making exploration of idea sketches and design alternatives</i>	Metode SCL lainnya	 
8	Membuat analisis-sintesis hasil perancangan; analisis aktifitas, komponen, konfigurasi, ergonomi <i>Make analysis-synthesis of the design results; activity analysis, components, configuration, ergonomics</i>	Metode SCL lainnya	 
9	Mengumpulkan tugas awal sampai studi prototipe <i>Collect initial assignments to prototype studies</i>	Metode SCL lainnya	 
10	Membuat alternatif dan penyempurnaan desain; material & struktur, join & mekanisme <i>Making design alternatives and improvements; materials & structures, joints & mechanisms</i>	Metode SCL lainnya	 
11	Membuat desain; detail & desain part, assembly, sub-assembly & production cost <i>Make designs; detail & part design, assembly, sub-assembly & production cost</i>	Metode SCL lainnya	 
12	Membuat gambar tampak lengkap dan potongan dan detail plus perspektif <i>Makes complete images from all views, snippet image and detail plus perspective</i>	Metode SCL lainnya	 
13	Membuat drawing: gambar part produk, detail dan urai <i>Making drawings; product part, details and explode view</i>	Metode SCL lainnya	 
14	Membuat presentation drawing: rendering tampak dan perspektif <i>Making presentation drawings; view rendering and perspective</i>	Metode SCL lainnya	 
15	Membuat presentation drawing: gambar operasional, gambar suasana dan portfolio <i>Making presentation drawings; operational drawings, environments and portfolios</i>	Metode SCL lainnya	 
16	Mengumpulkan seluruh tugas merancang despro 3 lengkap dalam pameran <i>Collect all complete Despro 3 tasks in the exhibition</i>	Non SCL	 

Bahasa Indonesia

English

Choose method ▾

