Syllabus
Course description

Course title	**Project Product Design 2a "ATELIERprojekte_WS23/24"**
Course code	97092
Scientific sector	Module 1: ICAR/13 Module 2: ICAR/13 Module 3: M-FIL/04
Degree	Bachelor in Design and Art (L-4)
Semester	Winter semester 2023/24
Year	3rd
Credits	19 (Module 1: 8 CP, Module 2: 6 CP, Module 3: 5 CP)
Modular	Yes

Total lecturing hours	180 (Module 1: 90, Module 2: 60, Module 3: 30)
Total hours of self-study and/ or other individual educational activities	295 (Module 1: about 110, Module 2: about 90, Module 3: about 95)
Attendance	not compulsory but recommended
Prerequisites	To have passed the WUP project and all the WUP courses; to have certified the language level proficiency B1 in the 3rd language in years following the first.
Maximum number of students per class	

Course description	*The course belongs to the class "caratterizzante" (module 1), "di base" (module 2) and "affine integrativa" (module 3) in the curriculum in Design.*
	Modul 1 – Produktdesign/ Product Design ITALIANO Un giovane designer che si avvicina alla realtà professionale non deve aspettare che un'azienda gli dia un incarico diretto, ma può proporre nuovi progetti di propria iniziativa. Tuttavia, deve avere le idee chiare e definire prima le proprie aree di interesse e il campo in cui vuole lavorare, nonché l'azienda con cui (teoricamente) vuole lavorare. Deve sviluppare una particolare sensibilità per comprendere le diverse filosofie/culture delle rispettive aziende e trovare "lacune" nelle collezioni esistenti.
	ATELIERprojekte_WS23/24 mira ad affinare queste competenze e ad affrontare il percorso necessario passo dopo passo: • definire il proprio campo di lavoro dopo un'attenta

ricerca nella variegata offerta di oggetti e servizi;
- capire come un'azienda costruisce una collezione, se e con quali designer collabora e come si presenta sul mercato;
- percepire le aree aperte che potrebbero ancora essere riempite nelle varie collezioni/cataloghi;
- definire un prodotto o un servizio concreto;
- visualizzarlo attraverso proporzioni, funzioni o modelli illustrativi;
- preparare una presentazione efficace, anche in forma scritta.

In ATELIERprojekte, gli studenti e le studentesse hanno il compito di definire il proprio tema e di svilupparlo nel corso del semestre. I punti di partenza possono essere i più disparati: dall'esplorazione degli spazi urbani alla reinterpretazione del proprio ambiente personale. In ogni caso, studenti e studentesse sono incoraggiati a osservare con occhio critico la realtà in cui vivono.

Questa forma di progetto molto aperta e libera è un esercizio di lavoro indipendente che richiede un'attenzione particolare nell'organizzazione del proprio lavoro nonché una buona e responsabile gestione del proprio tempo.

ENGLISH
Generally a young designer who approaches the reality of the profession is not forced to wait for a company to give him a direct assignment but can, on his own initiative, come forward proposing new projects.

However, he must have clear ideas and first of all identify his fields of interest and the sector in which he wishes to enter and then which companies he would like to collaborate with. He needs to develop a particular sensitivity to understand the different philosophies of the companies he is considering and to perceive the "gaps" within the existing collections.

ATELIERprojekte_WS23/24 aims to hone these skills and to tackle the necessary path step by step:
- to define one's own field of intervention after a careful;
- investigation into the world of objects and services that surround us;
- understand how a company builds a collection, if and with which designers it collaborates and how it presents itself on the market;
- perceive the "empty" spaces to fill in the collections/catalogues;
- think and define a concrete project or service;

- visualize it through models of proportion, function or mock-up;
- prepare an appropriate presentation, also in writing.

Each student will have the task of defining his or her own theme and developing it during the semester.
The points from which to start can be the most varied: from the exploration of urban spaces to the reinterpretation of one's own personal environment. In any case, students will be encouraged to take a critical look at the reality in which they live.

This very open and free form of project is an exercise in self-employment that requires particular attention to the organization of one's work and a good and responsible management of one's time.

Module 2 – Digital Modelling
ENGLISH
3D modelling and design is a language that connects a designer with his/her own ideas, at first, and later on, with an entire chain of designers, companies, and manufacturers. This means that a designer must be able to read, understand and write the rules of 3D design. Digital modeling is not just programming; it is something much broader: it is intrinsic to the design itself and strongly linked to every phase of the creative process. Through lectures, case studies, workshops and through a semester long exercise in biomimicry and digital fabrication, students will learn to model and materialize their ideas in a systematic, logic, and production-oriented way. The geometrical limitless nature of parametric design will provide them with not only a modelling tool, but a new way of thinking and producing products and systems.

Module 3 – Theories and languages of product design
DEUTSCH
Über die tägliche Arbeit von Designer*innen: Struktur, Strategie, Haltung (einschließlich Aspekte der Achtsamkeit und Verbundenheit)

In der täglichen Arbeit von Designer*innen müssen viele Aspekte und Aktivitäten berücksichtigt und umgesetzt werden, Tag für Tag. Die Universität lehrt in der Regel nicht die Aspekte der praktischen Notwendigkeiten - z.B. wie man auf potentielle Kunden zugeht, wie man realistische Kostenvoranschläge erstellt und anbietet, wie

	man sich in verschiedenen Marktsituationen bewegt, wie man mit "Pitches" (bezahlt, unbezahlt) umgeht, usw.

Eingebunden in das Projekt ATELIERprojekte bietet dieser Kurs sowohl Erkundungen und Antworten auf die genannten Fragen, als auch - parallel dazu - ein Schritt-für-Schritt-Programm zur professionellen Gestaltung von Prozessen.

About designers' daily work: structure, strategy, attitude (including aspects of attentiveness and connectedness)

In designers' daily work, a lot of aspects and activities have to be considered and realized, day by day. University usually doesn't teach those aspects of practical necessities – i.e. how to approach potential clients, how to prepare and offer realistic cost estimates, how to move in the middle of different market situations, how to deal with 'pitches' (paid, unpaid), and so on.

Integrated to the project ATELIERprojekte, this course offers both: explorations and answers to the mentioned questions, and – parallel to this – a step-by-step program regarding professional design process practices. |
| **Specific educational objectives** | **Knowledge and understanding**

Module 1
- have acquired their own project methodology in the field of product design. This methodology includes the ability to oversee all phases of design, from the generation of ideas to the realisation of the finished project. Through the integrated teaching of project subjects and subjects of a technical, scientific and theoretical nature, graduates will be able to simultaneously address all these aspects and consider them as synonymous with the development of a project that is successful on a formal, technical, scientific and cultural level.

Module 2
The course aims to provide all the necessary skills to deal autonomously with a project in the field of product design, paying particular attention to the real feasibility of the idea. It will provide the necessary skills to learn the language of digital modelling and how it interacts with the creative process of a designer. In addition, the technical knowledge necessary to communicate with the language of digital modelling will be acquired. |

	Module 3 The course is designed for acquiring professional skills and knowledge in the framework of a general overview of scientific contents. The main objectives are: • the acquisition of essential theoretical knowledge (related to theories and languages of product design) so as to be able to carry out a project in the field of product design • the acquisition of basic knowledge so as to be able to look critically at their own work and to deal with the complexities of contemporary society • the acquisition of basic knowledge concerning purposeful theoretical subjects in the field of the overarching project topic • the acquisition of basic knowledge concerning the culture of design with specific reference to product design • the ability to capture and analyse contemporary cultural and social phenomena that characterize design and art • a theoretical and socio-cultural education that aims to acquire a solid cultural background where technical media skills are combined with a theoretical reflection • the ability to developed a good independent judgment, both in the critical evaluation of their work and in the ability to use the appropriate interpretive tools with respect to the contexts where they are going to apply their own design practice and / or to continue their studies, assessing also social and ethical aspects • the ability to communicate at a professional level and argue the reasons for their choices and justify them from a formal, technical, scientific and theoretical point of view

Lecturer	**Module 1 – Product Design** Kuno Prey e-mail kuno.prey@unibz.it, tel. +39 0471 015 110, 335 29 69 67 webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/900-kuno-prey **Module 2 – Digital Modelling** Ofer Kristal e-mail ofer.kristal@unibz.it webpage https://www.unibz.it/it/faculties/design-art/academic-staff/person/49270-ofer-kristal **Module 3 – Theories and languages of product design** Hans Höger e-mail hans.hoeger@unibz.it tel. +39 0471/015194

	webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/891-hans-leo-hoeger
Scientific sector of the lecturer	**Module 1**: Kuno Prey: ICAR/13 **Module 2**: Ofer Kristal: / **Module 3**: Hans Höger: ICAR/13
Teaching language	**Module 1**: Italian **Module 2**: English **Module 3**: German
Office hours	**Module 1**: Mo – Tu: 12:00 – 14:00 by appointment; **Module 2**: Mo – Tu - Wed: 13:00 – 14:00 in order to avoid overlapping the exact time of the appointment will be arranged by email. **Module 3**: Wednesday 17 – 19 h
List of topics covered	**Module 1** Design of everyday objects for the home, office, person, travel, etc. Products to be produced in eco-sustainable materials that can be produced for the most part with production systems with low technological complexity. **Module 2** The course aims at establishing a functioning relation between research / analysis / sketching / digital modelling and digital fabrication. Main phases: - Research / analyze a natural object that presents a formal / behavioural logic. - Write / draw / sketch pseudo-codes to explain the logic. - Use visual scripting or 3D modelling (Rhino / Grasshopper) to explain the formal logic of the object. - Use visual scripting to model a "true representation" of the object. - Use any digital fabrication method to create a physical model (based on 3D model). - Translate the researched logical / behavioral patterns into an everyday item. - Use visual scripting to create your version of the item, incorporating the natural logic. - Use any digital fabrication method (3d printing, CNC, Milling, vacuum forming, etc.) to create a physical model (based on 3D model). **Module 3** The topics are organized along selected steps of design processes and professional day-by-day practices regarding, for instance: empathy (personal relationship to the project topic), inter- and transdisciplinarity (cultural engineering, storytelling), relevant examples / role models (context, character, content, methodology), WYSIWYG - What You See Is What You Get, impact of and quality in design projects.

Teaching format	Module 1 Project work in the atelier. Module 2 Lectures, exercises, workshops, case studies, tutorials, personal reviews Module 3 Lectures, seminars, exercises, group work

Expected learning outcomes	Disciplinary competence *Knowledge and understanding* - have acquired one's own project methodology in the field of product design, from the phase of planning to the phase of realisation of the project. - have acquired the basic practical and theoretical knowledge necessary to realise a project in the field of product design. - have acquired the basic knowledge to be able to turn a critical eye to their own work and to deal with contemporary complexity. - have acquired the basic knowledge necessary for further Master's studies in all components of project culture as well as in theoretical subjects. - have acquired the basic knowledge necessary for the design profession. *Applying knowledge and understanding* - plan, develop and realise a project in the field of product design. - use the basic knowledge acquired in the technical, scientific and theoretical fields to realise a mature project. - be able to finalize the creation of an accomplished project in the field of product design, thanks to the basic knowledge acquired in the practical and theoretical fields. - recognise the main phenomena of contemporary society, to observe them critically, also from an ethical and social point of view, and to elaborate appropriate solutions at the level of a design proposal/response. - make use of the skills acquired during the course of study in the event of continuing studies in a Master's degree programme in the field of product design and to develop them further.

	Transversal competence and soft skills
	Making judgements - Be able to make independent judgements for the purpose of developing their own design skills and in relation to all those decisions (technical, scientific and theoretical) that are necessary to bring a project to completion. - Be able to make independent judgements, both in the critical evaluation of their own work and in their ability to use the right interpretative tools in those design contexts in which they will work and/or continue their studies, also considering ethical and social aspects. *Communication skills* - Present an independently realised project in the field of product design in the form of an installation, orally as well as in writing in a professional manner. - to professionally communicate and substantiate one's own decisions and justify them from a formal and theoretical point of view. *Learning skills* - have learned a work methodology at a professional level - in the sense of being able to identify, develop and realise solutions to complex problems by applying the knowledge acquired in the practical and theoretical fields - in order to start a professional activity and/or continue their studies with a master's degree programme. - have developed a creative attitude and learned how to enhance it and develop it according to their own inclinations. - have acquired basic knowledge in theoretical andpractical subjects as well as a study methodology suitable for continuing studies with a master's degree programme. - have acquired basic knowledge in theoretical, technical and scientific subjects as well as a study methodology suitable for continuing studies with a Master's degree programme.
Assessment	**Module 1** Product Design presentation of the project: each candidate will present his work through graphic drawings, a model, photographs, a synthetic text and a concentrate of his work in a sixteenth. The design path, the final result and

all the materials delivered will be evaluated. The presentation of the project will be public.

Materials to be delivered: three days before the examination date the following documents must be delivered to the project assistant:

1. construction drawings;
2. model of proportions or functional model (possibly in 1: 1 scale);
3. Max. 3 photos that highlight the characteristics of the final elaborate format 10cm x 15cm, 72 dpi, RGB, jpg and 300 dpi, CMYK, tif;
4. short summary text where the final paper is presented (max 500 characters, doc or rtf);
5. the data need to be concentrated in a sixteenth in the A5 format of the design path and with the final result. The facsimile of the sixteenth will be delivered and explained to the students one month before the end of the project.

NB: The timely delivery of all the materials being examined is essential for admission to the exam itself.

Module 2
Digital modelling
The final assessment will be the result of work conducted during the whole semester. In particular the following will be evaluated:
• The ability to express ideas through technical representations (2D Tables – 3D models).
• The motivation and the commitment shown during the module and in the atelier.
• The spirit of observation and the curiosity displayed.
• The ability to develop functional ideas.
• The ability to self-create a methodical framework.

Materials to be delivered: three days before the examination date the following documents must be delivered:
- 3D Models / Codes
- 2D drawings
- Physical models
- Conceptual Sketches and Diagrams

Module 3
The exam is included as integral part in the final presentations concerning the project PD-2a with particular reference - on one hand - to those contents that have been explored, presented and discussed in the classroom and - on the other hand - to those ones documented in

	the digital Reserve Collection of "Theories and Languages of Product Design: Project 2a". The exams' evaluations will particularly focus onto the students' ability and originality concerning the integration of conceptual and theoretical topics and characteristics into their final presentations of the projects.
Assessment language	The same as the teaching language
Evaluation criteria and criteria for awarding marks	*By exam's date, each student must upload on the Microsite of the faculty detailed documentation of the work done during the course.* *http://portfolio.dsgn.unibz.it/wp-admin* *Documentation is an integral part of the exam. The documentation must include visual documentation and an abstract of the project.* The final assessment is based on the content of all the exercises according to the following criteria: **Module 1** Product Design The quality and clarity of the research, the creativity and the originality of the design concept, the quality and clarity of the design process, of the development and realization of the project such as the professionalism and consistency of the presentation and documentation. Also contributing to the final evaluation will be the initiative and the personal commitment in the atelier, in the research and the study and the participation in the project or the continuity, the attention and the curiosity demonstrated. **Module 2** Digital modelling - (15/100) Participation, punctuality, learning abilities. - (25/100) Ability to research, observe, analyse and create logic / conceptual links. - (25/100) Ability to express ideas through 3D models / 2D drawings. - (35/100) Quality of final submission **Module 3** - correctness of presented topics, concepts and theoretical contents/analysis/conclusions - clarity of presented topics, concepts and theoretical contents/analysis/conclusions - mastery of course-related language and terminology - demonstration of knowledge and understanding

	- ability to summarize, evaluate, and establish relationships between topics (ability of contextualization) - skills in critical thinking - ability to summarize in own words

Required readings	**Module 1**: - **Module 2**: - **Module 3**: Michele De Lucchi, *My horrible wonderful clients,* Quodlibet Habitat, Macerata 2015 Alice Rawsthorn, *Design as an Attitude,* JRP/Ringier, Zurich 2018 Alex Newson, Eleanor Suggett, Deyan Sudjic, *Designer Maker User,* the DESIGN MUSEUM / Phaidon, London 2016
Supplementary readings	**Module 1:** - **Module 2:** Arturo Tedeschi, *My AAD – Algorithms Aided Design: Parametric Strategies Using Grasshopper,* Le Penseur Publisher, Brienza 2014 Carlos Alberto Montana Hoyos, *Bio-ID4S: Biomimicry in Industrial Design for Sustainability,* VDM Verlag, Brienza 2010 **Module 3:** Peter Erni, Martin Huwiler, Christophe Marchand, *Transfer,* Lars Müller Publishers, Baden 2008