

-> [*Syllabus in lingua italiana*](#)

Syllabus Course description

Course title	Project PD – A1 L’Acqua
Course code	97103
Scientific sector	Module 1: ICAR/13 disegno industriale Module 2: INF/01 informatica Module 3: M-DEA/01 discipline demoetnoantropologiche
Degree	Bachelor in Design and Art (L-4)
Semester	I
Year	1st, 2nd or 3rd
Credits	22
Modular	Yes

Teaching language	Module 1: Italian Module 2: English Module 3: English
Total lecturing hours	180 (Module 1: 90, Module 2: 60, Module 3: 30)
Total hours of self-study and / or other individual educational activities	370 (Module 1: about 210, Module 2: about 65, Module 3: about 95)
Attendance	not compulsory but recommended
Prerequisites	<i>For students enrolled from 2012/13 onwards: passed WUP courses (warm up project + descriptive geometry + methods and techniques of representation); for students enrolled from 2016/17 onwards: passed WUP project;</i>
Course page	-

Project description and specific educational objectives	<p>The course belongs to the class “caratterizzante” (module 1, “di base” (module 2) and “affine integrativa” (module 3) in the curriculum in Design.</p> <p>PROJECT DESCRIPTION <i>Course description module 1 – Product Design:</i></p> <p>Some actions related to water: Drinking, collecting, transporting, purifying, accumulating, evaporating, producing energy with ... and many more. Water is the element we are mostly made of. It is the founding element of life on earth. Water is a formidable starting point for thinking of a contemporary and necessary project, because we are talking about a timeless and always necessary, crucial element. Making Design today means getting in touch with the urgent macro-themes that govern the world and</p>
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water more than any other is and will be "the theme".

Educational objectives module 1 – Product Design:

- the acquisition of a design methodology in the field of product design
- the development of an independent and rigorous study pathway
- the acquisition of the essential basic knowledge to be able to carry out a project in the field of product design
- the acquisition of a design methodology in the field of product design from the initial idea phase to the final completion phase of the project
- the acquisition of the knowledge and understanding of:
 - ✓ design processes for industrial products for mass consumption
- the acquisition of the basic knowledge concerning the culture of design in all its aspects

Course description module 2 – Digital Modelling:

The course will address digital modelling and digital fabrication techniques from CAD to CAM, through lectures and exercises (learning by doing). It will concentrate on how innovation can occur in experimental design practices through using digital technologies and making shifts between analog and digital. The course will ask students to experiment with the digital modeling and fabrication tools in their creative process.

Besides fundamental knowledge about digital modeling and digital fabrication, the course will guide students to explore the theme "water" through case-studies based on digital means.

Educational objectives Module 2 – Digital Modelling:

- the acquisition of the essential basic knowledge to be able to carry out a project in the field of product design from idea to final prototyping through the use of digital modelling and digital fabrication techniques.
- the acquisition of the basic knowledge concerning the technical and scientific subjects in the field of product design with a special focus on digital modelling and fabrication.
- the acquisition of the knowledge and understanding

	<p>of design processes for the visualisation of virtual and physical scenarios and models.</p> <ul style="list-style-type: none"> • the acquisition of the basic knowledge concerning the culture of design in all its aspects • the acquisition of the knowledge and understanding of design processes starting from two-dimensional forms to more complex three-dimensional forms. • the acquisition of the knowledge and understanding of analysing, designing and developing: <ul style="list-style-type: none"> - industrial projects for mass consumption - limited edition products in the craft industry <p><i>Course description module 3 – Cultural Anthropology:</i> The course will introduce students the anthropological study related to water with the final aim to produce a narrative around a product which will be able to take into account the complexities of contemporary society. The course will also introduce students to basic anthropological theory and method in order to generate ideas and test hypothesis against a cultural background.</p> <p><i>Educational objectives module 3 – Cultural Anthropology:</i></p> <ul style="list-style-type: none"> • the acquisition of the essential basic knowledge to be able to carry out a project in the field of product design • the acquisition of the 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 the basic knowledge concerning the cultural anthropology • the acquisition of the basic knowledge concerning the culture of design in all its aspects
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Module 1	Product Design
Lecturer	Francesco Faccin office F2.01.a, e-mail francesco.faccin@unibz.it, tel. +39 0471 015323, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37158-francesco-alessandro-faccin
Scientific sector of the lecturer	-
Teaching language	Italian
Office hours	Monday 13-19 Tuesday 9-18
Teaching assistant (if any)	-
Office hours	-
List of topics covered	Understanding of the topic Turning the general topic into a personal briefing method from research to a final product

	<p>Creating a concept Transforming a concept into a product How to present a concept or a product in a convincing way prototyping the idea</p>
Teaching format	Lectures,micro-workshop,practical and theoretical,exercises,discussions

Module 2	Digital Modelling
Lecturer	<p>Seçil Uğur Yavuz, office F2.01.b, Secil.UgurYavuz@unibz.it, tel. +39 0471 015311, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/36117-secil-ugur-yavuz</p>
Scientific sector of the lecturer	ICAR/13
Teaching language	English
Office hours	Monday 09-18 Tuesday 9-18 Wednesday 9-18
Teaching assistant (if any)	-
Office hours	-
List of topics covered	<p>Product design / 3D Modeling / Digital fabrication (subtractive – additive) / makers movement / physical computing / Industrial design / technology and crafts / rapid prototyping / Digital design / Computational design / parametric design</p>
Teaching format	Frontal lectures, exercises, discussions, workshops

Module 3	Cultural Anthropology
Lecturer	<p>Roberta Raffaetà office F2.01.b, e-mail Roberta.raffaeta@unibz.it, tel. +39 0471 015336, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37243-roberta-raffaeta</p>
Scientific sector of the lecturer	-
Teaching language	English
Office hours	Monday 14-16; Tuesday 11-13
Teaching assistant (if any)	-
Office hours	-
List of topics covered	<p>We will consider water in its socio-cultural aspects, as object of contention in global processes in contemporary world and we will review the meaning assigned to it by diverse people around the world, including indigenous people. Students will be also introduced to basic knowledge of anthropological theory and method.</p>
Teaching format	Labs ad workshops

Learning outcomes	<i>Learning outcomes for module 1 – Product Design:</i>
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- to have the ability to design, develop and implement a project in the field of product design
- know how to analyze, design and develop industrial projects for mass consumption
- know how to analyze, design and develop projects for the mechanical engineering industry
- know how to analyze, design and develop limited edition products in the craft industry
- know how to analyze, design and develop packaging projects from a product design and graphical perspective
- knowledge of the technical and scientific aspects of interior design
- knowledge of the technical and scientific aspects of the design of industrial products for mass consumption
- knowledge of the technical and scientific aspects of the design in the mechanical engineering industry
- knowledge of the technical and scientific aspects of the design of packaging
- know how to carry out packaging projects from a product design perspective
- present at a professional level their own projects realized in the field of product design in the form of an installation, both oral and written
- communicate at a professional level and argue the reasons for their choices and justify them from a formal, technical point of view

Learning outcomes for module 2 – Digital Modelling:

- to have the ability to finalize the implementation of a project undertaken in the field of product design with the basic knowledge acquired in digital modeling and digital fabrication.

Knowledge and understanding:

- know how to analyze, design and develop industrial projects for mass consumption
- know how to analyze, design and develop limited edition products in the craft industry
- knowledge of the technical and scientific aspects of the design of industrial products for mass consumption
- knowledge of the technical and scientific aspects in the design of visualizations of virtual and physical scenarios and models.
- know how to produce visualizations of virtual and physical scenarios of product design
- know how to produce 3D models and rapid prototyping

- know how to carry out drawing and/or CAD
- know how to carry out the design process and its steps in the new product development based on digital technologies.
- Know how to choose and utilize materials, digital fabrication tools and computer softwares in product design process.
- Know how to coordinate the prototyping phase from 2D drawing to prototyping.
- Communicate at a professional level and argue the reasons for their choices and justify them from a formal, technical point of view.
- Gain the ability to present, ideas, concepts and a final model in the best understandable and convincing way.

Learning outcomes for module 3 – Cultural Anthropology:

- to have the ability to finalize the implementation of a project undertaken in the field of product design with the basic knowledge acquired in the theoretical subjects
- to have the ability to grasp the main phenomena that characterize today's society and to know how to look at these critically, also from a social and ethical perspective, and to develop appropriate solutions in terms of the proposal / response of the project
- knowledge of the important sociological, semiotic and anthropological aspects
- know how to apply methods of empirical research in the socio-cultural sciences
- know how to present critical and planning analysis orally
- know how to present written critical and planning analysis
- know how to apply the research methods and results in the project to the various areas of the project itself
- develop 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 the social and ethical aspects
- communicate at a professional level and argue the reasons for their choices and justify them from a theoretical point of view

<p>Assessment</p>	<p><i>Assessment details for module 1 – Product Design:</i></p> <p>The final exam consist of a documentation of the project developed during the semester. The student is asked to present the project with the following documentation:</p> <ul style="list-style-type: none"> . screen presentation . complete printed documentation of the project (a booklet will be handed at the faculty secretariat the day before the exam .a model . material that will be defined with the students during the course <p><i>Assessment details for module 2 – Digital Modelling:</i></p> <p>Students will be asked to document their design process of each assigned exercise. Discussions will be done for each exercise based on a short presentation that reflects a synthesis of the skills learned through the Digital Modelling Module.</p> <p><i>Assessment details for module 3 – Cultural Anthropology:</i></p> <p>Development of an anthropology booklet where students will have to describe the social-anthropological significance of their project</p>
<p>Assessment language</p>	<p>The same as the teaching language</p>
<p>Evaluation criteria and criteria for awarding marks</p>	<p>The evaluation of the single modules does not result in three separate marks, but will add up to the overall project evaluation. There is only one final overall mark for the project which is agreed by the three professors, who evaluate the project according to the following criteria:</p> <p><i>Evaluation criteria and criteria for awarding marks for module 1 – Product Design:</i></p> <p>Process and implementation of the project Relation and understanding of the given brief Final object or research Model Presentation</p> <p><i>Evaluation criteria and criteria for awarding marks for module 2 – Digital Modelling:</i></p> <p>Students will be evaluated on the ability of using the 3D modelling and digital fabrication skills learned through lectures and exercises.</p>

	<p><i>Evaluation criteria and criteria for awarding marks for module 3 – Cultural Anthropology:</i></p> <p>The quality and depth of students’ engagement with the socio-anthropological aspects of their product will be evaluated</p>
<p>Required readings</p>	<p><i>Module 1 – Product Design:</i></p> <p>-</p> <p><i>Module 2 – Digital Modelling:</i></p> <p>-</p> <p><i>Module 3 – Cultural Anthropology:</i></p> <p>-</p>
<p>Supplementary readings</p>	<p><i>Module 1 – Product Design:</i></p> <p>-</p> <p><i>Module 2 – Digital Modelling:</i></p> <ul style="list-style-type: none"> • Lipson, H. and Kurman, M. (2013) Fabricated: The New world of 3D Printing, John Wiley & Sons Inc • Troika (2008) Digital by design: crafting technology for products and environments, Thames& Hudson. • Johnston L. (2015) Digital Handmade Craftsmanship and the New Industrial Revolution, Thames& Hudson. <p><i>Module 3 – Cultural Anthropology:</i></p> <p>-</p>

Syllabus

Descrizione del corso

Titolo del corso	PROGETTO PD – A2 L'Acqua
Codice del corso	97103
Settore scientifico disciplinare del corso	Modulo 1: ICAR/13 disegno industriale Modulo 2: INF/01 informatica Modulo 3: M-DEA/01 discipline demoeotnoantropologiche
Corso di studio	Bachelor in Design and Art (L-4)
Semestre	I
Anno del corso	I, II o III
Crediti formativi	22
Modulare	Si
Numero totale di ore di lezione	180 (Modulo 1: 90, Modulo 2: 60, Modulo 3: 30)
Monte ore totale di studio individuale o di altre attività didattiche individuali inerenti	370 (Modulo 1: circa 210, Modulo 2: circa 65, Module 3: circa 95)
Corsi propedeutici	<i>Per studenti immatricolati a partire dall'a.a. 2012/13: avere superato i corsi wup (progetto + geometria descrittiva + metodi e tecniche di rappresentazione); per gli studenti immatricolati a partire dall'a.a. 2016/17: aver superato il progetto wup.</i>
Frequenza	non obbligatoria ma raccomandata
Sito web del corso	-
Descrizione progetto ed obiettivi formativi specifici: modulo 1 – product design	<p>Il corso si inserisce nell'area di apprendimento dei corsi "caratterizzante" (modulo 1), "di base" (modulo 2) e "affini integrativa" (modulo 3) del curriculum in design.</p> <p>DESCRIZIONE DEL PROGETTO <i>Descrizione del corso modulo 1 – product design</i></p> <p>Alcune azioni legate all'acqua: Bere, raccogliere, trasportare, depurare, accumulare, far evaporare, produrre energia con...e molti altre ancora. L'acqua è l'elemento di cui siamo fatti in gran parte. E' l'elemento fondante della vita stessa sulla terra. L'acqua è un punto di partenza formidabile per pensare ad un progetto contemporaneo e necessario, perchè parliamo di un elemento senza tempo e sempre necessario, cruciale. Fare Design oggi significa essere in contatto con i macro-temi urgenti che governano il mondo e l'acqua più di ogni altro è e sarà "Il tema".</p>

	<p>Obiettivi formativi modulo 1 – product design:</p> <ul style="list-style-type: none"> • acquisire una metodologia progettuale nel campo del design di prodotto • sviluppo di un percorso autonomo e rigoroso • acquisire le conoscenze di base necessarie alla realizzazione di un progetto nel campo del design di prodotto • acquisire una metodologia progettuale nel campo del design di prodotto, dalla fase di ideazione alla fase di realizzazione del progetto • acquisire la conoscenza e comprensione dei: • acquisizione delle conoscenze di base relative alla cultura di progetto in tutte le sue componenti
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Modulo 1	Product design
Docente	Francesco Faccin office F2.01.a, e-mail francesco.faccin@unibz.it, tel. +39 0471 015323, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37158-francesco-alessandro-faccin
Settore scientifico disciplinare del docente	-
Lingua ufficiale del corso	Italiano
Orario di ricevimento	Lunedì 17-18
Collaboratore didattico (se previsto)	-
Orario di ricevimento	-
Lista degli argomenti trattati	.L'Acqua e l'antropologia .L'Acqua e il design .Il design oltre l'industria
Attività didattiche previste	Lezioni frontali Video e film Conferenze skype con esperti Esperimenti

Modulo 2	-> vedi syllabus in lingua inglese
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Modulo 3	-> vedi syllabus in lingua inglese
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Risultati di apprendimento attesi	<p>Risultati di apprendimento attesi relativi al modulo 1 – product design:</p> <ul style="list-style-type: none"> • essere in grado di ideare, sviluppare, realizzare un progetto nel campo del design di prodotto • sapere analizzare, ideare e sviluppare progetti di
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	<p>arredamento</p> <ul style="list-style-type: none"> • sapere analizzare, ideare e sviluppare progetti industriali per il consumo di massa • sapere analizzare, ideare e sviluppare progetti per l'industria meccanica • sapere analizzare, ideare e sviluppare prodotti in serie limitata nell'ambito dell'artigianato • sapere analizzare, ideare e sviluppare progetti d'imballaggio nei suoi aspetti di prodotto e di grafica • sapere analizzare, ideare e sviluppare progetti curatoriali ed espositivi • conoscenza degli aspetti tecnico-scientifici del design di arredamento • conoscenza degli aspetti tecnico-scientifici del design di prodotti industriali di consumo di massa • conoscenza degli aspetti tecnico-scientifici del design per l'industria meccanica • conoscenza degli aspetti tecnico-scientifici del design per il packaging • sapere realizzare progetti d'imballaggio nei suoi aspetti di prodotto e di grafica • sapere realizzare visualizzazioni di scenari virtuali e fisici per il design degli interni ed espositivi • presentare ad un livello professionale un proprio progetto realizzato nel campo del design di prodotto, della comunicazione visiva e/o delle arti visive in forma di installazione, oralmente e scritto • comunicare e argomentare ad un livello professionale le ragioni delle proprie scelte e motivarle dal punto di vista formale, tecnico, scientifico e teorico
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<p>Metodo d'esame</p>	<p><i>Metodo d'esame relativo al modulo 1 – product design:</i></p> <p>Lo studente dovrà presentare il risultato del proprio lavoro con una piccola discussione verbale e mostrando modelli e tavole di progetto.</p>
<p>Lingua dell'esame Criteri di misurazione e criteri di attribuzione del voto</p>	<p>corrisponde alla lingua d'insegnamento</p> <p><i>La valutazione dei singoli moduli non costituisce un voto a sé stante, ma è parte integrante della votazione complessiva del progetto. Il voto finale del progetto è unico ed è definito sulla base del coordinamento tra i tre docenti che valutano il progetto secondo questi criteri:</i></p> <p><i>Criteri di misurazione e criteri di attribuzione del voto relativi al modulo 1 – product design:</i></p>

	<ul style="list-style-type: none"> • capacità analitica e di osservazione dello studente • completezza e coerenza delle idee progettuali • chiarezza nel presentare il processo che ha condotto alle scelte progettuali • caratteristiche tecnico-formali degli elaborati
Bibliografia fondamentale	<i>Modulo 1 – product design:</i> -
Bibliografia consigliata	<i>Modulo 1 – product design:</i> -