Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

eine-> *Syllabus in lingua italiana*
-> *Syllabus in deutscher Sprache*

Syllabus
Course description

Course title	**Project PD – D1** **metallica**
Course code	97109
Scientific sector	Module 1: ICAR/13 disegno industriale Module 2: ING-IND/16 tecnologie e sistemi di lavorazione Module 3: M-FIL/05 filosofia e teoria dei linguaggi
Degree	Bachelor in Design and Art (L-4)
Semester	I
Year	1st, 2nd or 3rd
Credits	22
Modular	Yes

Teaching language	Module 1: German Module 2: English Module 3: Italian
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	*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;
Course page	

Project description and specific educational objectives	The course belongs to the class "caratterizzante" (module 1), "affine integrativa" (module 2) and "di base" (module 3) in the curriculum in Design. **PROJECT DESCRIPTION** ***Course description module 1 – Product Design*** **metallica**

	The objective of the course is to explore different production processes of metal working - hammering, cold-pressing, cold-spinning, slip casting, forging,metal turning, electroplating - and implement them creatively in the design process of the objects, which will be developed during the semester. The working methodology of the course is experienced based: experimental metal working in the workshop of the University, research trips to various production sites (industrial metal production, jewellery, bronze foundry) in South Tyrol and Lombardia - all this will support the students in the research of their individual project. Besides the individual project development, that will be accompanied in one2one tutorials and which content emerges from the selected production methodology, the course starts with a Workshop where objects *all around the desk* (pencil holder, pencil sharpener) will be produced. The brief for this initial Workshop is that the object needs to be 90% out of metal, the production costs lower than 5 Euros and productions site is the workshop of the University. ***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 the basic knowledge concerning the cultural of design in all its aspects ● 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 in the field of interior design ✓ design processes for industrial products for mass consumption ✓ design processes for the visualization of virtual and physical scenarios • the acquisition of the basic knowledge concerning the culture of design in all its aspects • present at a professional level the own project • communicate at a professional level and argue the reasons for the choice and justify them from a formal and technical point of view ***Course description module 2 – Production Technologies and Systems:*** The course is based on the intersection of two teaching methodologies: The first is linear and is focus on the basic and preparatory fields for the students growth plan, the second is open, horizontal and organized through a series of collective experience, researches and experiments. ***Educational objectives module 2 – Production Technologies and Systems:*** • 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 clear view of a production process, from self-production to industrial production • the acquisition of basic knowledge on materials from lessons but more important from practical experience on labs and workshops which we wil organize during the semester. • the acquisition of the basic knowledge concerning the technical and scientific subjects • the acquisition of process importance in design from a single object production to mass products. • the acquisition of the environmental impact of every product in contemporary world and the importance to be aware of this since the design process • the acquisition of a complete overview of world best design object produced, through a critical

	analysis on their production. • the acquisition of the basic knowledge concerning the culture of design in all its aspects ***Course description module 3 – Theories and Languages of Product Design:*** The object of the course is the acquisition of awareness toward the designer's work. We will present some useful tools such as: - semiotics of the objects - historical development of models in design - anthropological and historical research on the material which is object of the course (metals) We foresee also a basic introduction to Arduino, aimed to product engineering. ***Educational objectives module 3 – Theories and Languages of Product Design:*** • to acquire basic knowledge on design models • the acquire basic knowledge on semiotics applied to the meaning of design • the acquisition of awareness toward cultural diversity • the acquisition of basic knowledge on Arduino and Design engineering

Module 1	**Product Design**
Lecturer	Harald Thaler office F1.06.a, e-mail Harald.Thaler@unibz.it, tel. +39 0471 015330, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37152-harry-thaler
Scientific sector of the lecturer	-
Teaching language	German
Office hours	Monday, Tuesday
Teaching assistant (if any)	-
Office hours	-
List of topics covered	product design, industrial design, interior design, experimentation with metal working, self-production of

	serial products
Teaching format	frontal lectures in product design, labs, exercises, site visits - industrial companies and craft, one2one tutorials

Module 2	**Production Technologies and Systems**
Lecturer	Alessandro Mason office F1.06.b, e-mail alessandro.mason@unibz.it , tel. +39 0471 015105, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37721-alessandro-mason
Scientific sector of the lecturer	-
Teaching language	English
Office hours	To be agreed via mail
Teaching assistant (if any)	-
Office hours	-
List of topics covered	Technologies for industrial, craft and self-production, with classic and new materials, using traditional and new production systems.
Teaching format	Frontal lectures, exercises, labs, projects, workshops.

Module 3	**Theories and Languages of Product Design**
Lecturer	Francesco Galofaro office F1.06.b, e-mail francesco.galofaro@unibz.it , tel. +39 0471 015324, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37172-francesco-galofaro
Scientific sector of the lecturer	- M-FIL 05
Teaching language	Italian
Office hours	Wednesday, 11.00 - 12.30
Teaching assistant (if any)	-
Office hours	-
List of topics covered	– Meaning and technical objects: history, anthropology, semiotics; – Models of design process; – Tradition and innovation; – Metals and culture diversity;
Teaching format	Frontal lesson: introduction to historical, anthropological and semiotic problems related to the material (metal) which is the object of the stutents' project. Collective research on the topic of the course; Documentation of the project with references to the readings of the reserve collection;

Learning outcomes	***Learning outcomes for module 1 – Product Design:*** • to have the ability to design, develop and implement a project in the field of product design • design, develop and implement a project in the field of product design • know how to analyze, design and develop interiors • 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 • know how to analyze, design and develop projects concerning museums and exhibitions • 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 and graphical perspective • know how to produce visualizations of virtual and physical scenarios for interior and exhibition design • present at a professional level their own projects realized in the field of product design, visual communication and / or visual arts 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 – Production Technologies and Systems:*** • 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 technical and scientific subjects • to have the ability to clear understand a "production path" and focus on that trying to use and be aware of the best technology or process from craft to digital fabrication to industrial process • know how to analyze, design and develop interiors • 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 design in the mechanical engineering industry • know how to analyze, design and develop packaging projects from a product design and graphical perspective • communicate at a professional level and argue the reasons for their choices and justify them from a formal, technical point of view • know how to work in group with other designer or multi-dishiplinar team • ***Learning outcomes for module 3 – Theories and Languages of Product Design:*** • 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 historical and theoretical

	foundations of design • knowledge of the important sociological, semiotic and anthropological aspects • know how to analyze (critically), define and contextualize their projects • 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

Assessment	***Assessment details for module 1 – Product Design:*** The exam consists of 2 parts: /final presentation of the project /documentation of the final project the presentation is public. The student is asked to present his/her project followed by questions in regards to his/her project as well as to general knowledge of the subject and design topics discussed. ***Assessment details for Module 2 – Production Technologies and Systems:*** Oral exam on the project and on the experimentations accomplished during the course for the exercises. ***Assessment details for module 3 – Theories and Languages of Product Design:***

	– Active partecipation to lessons and discussion; – Presentation of individual contributions to the class; – Documentation of the project – In the documentation, references to the readings of the cours (Reserve collection)
Assessment language	The same as the teaching language
Evaluation criteria and criteria for awarding marks	*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*: ***Evaluation criteria and criteria for awarding marks for module 1 – Product Design*** concept and final object process and implementation of the project relation and understanding of the given brief sketches and models ***Evaluation criteria and criteria for awarding marks for module 2 – Production Technologies and Systems:*** Process and development of the project. Environmental impact. Ability to experiment. Quality of the final product and of the production of the prototypes, ability to explain the design process and production. ***Evaluation criteria and criteria for awarding marks for module 3 – Theories and Languages of Product Design:*** – Active partecipation to lessons and discussion; – Presentation of individual contributions to the class; – Documentation of the project – In the documentation, references to the readings of the course (Reserve collection)

Required readings	***Module 1 – Product Design:*** - **Module 2 – Production Technologies and Systems:**

	-Chris Lefteri MAKING, manufacturing techniques for product design, Laurence king publishing **Module 3 – Theories and Languages of Product Design:** -See Reserve Collection
Supplementary readings	***Module 1 – Product Design:*** See Reserve Collection ***Module 2 – Production Technologies and Systems:*** - Making It: Manufacturing Techniques for Product Design, Chris Lafteri, London, 2012 ***Module 3 – Theories and Languages of Product Design:*** – Michela Deni, Oggetti in azione, Franco Angeli, Milano, 2002 – Jean-Marie Floch, Visual Identities, Continuum, Bloomsbury, 2000, pp. 145-170 – Dario Mangano, Semiotica e design, Carocci, Roma, 2008, pp. 9-77 – Alvise Mattozzi, "A model for the semantic analysis of objects", in S. Vihma e T. Karjalainen (eds.), Design Semiotics in Use. Helsinki University of Art and Design Press. Helsinki, 2009, pp. 40-68 – Banzi, Shiloh, Arduino: la guida ufficiale. Milano: Tecniche nuove, 2015. – Banzi, Shiloh, Make: Getting Started with Arduino, 3rd Edition, Maker Media inc. 2014.

Syllabus
Beschreibung der Lehrveranstaltung

Titel der Lehrveranstaltung	**Projekt PD – D1** **metallica**
Code der Lehrveranstaltung	97109
Wissenschaftlich-disziplinärer Bereich der Lehrveranstaltung	Modul 1: ICAR/13 Industriedesign Modul 2: ING-IND/16 Technologie und Verarbeitungssysteme Modul 3: M-FIL/05 Sprachphilosophie und Sprachtheorien
Studiengang	Bachelor in Design und Künste (L-4)
Semester	1.
Studienjahr	1., 2. oder 3.
Kreditpunkte	22
Modular	Ja

Gesamtanzahl der Vorlesungsstunden	180 (Modul 1: 90, Modul 2: 60, Modul 3: 30)
Gesamtanzahl der Stunden für das Eigenstudium und andere individuelle Bildungstätigkeiten	370 (Modul 1: ca. 210, Modul 2: ca. 65, Modul 3: ca. 95)
Anwesenheit	nicht verpflichtend, aber empfohlen
Voraussetzungen	*Für ab dem ak. Jahr 2012/13 immatrikulierte Studierende:* die WUP-Kurse (Projekt + Darstellende Geometrie + Darstellungsmethoden und –techniken); *Für ab dem ak. Jahr 2016/17 immatrikulierte Studierende:* WUP-Projekt
Link zur Lehrveranstaltung	-

Spezifische Bildungsziele	*Die Lehrveranstaltung zählt zum Bildungsbereich der kennzeichnenden Fächer (Modul 1), der verwandten und ergänzenden Fächer (Modul 2) sowie der Grundfächer (Modul 3).* ***Kursbeschreibung Modul 1 – Produktdesign:*** **metallica**

	Ziel des Kurses ist es verschiedene Produktionsverfahren der Metallverarbeitung - Giessen, Schmieden, Metalldrücken, Metallwickeln, Drehen, Kaltpressen, Warmpressen und andere - zu erkunden und diese Prozesse in der Gestaltung der Produkte, die während des Semesters entwickelt werden, kreativ anzuwenden. Die Arbeitsmethode des Kurses ist praxisnahe, neben dem Experimentieren in der Metallwerkstatt der Universität, werden im Laufe des Semesters zwei Exkursionen angeboten, die die Studentinnen in der Recherchearbeit unterstützten. Besichtigt werden Produktionsstätten der Metallverarbeitung (z.B. Stahlproduktion, Bronzegiesser, Goldschmied und andere), in Südtirol und in der Lombardei. Parallel zum individuellen Projekt, welches sich inhaltlich an der Präferenz des metallischen Produktionsverfahrens anlehnt und regelmäßig in one2one tutorials betreut wird, gibt es zu Semesterbeginn einen Workshop, wo Produkte *everything around the desk* (z.B. Füller, Spitzer…) in Kleinserie produziert werden. Die Richtlinien für diesen Workshop sind, dass das Objekt zu 90% aus Metall besteht, die Produktionskosten nicht höher sind als 5 Euro und alles in den Werkstätten der Universität Bozen hergestellt wird. ***Bildungsziele Modul 1 – Produktdesign:*** ● Erwerb einer Projektmethodologie im Bereich des Produktdesigns ● Entwicklung einer individuellen und eigenständigen Arbeitsweise in den Projekten ● Erwerb von Grundkenntnissen zur Realisierung eines Projekts im Bereich Produktdesign ● Erwerb von Grundkenntnissen bezüglich einer Projektkultur im Design in allen ihren Bestandteilen ● Erwerb einer Projektmethodologie im Bereich des Produktdesigns, von der Ideenfindung bis zur Realisierung des Projekts.

	● Erwerb des Fachwissens und der Fertigkeiten für das: ✓ Einrichtungsdesign ✓ Design von industriellen Massenkonsumgütern ✓ Design für die mechanische Industrie ✓ Design zur Visualisierung virtueller und physischer Szenarien ✓ Design im Verpackungswesen ● Erwerb von Grundkenntnissen einer Projektkultur im Design in allen ihren Teilen ● Erwerb einer professionellen Kommunikation und Präsentation der individuellen Projekte ● Erwerb einer kritischen Auseinandersetzung mit dem ausgewählten Thema

Modul 1	**Produktdesign**
Dozent	Harald Thaler office F1.06.a, e-mail Harald.Thaler@unibz.it, tel. +39 0471 015330, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37152-harry-thaler
Wissenschaftlich disziplinärer Bereich des Dozenten	ICAR/13
Unterrichtssprache	Deutsch
Sprechzeiten	Montag, Dienstag
Wissenschaftlicher Mitarbeiter *(wenn vorgesehen)*	-
Sprechzeiten	-
Auflistung der behandelten Themen	Produktdesign, Industriedesign, Methoden der Metallverarbeitung, everything around the desk
Unterrichtsform	Vorlesung in Produktdesign, Laboratorien, Übungen, Besichtigung Produktionsstätten, one2one-tutorials

Modul 2	-> siehe Syllabus in englischer

Modul 3	-> siehe Syllabus in englischer und italienischer Sprache

Erwartete Lernergebnisse	***Erwartete Lernergebnisse für Modul 1 – Produktdesign:***

	● In der Lage zu sein, ein Projekt im Bereich Produktdesign zu konzipieren, zu entwickeln und auszuführen
	● Konzeption, Entwicklung und Realisierung eines Projekts im Bereich Produktdesign
	● In der Lage zu sein:
	  ● Einrichtungsprojekte analysieren, konzipieren und entwickeln zu können
	  ● kommerzialisierbare Industrieprojekte analysieren, konzipieren und entwickeln zu können
	  ● Projekte für die mechanische Industrie analysieren und entwickeln zu können
	  ● Produkte in beschränkter Stückzahl im Bereich des Handwerks analysieren, konzipieren und entwickeln zu können
	  ● Verpackungsprojekte (Produkt und Grafik) analysieren, konzipieren und entwickeln zu können
	  ● Kuratorien Projekte und Ausstellungsprojekte analysieren, konzipieren und entwickeln zu können
	● Kenntnisse der technisch-wissenschaftlichen Aspekte:
	  ● des Einrichtungsdesigns
	  ● des Designs von Industrieprodukten für den Massenkonsum
	  ● des Designs für die mechanische Industrie
	  ● des Designs für das Verpackungswesen
	  ● Verpackungsprojekte bezogen auf ihre Produkte und ihre graphische Aufmachung realisieren zu können
	  ● Visualisierungen virtueller und physischer Szenarien für das Interieur-und Ausstellungsdesign realisieren zu können
	● In professioneller Weise ein eigenes Projekt im Bereich des Produktdesigns, der Visuellen Kommunikation und/oder der Visuellen Künste in Form einer räumlichen Installation, sowie mündlich und schriftlich vorstellen zu können.
	● In professioneller Weise die Gründe der eigenen Entscheidungen kommunizieren und argumentieren und sie unter formellem, technischem, wissenschaftlichem und theoretischem Gesichtspunkt begründen zu können.

Art der Prüfung	***Art der Prüfung – Modul 1 –Produktdesign:*** Die Prüfung besteht aus den folgenden Teilen: /Finale Präsentation des Projektes

	/Eine Dokumentation des finalen Projektes Die Präsentation ist öffentlich. Der/die Student/in muss sein/ihr Projekt präsentieren und anschliessend erläuternde Fragen zum Projekt und generelle Fragen zum Thema argumentieren.
Prüfungssprache	entspricht der Unterrichtssprache
Bewertungskriterien und Kriterien für die Notenermittlung	*Die Bewertung der einzelnen Module führt nicht zu einer getrennten Benotung, sondern fließt in die Gesamtbewertung des Projektes ein. Es wird eine Note für das gesamte Projekt und in Absprache zwischen den drei Lehrenden zugewiesen* ***Bewertungskriterien und Kriterien für die Notenermittlung für Modul 1 –Produktdesign:*** Konzept und finales Objekt Präsentation und Darstellung Skizzen und Modelle Verständnis und Kohärenz des gesetzten 'brief'

Pflichtliteratur	***Modul 1 –Produktdesign:*** Die Bibliographie wird zu Kursbeginn in der Reserve Collection abrufbar sein.
Weiterführende Literatur	***Modul 1 –Produktdesign:*** -

Syllabus
Descrizione del corso

Titolo del corso	**PROGETTO PD – D1 metallica**
Codice del corso	97109
Settore scientifico disciplinare del corso	Modulo 1: ICAR/13 disegno industriale Modulo 2: ING-IND/16 Tecnologie e sistemi di lavorazione Modulo 3: M-FIL/05 Filosofia e teoria dei linguaggi
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	*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.
Frequenza	non obbligatoria ma raccomandata
Sito web del corso	-

Descrizione progetto ed obiettivi formativi specifici del corso: 3 – teorie e linguaggi del design di prodotto	Il corso si inserisce nell'area di apprendimento dei corsi "caratterizzante" (modulo 1), "affine integrativa" (modulo 2) e "di base" (modulo 3) del curriculum in design. **DESCRIZIONE DEL PROGETTO** ***Descrizione del corso modulo 3 – teorie e linguaggi del design di prodotto:*** Obiettivo del corso è acquisire consapevolezza critica rispetto al proprio lavoro. Gli strumenti presentati saranno:

	- semiotica degli oggetti - panoramica storica sui modelli del design - ricerca storico-antropologica sul materiale oggetto del corso (metalli). E' inoltre prevista una presentazione del sistema Arduino volta a favorire l'implementazione di componenti elettroniche nel prodotto. ***Obiettivi formativi modulo 3 – teorie e linguaggi del design di prodotto:*** ● Acquisire competenze di base circa i modelli del deign ● Acquisire competenze di base sulle applicazioni della semiotica al significato del design ● Acquisizione di consapevolezza circa la diversità culturale ● Acquisire competenze di base sull'applicazione di Arduino all'ingegnerizzazione del prodotto
Modulo 1	*-> vedi syllabus in lingua inglese e tedesca*

Modulo 2	*-> vedi syllabus in lingua inglese*

Modulo 3	**Teorie e linguaggi del design di prodotto**
Docente	Francesco Galofaro office F1.06.b, e-mail francesco.galofaro@unibz.it , tel. +39 0471 015324, webpage https://www.unibz.it/en/faculties/design-art/academic-staff/person/37172-francesco-galofaro
Orario di ricevimento	-
Settore scientifico disciplinare del docente	M-FIL 05
Lingua ufficiale del corso	Italiano
Orario di ricevimento	Mercoledì mattina, 11.00 – 12.30
Collaboratore didattico *(se previsto)*	-
Orario di ricevimento	-
Lista degli argomenti trattati	– Il senso degli oggetti tecnici: storia, antropologia, semiotica; – Il processo del design: modelli; – Tradizione e innovazione; – Approfondimento monografico sul materiale

	oggetto dei lavori finali;
Attività didattiche previste	Lezione frontale: introduzione alle problematiche storiche, antropologiche e semiotiche relative al materiale che sarà oggetto dei lavori degli studenti; Ricerca di gruppo e discussione in aula dei temi trattati; Realizzazione della documentazione individuale del progetto con riferimenti bibliografici;

Risultati di apprendimento attesi	***Risultati di apprendimento attesi relativi al modulo 3 – teorie e linguaggi del design di prodotto:*** • essere in grado di finalizzare alla realizzazione di un progetto compiuto nel campo del design di prodotto le conoscenze di base acquisite in campo teorico • essere in grado di cogliere i principali fenomeni che caratterizzano la società attuale, saperli osservare criticamente anche in una prospettiva etica e sociale ed elaborare soluzioni adeguate sul piano della proposta / risposta progettuale • conoscenza delle fondamenta storiche e teoriche del design • conoscenza di rilevanti aspetti sociologici, semiotici e antropologici • saper analizzare (in modo critico), definire e contestualizzare i propri progetti • saper applicare metodi di ricerca empirica negli ambiti delle scienze socio-culturali • sapere esporre elaborati critici e programmatici in forma orale • sapere produrre elaborati critici e programmatici in forma scritta • sapere applicare metodi e risultati di ricerca alla progettazione nei diversi ambiti della cultura del progetto • sviluppato una buona autonomia di giudizio sia nella valutazione critica del proprio lavoro, sia nella capacità di utilizzare corretti strumenti interpretativi rispetto ai contesti dove andranno ad applicare la propria pratica progettuale e/o proseguire i propri studi valutandone anche aspetti di carattere etico e sociale • comunicare e argomentare ad un livello professionale le ragioni delle proprie scelte e motivarle dal punto di vista teorico

Metodo d'esame	***Metodo d'esame relativo al modulo 3 – teorie e linguaggi del design di prodotto:*** – Partecipazione alle lezioni e discussione in aula; – Presentazione di lavori individuali o di gruppo in aula; – Stesura della documentazione relativa alle diverse fasi della progettazione; – Stesura di una bibliografia di testi consultati per la realizzazione del progetto;
Lingua dell'esame	corrisponde alla lingua d'insegnamento
Criteri di misurazione e criteri di attribuzione del voto	*La valutazione dei singoli moduli non costituisce un voto a sé stante, ma è parte integrante della votazione complessiva del progetto.* ***Criteri di misurazione e criteri di attribuzione del voto relativi al modulo 3 – teorie e linguaggi del design di prodotto:*** Sarà valutata la capacità del gruppo di lavorare in collaborazione reciproca. Costituisce oggetto di valutazione l'impiego puntuale degli strumenti analitici presentati durante il corso.

Bibliografia fondamentale	***Modulo 3 – teorie e linguaggi del design di prodotto:*** - Vedi Reserve Collection
Bibliografia consigliata	***Modulo 3 – teorie e linguaggi del design di prodotto:*** – Michela Deni, Oggetti in azione, Franco Angeli, Milano, 2002 – Jean-Marie Floch, Visual Identities, Continuum, Bloomsbury, 2000, pp. 145-170 – Dario Mangano, Semiotica e design, Carocci, Roma, 2008, pp. 9-77 – Alvise Mattozzi, "A model for the semantic analysis of objects", in S. Vihma e T. Karjalainen (eds.), Design Semiotics in Use. Helsinki University of Art and Design Press. Helsinki, 2009, pp. 40-68 – Banzi, Shiloh, Arduino: la guida ufficiale. Milano: Tecniche nuove, 2015.

	– Banzi, Shiloh, Make: Getting Started with Arduino, 3rd Edition, Maker Media inc. 2014.