

ACCF IDPD 290 INDUSTRIAL DESIGN

Program	Three-year course in Design
Course	Industrial Design 2
Credits	3
Professor	Lorenzo Pofferi

Course Description	<p>The course aims to guide the student through a phase of the design process, which involves switching between 2-D and 3-D information. The process of design contains both of these dimensions, which allow the designer to express his/her ideas and communicate them to others (i.e. peers, professor, client).</p> <p>The beginning of the course will focus on the seating unit: the armchair and its dimensions. During this exercise, the student will execute several technical drawings to better understand the logic of orthogonal projections (usually taught in the first year of studies); this will be the practical application of that knowledge and those skills. From these drawings, the student will build a precise scale model of the armchair (1:10) in lightweight cardboard.</p> <p>Afterwards, having understood the basic dimensions of an armchair, the student will be asked to develop an original armchair, applying the information acquired in the previous exercise. The student will express his/her ideas in both 2-D (sketches/drawings) and 3-D (study model in modeling clay, preferably in scale) and finally with the relative technical drawings (orthographic views).</p> <p>The third assignment will be the design of a hand-held peppermill. The student is encouraged to develop his/her idea through the use of both 2-D and 3-D work (sketches, tech. drawings and study models). This being the final exercise of the semester, the student will be encouraged to apply the skills acquired during the semester (3-D computer modeling / Rhino) to further "illustrate" their idea (3-D model + basic rendering).</p>
Learning Objectives and Outcomes	<p>At the end of the course the student will be able to:</p> <ul style="list-style-type: none"> • Better understand the orthographic projections for use in industrial design. • Become familiar with simple hand model-making techniques to explore their ideas • Acquire and develop a project methodology • Acquire experience in the presentation of one's work in a logical and effective way (pdf book)



Student Assessment	<p>The student's performance will be assessed on: Presentation of all the works in the various projects assigned, including all phases of the exercises/projects. The format of the pages of the book is A3 (420 x 297mm), to be saved in .pdf format. Please name your file as follows:</p> <p style="text-align: center;">SURNAME IndDES_II Sem3_MID (o_PRE-END o_END) (in high resolution, but controlled)</p>
Evaluation Scale	<p>The Italian grading system is based on a maximum of 30 points with 18/30 as the lowest passing grade. In case of excellence 30 cum laude may be awarded.</p>
Bibliography, Webography, Filmography	<ul style="list-style-type: none"> • <i>Sketching: Drawing Techniques for Product Designers</i>, Eissen, K. and Steur, R. (2007), pub. BIS Publishers** • <i>Free Hand Design</i>, Medola, I. and Petri, M. (2014), pub. Hoepli (Text in Eng+Ita)** • <i>Prototyping and Modelmaking for Product Design</i>, Hallgrimsson, B. (2012) Pub. Laurence King • <i>Human Dimension & Interior Space</i>, Panero, J. & Zelnik, M. (1979), pub. Watson Guptill • <i>New Chairs: Innovations in Design, Technology and Materials</i>, Byars, M. (2006), pub. Laurence King (in Italiano: Sedie – Design e tecnologie d'avanguardia, pub. Logos)

Week 1	<p>Topics:</p> <ul style="list-style-type: none"> • Introduction: Course Objectives/Organization • Syllabus and Books • Projects/Assignments (Armchair_1, Armchair_2, Peppermill, + ??) • Supplies (lightweight cardboard + modeling clay + drawing instruments)
Week 2	<p>Topics:</p> <ul style="list-style-type: none"> • 2-D skills (sketches and drawings) • 3-D skills (study models: tangible /virtual) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> • Paper Armchair_1 (start orthographic drawings) • Personal Armchair_2 (start sketches)
Week 3	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Ideation...) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> • Paper Armchair_1 (continue orthographic drawings) • Personal Armchair_2 (continue sketches, start clay models)
Week 4	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Ideation / Development...) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> • Paper Armchair_1 (finish orthographic drawings, start cardboard scale model) • Personal Armchair_2 (finish sketches, continue clay study models)



Week 5	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Paper Armchair_1 (finish cardboard scale model) •Personal Armchair_2 (finish clay study models)
Week 6	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Personal Armchair_2 (make final orthographic drawings)
Week 7	<p>MIDTERM FILE DUE</p> <p>File of ALL work done so far:</p> <ul style="list-style-type: none"> •Paper Armchair_1 •Personal Armchair_2
Week 8	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Research / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Peppermill (Intro: info / mood board-optional) •Peppermill (Research: grinder mechanism / what's on the market?) •Peppermill (Ideation: sketches & hand-made study models)
Week 9	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Research / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Peppermill (Research: grinder mechanism / what's on the market?) •Peppermill (Ideation: sketches & hand-made study models)
Week 10	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Research / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Peppermill (Ideation: sketches & hand-made study models) •Peppermill (technical drawings- orthographic views, by hand) •Peppermill (3-D 2-D Development : Development: shape studies in Rhino)
Week 11	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Research / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Peppermill (3-D Development: shape studies in Rhino) •Peppermill (2-D Development : final technical drawings AutoCAD)
Week 12	<p>Topics:</p> <ul style="list-style-type: none"> • Project methodology (Intro / Research / Ideation / Development / Presentation) <p>Assignments/Work in Class:</p> <ul style="list-style-type: none"> •Peppermill (3-D Development : final 3-D model in Rhino + Render?) •Peppermill (Presentation: Final Book- include all work)



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Week 13	PRE-FINAL FILE DUE Name of File: SURNAME IndDES_II Sem3_PRE-END (format .pdf ONLY)
Week 14	FINAL FILE DUE Name of File: SURNAME IndDES_II Sem3_END (format .pdf ONLY)