ACCF IDPD 490 ADVANCED INDUSTRIAL DESIGN

Program	Three-year course in Design
Course	Advanced Industrial Design
Credits	3
Professor	Catherine Hamon

Course Description	The aim of this course is to help the student manage his time and improve his skills in order to organize, develop and present professional industrial design projects. Special attention is given to the design process, a method to follow in order to organize and execute a design project from the beginning to the end. The projects developed are divided into 4 phases: Phase 0) Organization & Introduction Phase 1) Research & Analysis Phase 2) Ideation & Development Phase 3) Refinement & Presentation The student is asked to follow the four-phase process to explore his ideas using both manual and computer-aided techniques in order to produce various projects (minimum 2) regarding two categories: Furniture and Product Design. One of the projects must be associated with the annual school theme and another is to participate in an active design contest (deadline during the academic year). Every phase of this design process is to be documented in digital form (PROCESS BOOK- PDF file) which the student will consign at MID-term and END-term the semester. Please name your file as follows: SURNAME IndDES_IV Sem5_MID (or_PRE-END or_END)
Learning Objectives and Outcomes	At the end of this course the students will be able to: • apply a method in order to organize and execute a design project in a professional manner. (phases_0/1/2/3) • obtain and analyze research documentation (through the critical analysis of existing products, materials and technologies) (phase_1) • ideate and develop design concepts in 2D (sketches/drawings) and 3D (hand-made study models). (phase_2) • synthesize the design process selecting and refining the best ideas to be presented. (phase_2/3) • produce basic technical drawings (orthographic, exploded, section and detailed views) (phases_3) • produce presentation-quality images (renderings). (phase_3) • organize a process book of the various projects elaborated, expressing one's design effectively. (phase_3)

Student Assessment	The student will be evaluated on his/her: • student attitude: attendance, dialog, effort, workflow, meeting deadlines, and improvement • ability to organize and explain one's proper ideas/process/project in an orderly and concise way (project organization & introduction) • ability to gather, synthesize and apply useful information for one's project: self- study and documentation skills (research & analysis) • originality, conceptual abilities and manual skills: freehand sketches, development drawings and hand-made study models (concept ideation & concept development_1) • ability to express an idea through the use of computer-aided skills and graphic elaborations: 3D modeling and renderings, technical drawings (concept development_2 & refinement final concepts) • practical and visual skills: verbal persuasion ability, craftsmanship, graphics, resolution control and print quality, overall aesthetic/emotional impact (final presentation)
Bibliography, Webography, Filmography	*Materials and Design - The Art and Science of Material Selection in Product Design* (2a edizione), Ashby, M. and Johnson, K. (2002, 2010), pub. Elsevier Ltd. *Manufacturing Processes for Design Professionals, Thompson, R. (2007), pub. Thames&Hudson (in Italiano: Il Manuale per il Design dei Prodotti Industriali, Thompson, R. (2007), pub. Zanichelli)* *The Materials Sourcebook for Design Professionals*, Thompson, R. (2017), pub. Thames&Hudson *Making It- Manufacturing Techniques for Product Design* (2a edition), Lefteri, C. (2007, 2012), pub. Laurence King *Human Dimension & Interior Space*, Panero, J. & Zelnik, M. (1980), pub.Watson Guptill

Week 1	Syllabus and books, course objectives and organization Design Process: Phases 0/1/2/3 Projects (assigned & free choices): Accademia Italiana annual theme (interpretation) Design Contest (if possible) Student theme (personal) Materials-based project Manufacturing process-based project Hypothetical client/company Examples: student projects
Week 2	Phase 0: Introduction: What is Design? My Design Process (methodology) Phase 1: Research & Analysis (+inspiration) Books / Magazines / Internet / Catalogs / Trade Fairs / Retailers Sketchbook: start

Week 3	Phase 1: Research & Analysis What's on the Market? Specific Research Individual Meetings
Week 4	Phase 2: Ideation & Development_1 Concept sketches_ideation 2D Concept models_ideation 3D Individual Meetings
Week 5	Phase 2: Ideation & Development_1 Development drawings (freehand) Perspective views (1, 2, 3-point) Orthographic views (overall dimensions) Sections/Details Individual Meetings
Week 6	Phase 2: Ideation & Development_1 Development drawings (freehand) Perspective views (1, 2, 3-point) Orthographic views (overall dimensions) Sections/Details Individual Meetings
Week 7	MIDTERM FILE DUE Name of File: SURNAME IndDES_IV Sem5_MID (format .pdf ONLY) Submit file of ALL work done so far
Week 8	Phase 2: Ideation & Development_2 Development drawings (computer) CAD-3D form studies Individual Meetings
Week 9	Phase 2: Ideation & Development_2 Development drawings (computer) CAD-3D form studies Individual Meetings
Week 10	Phase 2: Ideation & Development_2 Development drawings (computer) CAD-3D form studies Individual Meetings
Week 11	Phase 3 : Refinement & Presentation Technical drawings (computer) CAD Renderings Individual Meetings

Week 12	Phase 3 : Refinement & Presentation Technical drawings (computer) CAD Renderings Individual Meetings
Week 13	PRE-FINAL FILE DUE Name of File: SURNAME IndDES_IV Sem5_PRE-END (format .pdf ONLY)
Week 14	FINAL FILE DUE Name of File: SURNAME IndDES_IV Sem5_END (format .pdf ONLY) Submit file of ALL work