

FURNTURE Course Descriptions and Outcomes

FURN 3000 Furniture Design: Materials and Techniques – 3 cr.

A prerequisite to all other furniture courses, this course examines both wood and metal as primary elements in traditional and sculptural furniture construction. Students learn to design and construct furniture through basic to advanced instruction in a wide range of techniques, from plasma cutting and welding to metal and wood lathes, other power tools, and floor machinery. Advanced hand tools are explored. Each project includes a drawing component to allow conceptual exploration and refinement of presentation skills. Demonstrations, lectures, and field trips to local lumber and steel yards are important components of the course. Prerequisite: Foundation: 3D

Outcomes:

- Know and demonstrate fabrication of metal and wood in the design of construction of furniture
- Recognize historical and contemporary furniture makers and styles
- Demonstrated technical proficiency with a variety of construction technique
- Apply a personal aesthetic to your work
- Document construction using exploded view of designed object including the construction specifics, materials, measurement.

FURN 3010 Theory and Methodology of Furniture – 3 cr.

This course investigates furniture construction by examining and deconstructing the design process through drawing, computer rendering, and model making. Critiques take place at all stages of the design process. The class also examines current designers and their processes through reading assignments, in-class discussions, and lectures by visiting design professionals. Prerequisite: Foundation: 3D

FURN 3020 Lighting/Accessories – 3 cr.

This course introduces students to functional illumination and illuminated objects and addresses accessories that are commonly associated with the experience of furniture. The class includes studio experiments with light (including lamps and atypical light sources), wiring, and electrical safety. Lighting concepts include task lighting and environmental and architectural uses of light. Accessories may include divider screens, trays, non-fabric window treatments, furniture hardware, office helpers, shelving, and other items that complete the furniture experience. Students are encouraged to incorporate a broad spectrum of materials such as plastics, metals, woods, castables, glass, and stone. Lectures and demonstrations support class activities. Prerequisite: Foundation: 3D

Outcomes:

- Describe different types of illumination and illuminated objects, both functional and non-functional
- Create illuminated accessories commonly associated with furniture.
- Demonstrate electrical wiring, observing existing codes.
- Demonstrate craftsmanship using a wide variety of materials.
- Summarize the history of accessory design and current trends.

FURN 3030 Computer Modeling and Making – 1 cr.

This workshop serves as an introduction to three-dimensional digital processes and resources at MCAD. Students acquire a basic understanding of formZ 3D modeling software used to create object files for digital fabrication; use MCAD's 3D printers to "build" objects; learn to use the Laser Cutter; and are trained in the use of our CNC router to machine object components. Instruction also includes the transfer of files, the use of software to translate digital models to machine code, and post-digital techniques in fabrication. Prerequisite: Foundation: 3D

Outcomes:

- Know historical and current trends and designers in furniture design.
- Demonstrate a clear personal methodology in furniture ideation
- Exhibit high crafted models in multiple materials and techniques including digital modeling.
- Esperance and working in group projects from concept to creation.

FURN 3040 Furniture as Art – 3 cr.

Furniture has been defined as functional art. This class investigates the boundaries of functionality, furniture, and art using traditional methods of furniture design and construction to sustain or dispute this definition. Lectures covering crossover furniture artists and sculptors initiate a conversation about the role of function in art.

Prerequisite: Furniture Design: Materials and Techniques, Theory and Methodology of Furniture Design, or Fabricated Sculpture

Outcomes:

- Explain fluctuation of the art/craft distinction throughout history and examine the role of furniture as a non-functional end product.
- Define traditional boundaries of sculpture and furniture.
- Create traditional and non-traditional objects.
- Demonstrate how objects can carry meaning beyond their tacit function.

FURN 3050 Experimental Furniture – 3 cr.

Experimental Furniture challenges traditional theories of furniture design, including structure, materials, and function. Hypotheses are proved and disproved and exploration is strongly encouraged. Materials covered include fiberglass as it applies to furniture, experimental paint techniques, and additional materials not normally associated with furniture. Students are encouraged to discover new furniture materials through online research. Slide presentations of alternative furniture and furniture constructed from unusual materials complete the course. Prerequisites: Foundation: 3D, one 3000-level furniture course

Outcomes:

- Explain non-traditional furniture concepts and processes.
- Exhibit non-traditional materials usage and techniques including fiberglass and composites.
- Describe the relation of work to future technologies and possibilities.

FURN 3055 Soft Furniture – 3 cr.

This class examines the skin of furniture in many of the same ways that we as humans look at our clothing. The fabric of furniture may take on varied forms and numerous characteristics. Technical instruction covers industrial sewing machines, sewing from temporary patterns, box cushions, and other upholstery techniques. Traditional and nontraditional methods of upholstery are explored. Prerequisites: Foundation: 3D, one 3000 level-furniture course

Outcomes:

- Describe knowledge of commercial versus residential fabrics and appropriate use.
- Demonstrate traditional and non-traditional upholstery construction and techniques.
- Using contemporary terms in relation to production of work and usage.

FURN 3070 Design Environment – 3 cr.

This studio course examines the many human factors that create a system relationship through exploration of the human scale as it relates to furniture, interior, and exterior space. In a studio setting, designs in furniture are created with an understanding of anthropometrics, social responsibilities, and environmentally responsible design. Projects focus on critical ideation and are evaluated by faculty and peers through group discussions and critiques. Prerequisites: Furniture Design: Materials and Techniques, Computer Modeling and Making Workshop, Theory and Methodology of Furniture Design

FURN 3080 Production Design – 3 cr.

This course focuses on the design of limited- and mass-production furniture. Students examine flat-pack, sustainable materials, and local and global outsourcing. The differences and similarities of each type of production model are explored through studio assignments utilizing computer modeling and full-scale prototyping. Group critiques and discussions focus on the relationship of craftsmanship and technology in each student's work. Prerequisites: Theory and Methodology of Furniture Design, Computer Modeling and Making Workshop, Digital Fabrication

Outcomes:

- Design and fabricate furniture that best reflects current aesthetic pursuits and craft precision.
- Define strengths and weakness in building a body of work into the portfolio.
- Express a unique design voice.
- Read and discuss contemporary theory and relation to their work.

FURN 3090 Digital Fabrication – 3 cr.

This course explores the expanding creative possibilities of digital fabrication with computer-generated, found (appropriated), and scanned digital objects. Students learn advanced three-dimensional modeling techniques in formZ Pro to create ideation, form development, presentation, and fabrication models in addition to techniques for capturing existing objects with MCAD's 3D Laser Scanners. Objects are digitally fabricated from various materials and incorporated into finished works using MCAD's 3D printing, laser cutting, and CNC router systems while outsourcing is explored as an effective practice in digital making. Instruction includes post-digital techniques in

fabrication along with modeling-based presentation techniques and the review of other professional level software packages. Prerequisites: Foundation: 3D and Foundation: Media 1, or permission from instructor

Outcomes:

- Demonstrate the possibilities of Digital Fabrication from computer-generated and found digital objects.
- Employ advanced 3D modeling techniques in formZ to develop ideas, make presentations, and fabricate models
- Expand beyond the simple creation of hardware, or objects that can be constructed in traditional media, to objects that cannot be readily realized without the computer.
- Use laser scanner as creative tool.
- Digitally fabricate 3D objects using 3-D printers, Laser cutters and CNC routers.

FURN 4000 Professional Practice – 3 cr.

This course addresses the skills and knowledge needed to succeed in the contemporary art world. Topics include writing for professional opportunities, exhibitions, the documenting and marketing of work, website development, residencies and graduate schools, copyright and tax issues, jobs in education, and studio/business startup concerns. Students engage in a variety of individual and group projects, including curating an off-campus exhibition. Course faculty, guest lecturers, and visiting-artist presentations connect abstract information with real-world experience. Prerequisite: Junior standing

FURN 4010 Internship: Furniture – 3 cr.

Internships provide an opportunity for students to gain practical experience in a particular career area and valuable on-the-job skills. Internships may be arranged by the Director of Career Services or initiated by students. All internships must be preapproved through the Career Services Office. For an internship to be approved, a mentor relationship and learning experience should exist beyond a simple employment opportunity. Three-credit internships require working 120 hours at the internship site and keeping a journal of hours and activities. Prerequisite: Professional Practice

FURN 5010 Advanced Furniture Design Seminar – 3 cr.

This course is for the advanced student who is interested in developing a self-motivated, sustained body of work through an understanding of the relationships between the formal, conceptual, and contextual aspects of sculptural form. Examining their own studio practice in relation to current topics in the field, students expand their perspectives while developing their work. Studio practice is supported by development of critical thinking skills, individual and group critiques, guest critiques, writing exercises, and readings covering artists, criticism, and theory. Prerequisites: Four 3000-level furniture courses, successful Junior Review

Outcomes:

- Design and fabricate furniture that best reflects current aesthetic pursuits and skill level.
- Define strengths and weaknesses in building a body of work into the portfolio
- Express a unique design voice.

- Read and discuss contemporary theory

FURN 5100 Senior Project: Furniture – 6 cr.

During their senior year, every furniture design major is required to develop and complete a substantial body of work in a specific field. This course provides a forum for the critical evaluation of this work and curatorial guidance in preparation for the Commencement Exhibition. Course content includes critical readings, position paper, individual and group discussion, and informational meetings. Required for all seniors. Prerequisites: Successful Junior Review, senior standing

Outcomes:

- Create a cohesive body of work for senior exhibition.
- Articulate conceptual, formal, technical issues in work through written thesis.
- Discuss/Defend work in individual and group critiques.
- Discuss work with visiting critics.