Three-Dimensional Design Courses (Art and Art History) (TDSN)

TDSN Courses
This is a list of courses with the subject code TDSN. For more information, see Art and Art History (College of Liberal Arts and Sciences) in the catalog.

TDSN:2210 Introduction to 3D Design  3 s.h.
Develop conceptual and critical design thinking while solving problems to create 3D structures with sustainable materials, processes, and consumption; discuss, develop, and evaluate composition principles and their relation to aesthetics, modular systems, structure, and sustainable use of material through handmade models and systems that lead to final designs; engage in diverse multidisciplinary collaborations. GE: Sustainability. GE: Engineering Be Creative; Literary, Visual, and Performing Arts.

TDSN:2240 Digital Drafting with AutoCAD  3 s.h.
Basic principles of 2D and 3D computer-aided drafting; use of AutoCAD software to draw plans, elevations, and sections for objects and interior spaces. Prerequisites: ARTS:1510 and ARTS:1520 and (CERM:2010 or SCLP:2810 or TDSN:2210 or MTLS:2910). Same as CEE:2240.

TDSN:2250 Digital Prototyping  3 s.h.
Basic knowledge and practical technical skills using 3ds Max studio software; experience creating and manipulating basic forms and working with texture, background, light, and camera viewpoints; basic animation. Corequisites: ARTS:1510 and ARTS:1520 and (ANIM:2125 or CERM:2010 or DSGN:2500 or DRAW:2310 or INTM:2710 or MTL5:2910 or PHTO:2600 or PNTG:2410 or PRNT:2610 or SCLP:2810 or TDSN:2240).

TDSN:3200 Product Design  4 s.h.
How objects are designed and structured; modeling, graphic skills necessary for basic project development. Corequisites: TDSN:2250.

TDSN:3220 Interior Design  4 s.h.
Relationship of interior space to its architecture, environment, human element; color, materials, furnishings, lighting; projects. Prerequisites: TDSN:2250.

TDSN:3230 Color for Interior Design  4 s.h.
Use of color for interior spaces; principles of color theory reviewed and applied to 3D environments; color as a compositional element and psychological tool. Prerequisites: TDSN:2250.

Three-dimensional computer-aided drafting; use of AutoCAD software. Prerequisites: ARTS:1510 and ARTS:1520 and (MTLS:2910 or SCLP:2810 or CERM:2010 or TDSN:2210).

TDSN:3260 Design for Production  4 s.h.

TDSN:3280 Forms and Textiles  4 s.h.
Products and seating design with soft materials; students experiment with diverse soft materials and textile construction techniques to design and make unique functional forms. Prerequisites: ARTS:1510 and ARTS:1520 and TDSN:2210. Corequisites: TDSN:2240 and TDSN:2250.

TDSN:3285 Fabrication and Design: Hand-Built Bicycle  4 s.h.
Building a bicycle frame by hand; use of CAD modeling and development of fabrication skills to create a modern-day work of art. Prerequisites: TDSN:2240.

TDSN:4010 Furniture Design I  4 s.h.
Introduction to advanced problems of furniture design and manufacturing; students design and fabricate a chair with sustainable methods using computer numerical control (CNC) technologies. Corequisites: TDSN:3200.

TDSN:4020 Furniture Design II  4 s.h.
Continuation of TDSN:4010; design of virtual environments. Prerequisites: TDSN:4010.

TDSN:4050 Site Specific Design  1 s.h.
Art of planning, building, and presenting at real professional design venues; students plan, design, and build an environment to display selected 3D design work at one or two professional design venues. Prerequisites: TDSN:2250. Corequisites: TDSN:3200 or TDSN:3220 or TDSN:3230 or TDSN:3260 or TDSN:3280.

TDSN:4299 Undergraduate Individual Instruction arr.
Individual instruction in 3D design for advanced students.

TDSN:6299 Individual Instruction in 3D Design arr.
Individual instruction in 3D design for advanced students.