The Design School
Fall 2017 Electives for Undergraduate Students

All courses are 3 credit hours and are open to other disciplines within The Design School unless noted otherwise. Day and time are subject to change.

**ALA 100**
An Introduction to Environmental Design

Instructor: TBA
Online and in person: Tu & Th, 3:00 p.m. - 4:15 p.m.
*3 credit hours*

Survey of Environmental Design: including historical examples, and the theoretical, social, technical, and environmental forces that influence design and shape our contemporary environment.

**ALA 102**
Landscapes and Sustainability

Instructor: Edward Cook
Tu & Th, 1:30 p.m. - 2:45 p.m.
*3 credit hours*

Surveys ideas relating to landscapes and sustainability and the role of landscape architecture in the creation of humanized environments. Lecture, discussion.

**APH 300**
World Architecture I - Western Culture

Instructor: TBA
Tu & Th, 12:00 p.m. - 1:15 p.m.
*3 credit hours*

Historical and contemporary built environments of Western civilizations: Mediterranean, Europe, and the Americas as manifestations of cultural history and responses to environmental determinants.

**APH 313**
History of Architecture

Instructor: TBA
Tu & Th, 4:30 p.m. – 5:45 p.m.
*3 credit hours*

Survey of selected monuments, buildings, and cities of the Near East, Western Europe, and USA from prehistoric times into the nineteenth century.
APH 414
Great Cities

Instructor: TBA
Tu & Th, 10:30a.m. - 11:45a.m.
3 credit hours

Historical survey of great cities from antiquity to the present.

ATE 361
Architectural Technology I

Instructor: TBA
Tu & Th, 6:00a.m. - 7:15p.m.
3 credit hours

This course is a lecture class that focuses on structural design for architects. Students will learn to efficiently organize, coordinate and communicate information in order to convey data necessary for structural design. Incorporated is an applied research project and field sketches related to structural design and detailing. Students will gain exposure to the essence of structural design, primarily using wood members.

Contact Clinical Assistant Professor Philip Horton (Philip.Horton@asu.edu) for permission to register for the class.

ANP 494
Connections & Assemblies

Instructor: Thomas Hartman
Tu & Th, 9:00 - 10:15a.m.
3 credit hours

This seminar will provide an opportunity for students to explore strategies of connection and assembly of materials. The course will explore both the pragmatic / technical aspects of assembly and the aesthetic / poetic potential afforded by the joining of materials. In this seminar, the technical implications of aesthetic decisions will be considered along with the aesthetic implications of technical decisions. While there are usually multiple solutions to assembly as merely a “technical problem”, it is important to understand that the method of assembly greatly affects the texture, legibility, constructability, complexity/simplicity of the finished building/object and should be embraced as an integral part of what we consider the “design process”.

This course is open to students in the following programs; master of urban design, undergraduate interior design, undergraduate architecture, master of interior architecture and master of architecture.

ATE 550
Passive Heating & Cooling

Instructor: Harvey Bryan
Tu & Th, 1:30p.m. - 2:45p.m.
3 credit hours
This course will undertake a detailed study of passive and low-energy heating and cooling strategies for use in buildings. The main focus of the course will be on methods of analysis, planning and design to estimate and control heat loss and gain in order to maximize comfort and minimize energy consumption. Passive and low-energy strategies will include: for heating -- thermal mass, direct gain, sunspace and trombe wall systems; for cooling -- thermal mass, shading, daylighting, ventilation, radiation, evaporation, and earth contact will be discussed. Emphasis is on architectural solutions and the natural, renewable energies available in the local climate and at the site.

This course is open only to 4th year undergraduate and graduate students.

**ATE 560**  
**Building Energy Analysis I**

Instructor: Marlin Addison  
M, 6:00p.m. - 8:45p.m.  
*3 credit hours*

Computer simulation of building thermal behavior. Software review. Detailed study of selected simulation models using case study projects.

This course is open only to 4th year undergraduate and graduate students.

**DSC 101**  
**Design Awareness**

Instructor: Jacques Giard  
Online or In-person: M & W 4:35p.m. - 5:50p.m.  
*3 credit hours*

Survey of cultural, global and historical context for the design professions. The educational emphasis of the course is principally information, discourse and exploration related to design in contemporary society. The focus of the course will be mostly in the areas of industrial design, interior design and visual communication design, but other related design areas such as architecture and engineering will be included. Together, the information, discourse and exploration will provide an insight to the phenomenon of contemporary design as well as a greater awareness of design’s impact on society.

**DSC 494**  
**Basic Model Making Techniques**

Instructor: Mark Fromeyer  
Tu, 9:40a.m. - 11:30a.m. – Session A  
*1 credit hour*

Basic setup and modeling techniques to show students how to create repeatable, safe operations. Instruction on basic principles of woodworking, material selection, re-saw, dimensioning, tool selection. Emphasis on cut lists, planning parts, basic tool knowledge, measuring and marking and joinery. Contact instructor at (patrick.plehn@asu.edu) for permission to register for the class along with your ASU Affiliate ID, program and year within the program.
DSC 494
Fundamentals of CNC in Modeling

Instructor: Jesus Orozco
W, 9:40a.m. - 11:30a.m. – Session A
1 credit hour

All things CNC. Emphasis will be on how to assemble different file types for best practice on CNC equipment. DXF/DWG (2-D files), STL, SLDPRT, IGES, STEP 93-D files). How CNC works, basic knowledge on code creation, tooling, different types of machines, fixtures, materials, part setup, and planning, joinery techniques, and topography. Contact instructor at (patrick.plehn@asu.edu) for permission to register for the class along with your ASU Affiliate ID, program and year within the program.

DSC 494
Cold Casting and Mold Making for Modeling
1 credit hour

Instructor: Mark Fromeyer
Th, 9:40a.m. - 11:30a.m. – Session A
Basic knowledge on mold making and cold casting. Emphasis on material selection, planning, form-making, and project planning. Students will be required to execute one part from techniques and methods discussed. Contact instructor at (patrick.plehn@asu.edu) for permission to register for the class along with your ASU Affiliate ID, program and year within the program.

DSC 558
Daylighting

Instructor: TBA
Th, 4:50p.m. -7:35p.m.
3 credit hours

Daylighting as a design determinant; concepts, techniques, methodology, experiments, and case studies.

This course is open only to 4th year undergraduate and graduate students.

EDS 223
Design Thinking

Instructor: TBA
M, W, F, 12:55p.m. - 1:45p.m.
3 credit hours

Introduces the notion of design thinking, a concept that is gaining significant recognition in several disciplines including art, design, business, engineering and others. Design thinking can be described as a creative, multidisciplinary, human-centered approach to solving complex problems. Contemporary society faces numerous challenges, and the need for new tools and methods to tackle and solve these problems is more pressing than ever before. Offers several new techniques of design thinking and creative problem solving through engaging lectures and exciting projects.
**EDS 301**  
*Contemporary Issues in Design Strategies & Innovation*

Instructor: TBA  
M, W, F, 8:35a.m. - 9:25a.m.  
*3 credit hours*

Covers theories and methods needed in design, innovation and management of environmental design projects. Uses best practices and case studies related to the design of artifacts and to the design of built environments as a vehicle to develop students’ understanding of different aspects of environmental design in a real-world setting. Also discusses the impact of contemporary issues such as globalization, digital tools, and global connectivity on the theories and practice of environmental design.

**EDS 401**  
*Environmental Design Synthesis I*

Instructor: TBA  
M, W, F, 9:40a.m. - 10:30a.m.  
*3 credit hours*

Environmental Design Synthesis I integrates principles of environmental design and design research into a culminating experience in which students develop a research study based on knowledge and skills already acquired in the BDES program of studies.

**GRA 101**  
*Designing Life*

Instructor: William Heywood  
M & W, 10:45a.m. - 12:00p.m.  
*3 credit hours*

Helps students develop strategies to successfully navigate their education experience. Focuses on critical and reflective thinking.

*Open to 1st and 2nd year undergraduate students.*

**GRA 111**  
*Graphic Design History I*

Instructor: Marsha Minniss  
M, W, F, 8:35a.m. - 9:25a.m.  
*3 credit hours*

This course is a survey of the development of visual communication from the earliest origins to the present digital age, highlighting significant technological, industrial, and social influences that directly or indirectly influenced design.
GRA 225
Communication / Interaction Design Theory

Instructor: Patrick Hoi Cheung
M & W, 4:35p.m. - 5:50p.m.
3 credit hours

Communication/interaction design theory is intended to offer opportunities for students to develop an understanding of concepts and phenomena relevant to the design of efficient, engaging communication and effective interaction for various media. Topics to be addressed include different visual representations and context, the implications of culture and cognition on communication, rhetoric and the language of visual signs and user experiences.

GRA 294
Intro to Digital Media I

Instructor: Emily Beu
Online
3 credit hours

This is an introduction to web design and development. The course provides a foundation of web design and development knowledge which will be the basis for continuing studios. 1 credit hour.

GRA 294
InDesign ICOURSE

Instructor: Emily Beu
Online
3 credit hours

Introduction to Adobe InDesign. Basic foundation on how to effectively use InDesign for well-crafted print publications, interactive documents, digital magazines, and ebooks.

GRA 345
Design Rhetoric

Instructor: Lisa Pena
Tu & Th, 4:30p.m. – 5:45p.m.
3 credit hours

Develops critical thinking and expression of ideas in concise, persuasive written and spoken form. Explores applications of persuasion when applied to professional development, business practices, and visual display.

Open to 3rd and 4th year undergraduate students.

GRA 440
Finding Purpose

Instructor: William Heywood
Tu, 6:00p.m. - 8:45p.m.
3 credit hours
Career orientation in the creative professions, including value clarification, decision making, lifestyle planning, goal setting, and expression of individual talents.

Open to 3rd and 4th year undergraduate students

**IND 242**  
**Materials & Design**

Instructor: Joseph Velasquez  
M & W, 6:00 p.m. - 7:15 p.m.  
*3 credit hours*

Materials application in design. Introduces characteristics and properties of metals and organic materials, including plastics, and inorganic materials.

**IND 316**  
**20th Century Design I**

Instructor: Jacques Giard  
Online  
*3 credit hours*

European and American design from 1850 to 2000 with thematic emphases on world view, natural world, economics, technology and transportation. The emphasis of Twentieth Century Design I is the presence of industrial design in five thematic contexts during the late 19th and 20th centuries. The focus of the course material will be primarily on the role played by industrial design in the thematic areas of world view, natural world, economics, technology and transportation.

**IND 344**  
**Human Factors in Design**

Instructor: Donald Herring  
Tu & Th, 3:00-4:15 p.m.  
*3 credit hours*

Human – machine environment systems; human characteristics and behavior applied to design of products, systems and their operating environment.

**IND 494**  
**Sculpted CAD modeling for Product Design – Lecture + Lab**

Instructor: Reid Jonson  
M, 11:00 a.m. - 12:30 p.m. + online  
*3 credit hours*

This course teaches the latest cloud-based CAD/CAM tools that combine organic shapes modelling, industrial design, mechanical design, and manufacturing in one comprehensive collaborative platform. In this course students will learn how to sculpt their ideas, then move to parts and assembly modelling, motion, strength testing, and, as a final step, create drawings, photo-realistic renderings and prepare for manufacturing on a CNC machine or 3D printers.

Contact Associate Professor Dosun Shin (dosun.shin@asu.edu) for permission to register for the class.
INT 111
Interior Design Issues and Theories

Instructor: Golab
M,W,F, 9:40 a.m. - 10:30 a.m.
3 credit hours

The course will also review the conditions and movements generated by modernity from the beginning of the twentieth century. Our approach will be to introduce, identify, clarify, and relate general themes, and discover their relationship and influence on contemporary design ideas and practice. The readings and lectures will present a composite survey of design and environment conceptions. In the last part of our course we will explore the changes affecting our societies today. Humanity is immersed in one of the most profound technological revolutions ever, with drastic changes in our relationship with the environment. The course will explore design in the information and biotech century, and emphasize the need to advance a sustainable approach in design; thereby, establishing a basis to critically understand significant design thought developments.

INT 121
Introduction to Computer Modeling for Interior Design

Instructor: Diane Bender
Th, 6:00 p.m. - 7:15 p.m.
3 credit hours

Computers in design, including software concepts, specific packages, problem solving, illustration, modeling, and animation.

INT 310
History of Interior Design

Instructor: Golab
Tu & Th, 9:00 a.m. - 10:15 a.m.
3 credit hours

Evolution of interior design as an expression of cultural influences from the ancient periods to 1835. Analysis of interior architecture, planning and lighting of interior spaces, and furniture.

INT 351
Ambient Environment

Instructor: Kelly Hatch
Tu & Th, 12:00 p.m. - 1:15 p.m.
3 credit hours

Surveys environmental control systems, acoustics, and lighting properties.
INT 415
Latin American Design

Instructor: Jose Bernardi
Tu & Th, 12:00p.m – 1:15p.m.
3 credit hours

The impact of Latin American culture and civilization on design throughout the Americas.

INT 471
Facilities Management

Instructor: Brie Smith
Tu & Th, 6:00p.m - 7:15p.m.
3 credit hours

Facility management process in large-scale organizations. Planning, long-range forecasting, and productivity. Project management methodologies using micro-based software programs.

INT 598
Portfolio Design

Instructor: Diane Bender
Tu & Th, 4:30a.m - 5:45p.m.
3 credit hours

This course is an introduction to the process of creating a traditional printed portfolio and a digital portfolio for application to graduate school or for use in employment interviews. Emphasis is placed on the smooth transition of taking design work from print to digital media, while maintaining a consistent style between the two versions. Career development materials and personal branding are also discussed.

LAP 352
Ecosystems & Sustainable Design

Instructor: Paul Coseo
Fri, 8:35a.m. - 11:20a.m.
3 credit hours

Increases awareness and understanding of the biotic and abiotic systems, processes and factors of our biosphere in order to facilitate sustainable landscape architectural design and applications.

LPH 310
History of Landscape Architecture

Instructor: Rebecca Fish Ewan
Tu &Th, 1:30-2:45p.m.
3 credit hours

Physical record of human attitudes toward the land. Ancient through contemporary landscape planning and design.
LPH 494
Hand Drawing & Illustration

Instructor: Duane Blossom
M, 8:35a.m. - 11:20a.m.
3 credit hours

This course introduces rapid visualization of hand drawing as tools for visually seeing, understanding and capturing existing scenarios; and as the foundation to imagining the future and the development of alternative design ideas.

MUD 598
Biomimetic Design and the Sonoran Desert

Instructor: Darren Petrucci
W, 9:00a.m. - 11:45a.m.
3 credit hours

Students will gain awareness and understanding of biomimicry theory through firsthand field observations of the plants, animals, and ecosystems of the Sonoran Desert. The course will operate as a laboratory for challenging conventional design practice as a response to nature’s principles. Students will engage in: field visits, readings, case studies, and applied projects.

This seminar is open to all 4th year, 5th year and 6th year students in Architecture, Industrial Design, Interior Design, Landscape Architecture, Urban Design and Visual Communication Design.