

# The Design School

## Fall 2019 Electives for Graduate Students

All courses are 1-3 credit hours and are open to other disciplines within The Design School unless noted otherwise. Day and time are subject to change.

*According to Graduate College policy, please note that all Graduate students are only allowed to include 6 credits of 400 level courses on their interactive plan of study.*

Please email the instructor for permission. Once you receive approval, forward the confirmation to [designgrad@asu.edu](mailto:designgrad@asu.edu) to receive the appropriate override.

### **APH 405** **Contemporary Architecture**

Instructor: Elena Rocchi  
Tu & Th, 4:30 pm -5:45 pm  
*3 credit hours*

Addresses issues of global architecture and urbanism in the late 20th and early 21st centuries.

*Graduate students are only allowed to list two 400 level courses on their plan of study.*

### **APH 414** **Great Cities**

Instructor: Max Underwood  
Internet – Session A  
*3 credit hours*

Historical survey of great cities from antiquity to the present.

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### **APH 494** **Image of Rome**

Instructor: Elena Rocchi  
Internet  
*3 credit hours*

The Image of Rome, a cross-disciplinary joint venture among The Design School and the School of Film, Dance and Theatre, is a comparative cultural study examination of the city of Rome and its intercultural understanding through consistent analysis of its specific past events and persons who built it, and of its change over time.

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**APH 598**  
**Charles + Ray Eames**

Instructor: Max Underwood  
Internet – Session B  
*3 credit hours*

In-depth examination of 2 key male + female designers of the 20th century, which provides each student a model of personal empowerment and professional excellence.

**APH 598**  
**Desiring Cities**

Instructor: Renata Hejduk  
Tu & Th, 10:30 am – 11:45 am  
*3 credit hours*

Desiring Cities is a seminar that looks to understand the historic evolution of modern cities and the basic generative elements of urban design (formal and informal). We will examine a series of key moments in modern urban history and consider the specific forces that have shaped the evolution and growth of contemporary cities. The modern, contemporary, and future history of the city will be studied through a series of readings, lectures, case study presentations, guest seminar participants, and collective dialogues. Students will develop a first-hand understanding and appreciation for those elements (cultural, technological, natural, and designed) that come together and push and pull cities into more or less generative landscapes. What generative urban elements comprise thriving cities? What happens when cities fail (war, economic crisis, moving migration patterns, immigration/emigrations, poverty, health crises, natural and manmade disasters)? What does nature offer us in terms of systems to transform the city? What are the possibilities for regeneration?

**APH 691**  
**Education by Design**

Instructor: TBD  
M, 4:50 pm – 7:35 pm  
*3 credit hours*

Design as a way of thinking and as a process that values collaboration, context, and diverse perspectives. Design as an approach that generates creative solutions to complex (wicked) problems of practice, particularly in education.

**ATE 521**  
**Building Environmental Science**

Instructor: T. Agami Reddy  
Tu & Th, 3:00 pm – 4:15 pm  
*3 credit hours*

The purpose of this class is to teach scientific and engineering principles of various mechanisms affecting heat loads in buildings. This involves methods of calculating building peak heating and peak cooling loads, annual energy estimation methods, human comfort and indoor air quality,

ventilation and air infiltration into buildings, solar loads on buildings, and windows and fenestration systems. State-of-the art design methods used by the professional community as well as pertinent standards will be covered. Team work will be emphasized by means of a design project.

**ATE 550**  
**Passive Heating & Cooling**

Instructor: Harvey Bryan  
Tu & Th, 1:30 pm – 2:45 pm  
*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.

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

Instructor: Marlin Addison  
M, 6:00 pm – 8:45 pm  
*3 credit hours*

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

**ATE 562**  
**Experimental Evaluation**

Instructor: Muthukumar Ramalingam  
M, 7:30 am – 10:15 am  
*3 credit hours*

Introduction and hands-on familiarity with various types of sensors and measuring equipment used in solar energy applications and in building energy use and conservation, experiments involve active and passive solar concepts and systems, and analysis of energy/day lighting components and systems in buildings.

**DSC 558**  
**Daylighting**

Instructor: Miho Schoettker  
Th, 4:50 pm – 7:35 pm  
*3 credit hours*

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

**DSC 598**  
**Basic Model Making Techniques**

Instructor: Mark Fromeyer  
Tu, 9:40 am – 11:30 am – Session A  
*1 credit hour*

Design and integration of building systems, including mechanical, electrical, plumbing, security, communications, fire protection, and transportation.

**DSC 598**  
**Fundamentals of CNC in Modeling**

Instructor: Ben Bednarz  
W, 9:40 am – 11:30 am – 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 598**  
**Cold Casting and Mold Making for Modeling**

Instructor: Mark Fromeyer  
Th, 9:40 am – 11:30 am – Session A  
*1 credit hour*

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 598**  
**Mindfulness Fundamentals**

Instructor: Barbara Crisp  
Th, 4:30 pm – 6:15 pm  
*1 credit hour*

Mindfulness is the ability to maintain a moment-to-moment awareness of our thoughts, emotions, bodily sensations, and surrounding environment. It is also a set of techniques and methods for systematically developing this awareness. The practice of mindful awareness has a variety of well-documented impacts, including a reduction in stress, an increase in emotion regulation, and an improvement in sustained attention, focus and executive function. The central

objective of the course is for participants to have the tools necessary to continue their mindfulness practice after the course completes.

**DSC 598**  
**Principles of Collaboration in Design**

Instructor: William Heywood  
W, 6:00 pm – 8:45 pm  
*3 credit hours*

Covers knowledge and best practices for designers to collaborate in the areas of design thinking, storytelling, teaming, entrepreneurship, sustainability, biomimicry, experience design and design research.

**DSC 598**  
**Interdisciplinary Applied Learning Lab**

Instructor: Kevin Dooley  
T, 1:30 pm – 4:00 pm  
*3 credit hours*

This interdisciplinary course enables teams of graduate students in cultural leadership, design and business students to tackle impactful problems relevant today. Students will work with a community organization as a client. Cross-disciplinary student teams will develop innovative solutions to a pressing urban or cultural issues with business implications. Students will learn new discipline specific knowledge, how to work with diverse stakeholders and tackle complex problems.

**GRA 440**  
**Finding Purpose**

Instructor: Will Heywood  
Tu, 6:00 pm – 8:45 pm  
*3 credit hours*

Career orientation in the creative professions, including value clarification, decision making, lifestyle planning, goal setting, and expression of individual talents.

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**GRA 526**  
**Visiting Designers**

Instructor: TBD  
Th, 4:50 pm – 7:35 pm  
*3 credit hours*

Students learn about the "business" of creativity. This course familiarizes students with processes of being a creative as a business through discussions with successful valley

creatives - graphic designers, architects, artists, related professional (photographers, writers, and production artists), web and interactive developers and the like.

**GRA 561**  
**Methods in Visual Communication Design I**

Instructor: TBD  
T, 10:30 am – 1:15 pm  
*3 credit hours*

Sponsored by Montana Avenue Capital Partners, this studio-based course is housed in downtown Phoenix's historic Heard Building. Currently under renovation, new corporate office/studio spaces are being developed, and will cater to a variety of contemporary, creative businesses. We will customize empty office spaces with large-scale environmental graphic designs, giving each space a unique and vibrant atmosphere to attract potential tenants.

**GRA 598**  
**Advanced Exhibit Design**

Instructor: Eric Montgomery  
Tu & Th, 10:30 am – 1:15 pm  
*3 credit hours*

In their senior year students continue with series of "core" course requirements. This course familiarizes students with processes of designing exhibits that bring together a vast amount of information into a coherent space which is intellectually and visually stimulating. It addresses issues of visual communication in three dimensions as well as storytelling through design. It fosters the process of conceptual and visual discovery. It offers an opportunity to develop teamwork since an exhibit design is a collaborative rather than an individual activity.

**IND 544**  
**HF System & Docs**

Instructor: Donald Herring  
W, 8:35 am – 11:20 am  
*3 credit hours*

Advanced topics associated with theory and methods of human factors in design. Individual projects stressing problem organization, evaluation, and documentation.

**IND 550**  
**Furniture Design**

Instructor: Lauren McDermott  
F, 8:30 am – 11:15 am

Explores furniture design and production methods for industrial design.

Contact [designgrad@asu.edu](mailto:designgrad@asu.edu) for permission to register for the class. This course is recommended for final year MID students.

**IND 598**  
**Sculpted CAD modeling for Product Design – Lecture + Lab**

Instructor: Reid Jonson  
M, 11:00 am – 12:30 pm + 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.

**IND 598**  
**Visual Storytelling and Graphics for Industrial Design**

Instructor: Scott Reeves  
Tu & Th, 6:00 pm – 7:15 pm  
*3 credit hours*

Visual storytelling with an emphasis on products, design portfolios and personal branding.

**IND 598**  
**Principles of UX/UI Design**

Instructor: Collin Smith  
M, 6:00 pm – 8:45 pm

**INT 415**  
**Latin American Design**

Instructor: Jose Bernardi  
Tu & Th, 12:00 pm – 1:15 pm  
*3 credit hours*

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

**INT 598**  
**Portfolio Design**

Instructor: Diane Bender  
Tu & Th, 4:30 pm – 5:45 pm  
*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.

**INT 598**

## **Research Methods in Interior Architecture**

Instructor: Lori Brunner  
W, 9:00 am – 11:45 am  
*3 credit hours*

A seminar course in research, with a particular emphasis on quantitative and empirical methods.

## **LAP 598 Landscape Surveying and Mapping**

Instructor: Nikolas Smilovsky  
Tu, 12:00 pm – 2:45 pm  
*3 credit hours*

Introduces students to the fundamentals of field surveying and mapping for design related projects. Instruction will include basic orienteering, site sketch-mapping, proper field note assemblage, GPS field data collection, photo documentation, and basic Geographic Information Systems (GIS) usage. Students will learn how to properly engage with the landscape and properly document their experience.

## **LPH 598 Urban Water**

Instructor: Chingwen Cheng  
M, 9:00 am – 10:15 am  
*3 credit hours*