

The Design School Spring 2019 Electives for Graduate Students

All courses are 3 credit hours and are open to all students majoring in 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.

In order to receive an override, please email the instructor (unless noted otherwise below) and forward the request to designgrad@asu.edu if you receive instructor approval.

APH 494

The Image of Rome

Class # 22959

Instructor: Elena Rocchi
iCourse

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.

APH 598

Looking, Thinking, Sketching

Class # 31833

Instructor: Victor Irizarry
6:00 pm – 8:45 pm, Th

In this Studio/Workshop the student will learn to use different techniques of visual communication by exploring them in a more experiential approach. Invention and Imagination will be encouraged in the process of designing the drawings/documents. This will help the student to understand the importance of conventional parameters of architecture such as form, space, proportion, texture, light and shadow, but also particular spatial experiences and events, people, sounds, smells, colors, materiality, and the role of invention and imagination.

APH 598

Frank Lloyd Wright

Class # 31810

Instructor: Paul Zygas
6:00 pm – 8:45 pm, Th

A seminar examining the work of F.L. Wright. Emphasis will fall on works which best reveal his operative design premises, strategies, and tactics.

APH 598

Charles + Ray Eames

Class # 27314

Instructor: Max Underwood
iCourse

Survey of the American designers Charles and Ray Eames, their innovative design thinking and masterworks.

ATE 582
Environmental Control Systems
Class # 29641

Instructor: Agami Reddy
1:30 pm – 2:45 pm, Tu + Th

Heating, ventilation, and air-conditioning systems. Loads, psychrometrics, refrigeration cycle, air/water distribution, controls, energy performance standards, and utility rates.

ATE 598
Green Building Practices
Class # 18241

Instructor: Harvey Bryan
3:00 pm – 4:15 pm, Tu + Th

This course will critically review several of the Green Building Practices that are currently in operation in the U.S. To date these practices have been primarily voluntary, however recently several regulatory standards have been developed. On the voluntary side we have; U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) System, The Green Building Initiative's (GBI) Green Globes, International Living Future Institute's Living Building Challenge and the EPA's Energy Star. On the regulatory side we have the ASHRAE 189.1 Standard, International Green Construction Code (IgCC), California's CalGreen Code as well as several Federal Executive Orders. Students will come away from this course with a very good understanding of these practices. How they could apply them to in practice and prepare them for certifications such as a LEED GA (Green Associate).

ATE 598
Building Energy Analysis II
Class # 12678

Instructor: Marlin Addison
6:00 pm – 8:45 pm

This course will employ advanced whole-building analysis tools in a computer lab setting, to develop insight into the rules of energy-efficient sustainable design.

ATE 598
Renewable Energy Systems
Class # 18214

Instructor: Harvey Bryan
12:00 pm – 1:15 pm, Tu + Th

This course is meant to provide an introduction to various renewable energy sources. Special emphasis will be placed on solar energy, Arizona's most plentiful energy resource. Prerequisite: admission to upper division or consent of instructor.

Renewable energy is the only long term solution to a sustainable future. This course is meant to provide an introduction to various renewable energy sources – solar, wind, water, geothermal (underground heat), ocean (tides, waves, thermal gradient) and biomass (growing of plants). This course will focus on solar energy conversion and cover both passive and active solar thermal systems as well as solar electric generation by thermal and photovoltaic means. Topics to be included are: renewable energy's role in

mitigating global warming; methods to assess incident solar energy availability; different types of solar collectors and various types of system (building related, process heat and electricity); energy storage; the integration of solar into existing infrastructure; the economics of renewable energy; and the future of national renewable energy policy. The aim of this course is to equip students with a good understanding of the basic scientific concepts and analytical skills to perform system evaluation and a familiarity of pertinent technologies; factors necessary for students to assess the utility and viability of various solar energy technologies in the context of the growing opportunities available in the emerging global renewable energy market.

DSC 501
Qualitative Research in Design
Class # 16490

Instructor: TBA
4:30 pm – 5:45 pm, Tu + Th

Theory and application of qualitative research. Emphasizes using ethnography to identify and specify innovative concepts and strategies.

DSC 598
Mindfulness Fundamentals (Session A)
Class # 26851

Instructor: Barbara Crisp
4:30 pm – 6:15 pm, Tu
1 credit

Mindfulness is about paying attention (awareness), with an attitude of curiosity and acceptance (no judgment) to the present moment (whatever you are doing). You can bring mindfulness to anything you do - walking the dog, brushing your teeth, talking to a friend, sitting in traffic, or having a coffee ☺ and it is something you can experience anytime. Mindfulness is also a set of skills and techniques for systematically developing present moment awareness. The practice of mindful awareness has a variety of well-documented impacts, including reduction in stress, increase in emotion regulation, and improvement in sustained attention, focus, and executive function. The central objective of the course is for participants to gain the tools necessary to manage stress, to feel more balanced in their lives, and to continue a meaningful mindfulness practice after the course completes. In this 8 week course you will learn: The basics of mindfulness meditation, skills to manage stress, increase energy, and create calm ☺ Practices that cultivate positive states of mind like gratitude, kindness, and joy. The role mindfulness plays in all aspects of our lives, including communication and interaction.

DSC 598
Basic Model Making Techniques (Session A)
Class # 23256

Instructor: Mark Fromeyer
9:40 am – 11:30 am, Tu
1 credit

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 598
Fundamentals of CNC in Modeling (Session A)

Class # 23257

Instructor: Ben Bednarz
9:40 am – 11:30 am, W
1 credit

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 (Session A)
Class # 23258

Instructor: Mark Fromeyer
9:40 am – 11:30 am, Th
1 credit

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
Indigenous Architecture, Planning & Construction
Class # 27559

Instructor: Wanda Dalla Costa
1:30 pm – 2:45 pm, Tu + Th

This course is a vehicle for research and analysis of emerging theory in indigenous planning, architecture and construction. Case studies, research models and best practices of indigenous projects from North America and abroad will be reviewed. This perspective will engage an examination of global strategies of sustainability and add to alternative research methodologies for future practice.

DSC 598
Community Development: art culture design
Class # 27330

Instructor: Maria Jackson
9:00 am – 11:45 am, F

EPD 791
Seminar – Research Proposal Writing
Class # 22490

Instructor: Kenneth Brooks
1:30 pm – 2:45 pm, Tu + Th

A small class emphasizing discussion, presentations by students, and written research papers.

GRA 401
Creative Environment
Class # 16690

Instructor: William Heywood
10:45 am – 12:00 pm, M + W

Explores and investigates theories of the psychology of space, psychology of people in space, and the psychology of objects as it pertains to creativity and the creative environment.

GRA 562
Methods in Visual Communication II
Class # 12579

Instructor: Danielle Foushee
10:30 am – 1:15 pm, M

Advanced theories and methodologies in visual communication. Emphasizes visual search as the synthesis of theory and practice.

GRA 598
Advanced Interaction Design II
Class # 13196

Instructor: Michelle Fehler
9:00 am – 10:15 am, Tu + Th

By the end of this course, students should be able to create and publish a web-based interface that utilizes current technological, and design methods to create web applications suitable for various interactive platforms.

IND 598
Medical Product Design
Class # 17851

Instructor: Joseph Velasquez
6:00 pm – 8:45 pm, M

Understanding and managing the complex challenges faced when bringing commercial medical devices to market.

IND 598
Digital Visualization for Design
Class # 22790

Instructor: Jiyun Shin
10:30 am – 12:15 am, Th

Please contact Pepe Velasquez at joseph.velasquez to receive permission to enroll.

IND 598
Advanced UX Design – UX for Emerging Technologies
Class # 31970

Instructor: Colin Smith
6:00 pm – 8:45 pm, Th

Please contact Pepe Velasquez at joseph.velasquez to receive permission to enroll.

IND 598
Digital Process – Advanced Parametric CAD Modeling
Class # 25458

Instructor: Daniel Allen
6:00 pm – 8:45 pm, Th

This hybrid course provides advanced techniques of 3D computer modeling and virtual rendering. Before taking this class, students will be expected to understand the basics of SolidWorks and KeyShot software. This course is composed of online video lecture with tutorials and lab that will require considerable hands-on practice in and outside of class. Students are required to watch the video lecture that will be provided by the instructor, and they will need to practice and complete the given assignments with the video materials. Through the assigned lab hours in the computer lab, students will learn other tool utilizations and how to build 3D models in SolidWorks with the instructor, and they could ask questions about the video tutorials that demonstrate the process of creating work. By watching the video materials, students will be able to follow the building process and understand tool utilizations.

Please contact Pepe Velasquez at joseph.velasquez to receive permission to enroll.

INT 598
Identities and Design
Class # 31357

Instructor: Olivier Vallerand
10:30 am – 11:45 am, Tu + Th

How do embodied identities impact designers' biases and the way people experience spaces? How has the history of identity politics intersected with changes in the design professions? How can we challenge assumptions about a universal user? This seminar focuses on the relationship between design and gender, race, culture, disability, age, gender identity, and sexual orientation, among other dimensions of self-identifications. Students will be expected to recognize and understand what biases impact the work of designers. They will critically investigate methods to assess these biases and their impact on users, as well as solutions to avoid or mitigate them.

LAP 598
AutoCAD for LA & Planning – Session A
Class # 27453

Instructor: Nikolas Smilovsky
2:45 pm – 4:15 pm, Th

LAP 598
GIS for Landscape Architecture
Class # 27361

Instructor: Nikolas Smilovsky
12:30 pm – 2:30 pm, Tu + Th

LAP 598
Advanced GIS Applications in Environmental Design
Class # 28559

Instructor: Nikolas Smilovsky
9:00 am – 11:45 am, Tu

LPH 598

Hand Drawing & Illustration

Class # 32086

Instructor: Duane Blossom

9:00 am – 11:45 am, Th

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

LPH 598

Green Urbanism

Class # 15320

Instructor: Paul Coseo

9:00 am – 11:45 am, M

LPH 598

Design the Arizona Landscape

Class # 32430

Instructor: Joseph Ewan

9:00 am – 11:45 am, Tu

This course will focus on infrastructures that have influenced the physical form of human settlements in Arizona. The course will emphasize the importance of field experience in developing an understanding of how infrastructures function and how they have shaped the natural and built environment.

MUD 598

Urban Issues

Class # 32412

Instructor: Darren Petrucci

9:00 am – 11:45 am, W

TROPICAL RESEARCH BASE CAMP DESIGN - Seminar (3 credits)

Open to 4th, 5th and 6th year Architecture students

The Smithsonian Tropical Research Institute (STRI) was established as a marine research facility on Panama's Pacific coast. As part of a Panama's Coiba National Park and a UNESCO World Heritage Site, Coibita is superbly located to serve as a base for the Smithsonian to launch scientific studies in a critically important ecosystem of major importance to humanity. This seminar will work directly with STRI, Biomimicry, and others to redesign STRI's outdated research facilities on the island. Students in the seminar will work collaboratively in developing adaptive resilient building systems that leverage the unique conditions of this extremely remote site. The deliverable from the seminar will include a site plan, building design, and sustainable strategies. Recognizing that this is a seminar, not a studio the course will be mindful of student's time in developing this exciting opportunity, therefore the workload will not exceed that of a conventional seminar. Funding provided by STRI will pay for interested students to finalize the work of the seminar during the beginning of the summer.