ARCH Course Options- Summer 2021

Summer options listed here are subject to change, based on the university's response to the COVID-19 situation. Please stay updated on the CU Denver website [here](#).

Note: All ARCH electives require sophomore-standing or higher. Some courses may have additional pre-requisites; see description for pre-requisite information. All meeting days/time are subject to change; please double-check listing in UCDAccess.

- **ARCH 3340.001 - Theory of Structure I**
  - Introduction to the analysis and design of structural elements and focuses on the principles of statics and the strength of materials. Topics include stress determination, deflection and the behaviors of tension, compression and shear in various structural elements. *Please be advised that this class will move at a fast pace due to the relatively short duration of the summer term (8 weeks). The Architecture Department will offer this class again during the Fall 2021 term (16 weeks) according to the more typical scheduling of this class.*
    - M,W 8:00 am – 9:15 am, REMOTE/ONLINE (mixed modality)
    - Recommended Prereq: MATH 1130 OR MATH 1110 & 1120; PHYS 2010/2030 OR PHYS 2311/2321.

- **ARCH 3602.001 - Architecture Photography**
  - Architecture Photography is an introduction to making and critically analyzing photographs in general, as well as architectural images specifically. Students will be challenged to create compelling imagery and to think critically about the ways in which images communicate. Students will complete a number of in-class mini assignments, four photographic

    assignments, and a final photographic project. Throughout the semester students will learn:

    - How to operate a DSLR/mirrorless system camera
    - Photographic composition
    - Adobe Lightroom Classic CC, and components of Adobe Photoshop
    - Approaches to photographing architectural exteriors and interiors
    - How to use photography to capture design inspiration
    - About photographic artists and their work
    - In order to successfully complete this course students will need:
    - Access to a DSLR or mirrorless system camera
    - Can be purchased or borrowed from a friend or family member
    - A **limited** pool of cameras will be available through the college
    - An external hard drive or laptop

      - T,Th 5:00- 7:45 PM (REMOTE)

- **ARCH 3600.E01- Special Topics Design: Architecture of Fun**
  - What is fun? And what is fun architecture? It seems like an easy question at first. But like a lot of easily questions, easy answers are hard to come by. This course tackles this

seemingly simple question through creative practice and critical interrogation. By making and thinking about the objects we employ to "have fun", you will develop a conceptual framework and develop skills for designing and creating fun objects, with an eventual focus on a special class of objects we recognize as fun architecture.

- No dual credit awarded if class has been completed in a prior term.
- ONLINE

- **ARCH 3700.002 – Special Topics Design: Precedent Potpourri – Reproduction & Representation**
  - o This course will be a study in precedent, architectural precedent and representational precedent. Students will choose one piece of architecture at the beginning of the course and, through short, targeted exercises, create drawings of this building in a potpourri of different styles. The class will meet over Zoom once a week for the instructor to introduce projects, students to present their assignments and visiting lecturers to showcase their work and techniques. Asynchronous tutorials will be uploaded weekly and the class will utilize Miro for assignment feedback and student/instructor dialogue. Proficiency with Adobe Illustrator and Photoshop is highly encouraged.
    - T, 2:00 pm – 4:45 pm, REMOTE/ONLINE (mixed modality)

- **ARCH 3701.H03 – Survival Sketching**
  - o Architects regularly observe, analyze, and envision the future of the world around us. Drawing is our special tool. While we increasingly have sophisticated information modeling and rendering software available to us, the humble sketchbook remains a powerful asset in developing our skills in a variety of situations.

    Skills development in sketching comes through understanding, practice, and critique. This class consists of asynchronous online demonstrations, mini-lectures and guest presentations; coupled with out of class drawing exercises and critique of those drawings through remote class meetings (Zoom).

    The specific skills developed in this course are freehand drawing in several media (e.g., pen, pencil, brush) and the combination of that drawing with other analog and digital media (e.g., photographs, computer renderings).We will explore perspective drawing and analytic paraline projections while developing technique through the use of line/contour, tone, color as well as the development of viewpoint and image framing and composition.

    - W 4:00 – 5:15 pm REMOTE; F 1:00 pm – 3:45 pm ON-CAMPUS/IN-PERSON

- **ARCH 3709.H01- Furniture Design**
  - o With Advanced digital technologies, students are able to create complex designs, produce intricate wood objects, and replicate furniture components in a production quality atmosphere. Students will learn to run our CNC router as they combine the traditions of furniture making with modern technology in an intensive hands-on course that explores the creative potential of the Computer Numerically Controlled (CNC) router. The class will address the questions of why, when and how to use the CNC to

explore ideas in repeatable CNC driven furniture design. We will explore ways in which this technology can become another powerful tool as a design/fabrication method of making. Students will explore the materials and techniques of traditional woodworking paired, or recreated through digital technology and methods. Students will experiment, evaluate, choose and develop prototype to final product using digital modelling and CNC technology.

- **NOTE: This course was previously numbered ARCH 3700 (Special Topics Design: Furniture Design. If you took this ARCH 3700 course previously, do not enroll in ARCH 3709; you cannot earn credit for both.**
- M,W 3:30 pm – 4:45 pm (Hybrid)

- **ARCH 3800.E01 - Special Topics Technical: Rhino**
  - This course focuses on the workflows and introductory level skills needed to work within the 3D modeling software Rhinoceros. Workflows focus on how Rhino works with other software used in design fields and how Rhino may be leveraged to operate with the ever increasing number of available digital fabrication tools. Additionally, this course discusses where Rhino is useful in the design process and how it compares to other architecture software. Lastly, the introductory skills offered in this course will include how to navigate within the software, how to create drawings, how to create accurate 3D designs, how to create and modify topography, and how to set up a Rhino file to be used either for rendering or diagramming.
    - ONLINE

- **ARCH 3800.E02 – Special Topics Technical: Digital Portfolio Design**
  - This course will focus on the production of Graphic Design exercises and a Digital/Print Portfolio. The use and interplay of various computer-aided applications, including: Photoshop and InDesign applications will be used to imbue each with aesthetic and technical legibility.

    A series of progressive exercises will introduce the visual and dynamic qualities of successful portfolio compositions. These exercises will create the conceptual framework for the development of the Portfolio. Ultimately, the work is intended to broaden the students' ability to develop the representational techniques necessary to display architectural design in a concise and aesthetically relevant manner.

    - ONLINE

- **ARCH 3805.E01 - Beginning Revit**
  - This course covers the fundamental operation and use of Autodesk's Revit Architecture software. In this course, students will learn how to operate and navigate the program and will produce drawing sets and renderings for a simple building. By the end of the course, students will be capable of producing full architectural drawing sets including title blocks, floor plans, elevations, sections, details, renderings, and 3D models. The course will cover basic rendering techniques and a limited amount of Adobe Photoshop

skills so that students can apply their knowledge of Revit to produce materials for their studio courses as well as in their careers as architects.

- ▪ *Prereq: ARCH 3110 and 3130*
- ▪ ONLINE

- **LDAR 6625.001 - Field Studies: 16th Avenue Shared Street "Living Lab" Design-Build**

  o Join us to help make East 16th Avenue into one of Denver's most lively and exciting shared streets. Dig Studio is partnering with the Colfax Avenue Business Improvement District and Denver Streets Partnership to create a "Living Lab" on 16th Ave between Park & York to create a truly shared public space that encourages active transportation and improves safety for all. Most importantly, the goal of this project is to bring joy and delight to the street and serve as an example for future shared street improvements around the city. This summer course will be a collaborative design-build program with Dig Studio to finalize design for shared street elements, fully source and construct these elements and work with the community to install the interventions in the street this summer.
    - ▪ *Pre-req: ARCH 3120 Design Studio III; junior/senior standing*
    - ▪ This class will run on a non-traditional schedule, June 7th – July 3rd; please check UCDAccess for specific class meeting schedule.
    - ▪ Please contact your advisor (CAP.UGAdvising@ucdenver.edu) for assistance with course enrollment.