



University of Colorado
Denver

**ARCH 3700: Special Topics Design M03
Extended Studies - 2018
College of Architecture and Planning
Undergraduate Architecture**

Instructor Names: Jo Vandenburg and Maria Delgado

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Class Meeting Days: June 23, 2018 – Aug. 10th, 2018 - *Monday-Thursday 1:15-5:15*

Class Term: Summer 2018

Class Room: CU Denver Building

COURSE SYLLABUS

COURSE OVERVIEW

I. Welcome!

In this course, you will design and build a structure on CU Denver's neighborhood community.

II. University Course Catalog Description

Special topics in architecture studies related to design inquiries including theory, design skills, and/or analytical thinking. Max hours: 9 Credits.

III. Course Overview

This course will be taught by the College of Architecture and Planning to engage the student population. In this course, the students will implement Grasshopper programming and Rhino to create parametric design elements. The students will design two accessible structures in the CU Denver neighborhood on the Auraria Campus. The types of drawings that will be produced will be scaled plans, elevations, and sections. EV Studio, a local design build firm, will voluntarily act as our structural engineer. They will review the drawings to ensure the design satisfies all the load and safety requirements. We will submit the drawings to the Vice Chancellor to review the design. In addition to architectural drawings, the students will create graphic images, rendering, and a video animation for the University to use as promotional material for the project. After the design has been finalized, the students will begin to build the project. They will use the College of Architecture and Planning digital fabrication lab. After the high-quality

designs have been built, the students will be responsible for installing the project on site. The project installation will occur the week of August 6th.

The course will offer the undergraduate students the opportunity to experience a cycle of experiential learning. A concept and site will be given to the students to respond to with a concrete design intervention. The materiality of the design will be chosen based on observation of the designs conceptual and technical requirements. Connections for fabrication and installation of the architectural construct will require active experimentation and further reflection. Through this cycle students will have the opportunity to understand the relationships between abstract thought (the concept) and the limitation of real-life situations (the making).

Skills developed and used in the course will include: Grasshopper and Rhino for parametric design, CNC operation, calculations for structural analysis, planning strategies for cost estimating and scheduling, and graphic design and communication skills.

IV. Course Goals and Learning Objectives

Be able to think critically to allocate resources of time, money, materials and community engagement. The practical understanding of innate materiality and local resources derived from the landscape and environment.

- Students will documentation of all determined design.
- Students will prepare concept diagrams, drawings (plans, elevations, sections, and detail connections), photographs, renderings, site location placement, and other exhibits intended to describe each project.
- Students will prepare presentation to Vice Chancellor on July 26th (1 such meeting is anticipated during design phase).
- Students will submit drawings to EV Studio July 24th for review
- Students will design development drawings (for use for cost estimation and project fabricators)
- Students will prepare cost estimation (ongoing) – the college will spend no more than the allotted budget.
- Students will assemble project by August 10th deadline on campus.

V. Course Prerequisites

College of Architecture and Planning Digital Fabrication Lab safety training.

VI. Course Credits

3 credit

VII. Required Texts and Materials

All readings will be distributed through canvas.

VIII. Course Schedule

The following is a proposed schedule and is subject to change.

EVALUATION

VIII. Assignments

All assignment will be distributed through canvas.

Assignments/Timeline

Prerequisite: ARCH 3801 (Digital Media)

Maymester: 1 Class x 3 Weeks = 3 Credits

Monday-Thursday during the following periods:

Morning (8:30a-12:20p) – Lab work session

Afternoon (01:30p-5:20p) – In class session

March 12

Registration begins.

Tentative Week 01: Design			
<u>July 23</u> 1:30 - W.W. Committee 2:00 - Intro to 3D modeling 3:00 Start Form Designing 4:30 Walk-through Form Review (Jo + Maria) HW: Finalize Form iteration	<u>July 24</u> 1:15 - Jo and Maria select form (to waffle) 2:00 - Break up into teams 4:00 Internal CAP Review + EV Studio HW: Finalize Form Presentation Print Drawings: plans, elevations, sections	<u>July 25</u> 9:00 W.W. Committee Form Presentation (volunteer) 1. Prototype - Full scale Detail 2. Small Scale Model 3. Material Order Estimate 4. Update Boards 5. Prepare files for CNC	<u>July 26</u> 1:30 Practice Presentation 3:15 Presentation To Design Review
Week 02: Fabricate			
<u>July 30</u> Safety Training Cut all the wood	<u>Jul 31</u> Cut all the wood	<u>Aug 1</u> Cut all the wood	<u>Aug 2</u> Cut all the wood
Week 03: Assemble/Disable/Store			
Aug 06 Assemble	Aug 07 Assemble	Aug 08 Assemble	Aug 09 Assemble

X. Basis for Final Grade

Assessment	Points Possible	Percent of Final Grade
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Attendance/Construction Participation	50	50%
Daily Report	40	40%
Final Report	10	10%
Total	100	100%

Grading scale:

Scale (points or %)	
94-100	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
67-69	D+
64-66	D
60-63	D-
0 - 59	F

XI. Grade Dissemination

CU Denver utilizes web grading which is accessed through [UCDAccess](#). All web grading information can be found at www.ucdenver.edu/student-services/resources/registrar/faculty-staff/

COURSE PROCEDURES

XII. Course Policies: Grades

Attendance Policy:

UC Denver Student Attendance and Absences Policy:

http://www.ucdenver.edu/faculty_staff/employees/policies/Policies%20Library/OAA/StudentAttendance.pdf

Late Work Policy: No late work accepted.

Extra Credit Policy: An exhibit will be displayed on the second floor after the trip. Involvement in exhibit preparation will be considered extra credit.

Grades of "Incomplete":

Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course; students have up to one year (three semesters) to complete course requirements. The instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished within the time allowed or the “I” will automatically be recorded as an “F” on your transcript.

Group Work Policy: Everyone must take part in a group project. All members of a group will receive the same score; that is, the project is assessed and everyone receives this score.

XIII. **Course Policies: Technology and Media**

Email: Only email instructors through CU Denver email.

Canvas: Email instructors through canvas. Canvas will be used to distribute grades and assignments. You can use Canvas to contact other students in class.

XIV. **Course Policies:**

The Student and Community Counseling Center ((located in Tivoli 454)

The Student and Community Counseling Center is located in Tivoli 454 and provides cost-free and confidential mental health services to help students manage personal challenges that impact emotional or academic wellbeing. You can learn more at the Center at <http://www.ucdenver.edu/life/services/counseling-center> or by calling 303-556-4372.

Campus Assessment, Response & Evaluation (CARE)

The Campus Assessment, Response & Evaluation (CARE) Team, was created at the University of Colorado Denver and Anschutz Medical Campuses to address the health and safety needs of students as well as the campus community. If you have immediate concern about the behavior or safety of a student at CU Denver, help by making a referral to the campus Assessment, Response & Evaluation (CARE) Team. The CARE team’s purpose is to promote a safe productive learning, living and working environment by addressing the needs of students, faculty, and staff. If you or a classmate are in need of help, please submit a concern at <http://www.ucdenver.edu/care> or call 303-352-3579.

Late Arrivals: Late arrivals will be documented on Canvas and will influence grade.

Auraria Library: Utilize the Auraria Library services, research databases and collections, for assignments. Contact a librarian below:
<http://library.auraria.edu/services/researchhelp/specialists>.

Writing Center: If you engage students in writing, consider including the use of the Writing Center as one of your expectations.
<http://www.ucdenver.edu/academics/colleges/CLAS/Centers/writing/Pages/TheWritingCenter.aspx>

Religious Observances: Notify instructors in advance if you anticipate missing class due to major religious observances.

UNIVERSITY POLICIES

XV. Access

Disability Access:

The University of Colorado Denver is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS) in Academic Building 1, #2116, Phone: 303-315-3510, Fax: 303-315-3515. I will be happy to provide approved accommodations, once you provide me with a copy of DRS's letter. Note: DRS requires students to provide current and adequate documentation of their disabilities. Once a student has registered with DRS, DRS will review the documentation and assess the student's request for academic accommodations in light of the documentation. DRS will then provide the student with a letter indicating which academic accommodations have been approved.

XVI. Academic Honesty

Student Code of Conduct: Students are expected to know, understand, and comply with the ethical standards of the university, including rules against plagiarism, cheating, fabrication and falsification, multiple submissions, misuse of academic materials, and complicity in academic dishonesty. For suggestions on ways to avoid academic dishonesty, please see the Academic Honesty Handbook:

http://www.ucdenver.edu/faculty_staff/faculty/center-for-faculty-development/Documents/academic_honesty.pdf

Plagiarism is the use of another person's ideas or words without acknowledgement. The incorporation of another person's work into yours requires appropriate identification and acknowledgement. Examples of plagiarism when the source is not noted include: word-for-word copying of another person's ideas or words; the "mosaic" (interspersing your own words here and there while, in essence, copying another's work); the paraphrase (the rewriting of another's work, while still using their basic ideas or theories); fabrication (inventing or counterfeiting sources); submission of another's work as your own; and neglecting quotation marks when including direct quotes, even on material that is otherwise acknowledged.

Cheating involves the possession, communication, or use of information, materials, notes, study aids, or other devices and rubrics not specifically authorized by the course instructor in any academic exercise, or unauthorized communication with any other person during an academic exercise. Examples of cheating include: copying from another's work or receiving unauthorized assistance from another; using a calculator, computer, or the internet when its use has been precluded; collaborating with another or others without the consent of the instructor; submitting another's work as one's own.

Fabrication involves inventing or counterfeiting information—creating results not properly obtained through study or laboratory experiment. Falsification involves deliberate alteration or changing of results to suit one's needs in an experiment or academic exercise.

Multiple submissions involves submitting academic work in a current course when academic credit for the work was previously earned in another course, when such submission is made without the current course instructor's authorization.

Misuse of academic materials includes: theft/destruction of library or reference materials or computer programs; theft/destruction of another student's notes or materials; unauthorized possession of another student's notes or materials; theft/destruction of examinations, papers, or assignments; unauthorized assistance in locating/using sources of information when forbidden or not authorized by the instructor; unauthorized possession, disposition, or use of examinations or answer keys; unauthorized alteration, forgery, fabrication, or falsification of academic records; unauthorized sale or purchase of examinations, papers, or assignments.

CU Denver has a license agreement with Turnitin.com, a service that helps detect plagiarism by comparing student papers with Turnitin's database and Internet sources. Students who take this course agree that all required papers may be submitted to Turnitin. While students retain copyright of their original course work, papers submitted to Turnitin become part of the Turnitin's reference database for the purposes of detecting plagiarism.

Complicity in academic dishonesty involves knowingly contributing to or cooperating with another's act(s) of academic dishonesty.

*Note: Syllabus is subject to change.

I've read and agree to the terms of the syllabus.

X _____
Signature above Date