Syllabus: Design Dimensions of 2D-3D & 4D Spaces
University of Colorado Denver
College of Architecture and Planning
CU DEN ARCH_ARCH6590:

Semester: Spring 2018 May 14th – May 31st.
Type: Technology/Design/Professional Applications
Credits: 3
Prerequisites: none
Schedule: 11:00AM – 1:20PM. M/Tu/W/Th
Location: rm. 460, CU Building
Instructor: Robert Flanagan
Phone: 303-717-9877 cell
E-mail: robert.flanagan@ucdenver.edu
Office hours: afternoons 1:30-3:30PM (call if door closed! In lab, studio etc.)
Office Location: CU 320ff Help/tutorial hours: 9:00-10:30 Saturday, only on request.
Location(s): 320A or 320C.
Required software all classes: Autocad 2018 (or latest version), 3DSMax 2018 (or latest version), Adobe Premiere. You may use your personal computer in class.

DESCRIPTION (catalogue): Design Dimensions of 2D-3D & 4D Spaces

Architects rely on the graphic language of words and art to bridge intention and design, just as it has always been. Yet, passing an idea or concept from mental imagery to design practice through 2D, 3D and 4D filters has become even more complicated on account of digital technology. This class starts by examining the symbol expressions of ideas as seen through AutoCAD, it continues with 3DStudio Max (a 3-D design and animation program), and concludes with Adobe Premiere (video editing software).

There is an Architectural interest introduction to the use, application, and integration of these three software packages. This will include creating 2-D, 3-D, and 4-D representations of architectural concepts and expressions. No prior knowledge of AutoCAD, 3DStudio MAX, or Adobe Premiere is required.

INTRODUCTION AND COURSE OBJECTIVE: This exploration takes place within the context of environmental design concepts as they would be applied in architectural practice. Technical topics include the introduction to basic tools and concepts in AutoCAD; creation and modification of complex two and three-dimensional objects; management of design components (blocks); form generation and manipulation; drawing management, layers model and paper space; orthographic and perspective view development; and the use of shade and shadow, and sun and artificial lighting.

Other topics (3DS MAX related) include environmental simulation, computational methods of evaluation and optimization, and photogrammetry. There is some flexibility to incorporate data-driven city modeling using Autodesk 3-D MAPS (an Autocad derivative) – database of city infrastructure based on student interest.

Finally, students are introduced to Adobe Premiere and the construction of Design Diagrams, short videos incorporating sketches, 2D-drawings, 3D-objects, and animations into short, non-linear, design concept videos.
The primary software applications, Autodesk’s AutoCAD and 3Dstudio MAX are free for student download and use; Adobe Premiere is available in the computer lab. The related software applications are available in the computer lab.

TEACHING METHODS: Hands-on demonstrations of software applications in the computer lab introduce students to fundamental concepts. Each assignment builds on the previous assignment until a mastery of essential concepts are demonstrated. Assignments are typically organized into modules and assigned after 8-hours of intensive study. ‘Studio format’ reviews are intended to promote discussion and critical analysis. Students are expected to attend all scheduled classes.

OUTCOMES: Classroom discussion and presentations required at every class meeting. All assignments are printed, pinned-up, and then submitted in native format and PDF to Canvas before the start of the review session. Videos are uploaded directly to Canvas. Students are expected to demonstrate an understanding and ability to employ the digital tools used in the classroom to demonstrate original design concepts.

REQUIREMENTS: Failure to submit all assignments will result in a failing grade. Incompletes will not be assigned without proper documentation.

TEXTS and READINGS: Tutorials are essential to understand the full range of the software’s potential. Tutorials address specific learning outcomes and they are not a substitute for class attendance. Additional tutorials are available on YouTube, within AutoCAD and MAX (hold mouse over topic, press F1), by entering “keyword or phrase” on the top menu line. A subscription to Lynda.com is recommended. We will discuss in class the contribution of on-line tutorials and required subscription (i.e. Lynda.com) in the first classes.

SCHEDULE: The schedule may vary to accommodate holidays, school cancellations, or other similar interruptions. http://www.ucdenver.edu/student-services/resources/Registrar-dev/CourseListings/Pages/AcademicCalendar.aspx (Links to an external site.)

PROFESSIONAL PROGRAM ACCREDITATION CRITERIA: see department guidelines.

a) University-wide policies relevant to the syllabus include:

· Student Code of Conduct

http://www.ucdenver.edu/life/services/standards/students/pages/default.aspx

· Accommodations

http://www.ucdenver.edu/student-services/resources/disability-resources-services/accommodations/Pages/accommodations.aspx

· Academic Freedom


· Family Educational Rights and Privacy Act (FERPA)
ATTENDANCE: http://www.ucdenver.edu/faculty
staff/employees/policies/Policies%20Library/OAA/StudentAttendance.pdf

Absences, Tardiness, Quizzes and Examinations, and Homework: Except for documented health or disability reasons, I will not accept excuses for absences, tardiness, missed examinations, or homework not submitted. Documentation of disability or health related issues must be provided to Disability Resources and Services. Classes begin and end on time. Four (4) absences will be allowed before an academic penalty of (one) grade reduction is imposed i.e. B to C. Homework, papers, projects, or any other required assignments that are turned in late will receive (one increment) grade reduction for every two days they are late i.e. B+ to B; if late after one week, the grade is F. Any student who misses scheduled pin-ups or fails to turn in assignments to canvas and/or papers will receive either a zero (0) or an F for the work missed. Under NO circumstances will you be allowed to treat this class as an independent study without written prior permission.

Submitting and Returning Assignments and Grading

1. Assignments will be distributed in class session or uploaded to Canvas.

2. Assignments and examinations will be announced in class and made available on Canvas.

3. To ensure your privacy, use your individual folder in Canvas. Email is not an option since adding assignments to Canvas is not an instructor option and it bypasses grading processes. If it is impossible to upload an assignment to canvas, bring the electronic copy to class in addition to the printout. The assignment will be accepted as on-time, but it still must be uploaded to Canvas. If the work cannot be uploaded to Canvas for any reason, notify me and seek technical support from student IT help services.

Supplementary (Optional) Tutorial and Materials See class files/tutorial folder on Canvas. Materials will be added on a regular basis to explain or expand on a topic covered in class.
Basis for Final Grade

Grading Scale
(number/letter equivalent (%):
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

GRADES: each project has three grade considerations: technical proficiency (1/3), graphic development (1/3), and design synthesis (1/3). A number-letter grade equivalency is applied to each component. If no assignment submitted, the assigned grade is F. Work completed as assigned that meets the requirements described = B; work that exceeds that requested in quality/quantity = B+, work that significantly exceeds work assigned in quality/quantity = A-, the best example of work submitted = A.

Each assignment is weighted according to its length i.e. a 4-week assignment has twice the weight of a 2-week assignment. Classroom participation/quiz is 10% of final grade

Grade Dissemination

Graded tests and assignments in this course will be submitted and reviewed via the course’s Canvas course shell. You can access your scores at any time within the Canvas gradebook. CU Denver utilizes web grading which is accessed through UCDAccess. All web grading information can be found at:
http://www.ucdenver.edu/student-services/resources/registrar/students/policies/Pages/default.aspx

Attendance Policy: Grades of "Incomplete":

The current university policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course and the remaining work can be completed the next semester. Your instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished by the end of the subsequent semester or the “I” will automatically be recorded as an “F” on your transcript.

Group Work Policy:

All members of a group will receive the same score; that is, the project is assessed and everyone receives this score. The grading criteria are the same as the group project. Once formed, groups cannot be altered or switched, except for reasons of extended hospitalization.

Course Policies: Student Expectations
Civility: My commitment is to create a climate for learning characterized by respect for each other and the contributions each person makes to class. I ask that you make a similar commitment.

Religious Observances: Notify me in advance if you intend to miss class to observe a holy day of their religious faith.

UNIVERSITY POLICIES

Disability Access: Offer specifics about the university’s policy on disability access. Example: 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 North Classroom 2514, Phone: 303-556-3450, TTY: 303-556-4766, Fax: 303-556-4771. I will be happy to provide approved accommodations, once you provide me with a copy of DRS’s letter.

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. Please see the Academic Honesty Handbook at:

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

for suggestions on ways to avoid academic dishonesty. Document all work that is not your own! This is a policy that you should adopt for all of your work. Ask if you are not sure what or how to document the work of others.

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