



UNIVERSITY OF CALGARY

SCHOOL OF ARCHITECTURE, PLANNING AND LANDSCAPE

Design Media and Exploration I EVDA 541 H(2-8T)/ARST 451

Fall 2019 _ MW 0840-1250 Room 2165

Co-requisite ARST 484/EVDA 580 - Studio I Design Thinking

INSTRUCTORS

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CACB SPC: graphics skills [primary] /design skills [secondary]

INTRODUCTION

Design Media and Exploration I is a skill-building course, taught in conjunction with Studio One. The course begins by framing the notion of representation, the drawings and models that are the architect's tools to explore communicate and ultimately anticipate a future. To this end, the course covers a range of digital and analog techniques for communication, production and design thinking. Three modes of representation will be developed: descriptive explorations, interpretive explorations, and transformative explorations. The course offers a series of graphic exercises with an emphasis placed on the connections between design thinking and making for communication, design iteration, and design resolution.

OBJECTIVES

- 1.To develop a critical understanding of representation and its connection to the generative processes of architecture.
- 2.To develop communication skills across a number of platforms (digital and physical drawing and making).
- 3.To connect critical thinking with design thinking through the development of design processes and the application of strategic tools to assess, interpret, transform and create bodies of knowledge.
- 4.To develop critical-productive positions regarding the use of various techniques and technologies as they relate to architectural design.
- 5.To develop skills and familiarity around the use of diagramming, orthographic projection, constructed drawings, scale and measurement, visual notes and sketching, composition and layout, modeling by hand and by machine, and material communication, as well as familiarity with the software packages Illustrator, Photoshop, In-Design, Rhinoceros and Grasshopper [*introductory*].

TEACHING APPROACH

The course is taught using lectures, tutorials and hands-on production. Typically, a lecture in the specific topic will be given alongside a related assignment handed out at the conclusion of the lecture. The following class, a series of tutorials and demonstrations by the course Teaching Assistants will introduce techniques for completing the assignments. The faculty team and Teaching Assistants will provide desk crits, tutorials and reviews of work as specified in each problem statement. Students should be productive during the time allotted in the course for working on projects and should expect to spend additional time outside of the class completing the assignments.

Class participation is vital to student success in the course and attendance to lectures and tutorials is mandatory. A maximum of 2 unexcused absences will be allowed.

Sketching will be deployed throughout the term and within projects as a means to evaluate and iterate ideas around each graphics project. A portfolio of sketching will be maintained throughout the term. Completed graphic work is to be posted by the students to the course D2L website. Assignments will not be accepted by email.

CONTENT: TOPIC AREAS AND CLASS SCHEDULE (SUBJECT TO CHANGE)

- 1. PAMPHLET ONE_ Sept 09 – Sept 23 20 %
Descriptive and Interpretive Explorations_ in 2 D
Topics architectural diagrams - lines – graphic layout - the *first* orthographic cut
Tools Adobe Suite - indesign - illustrator – Rhino - pencil

- 2. PAMPHLET TWO_ Sept 23 – Oct 30 30 %
Interpretive and Transformative Explorations_ from 2D to 3D
Topic mapping – rendering – modelling – contextualizing - the *second* orthographic cut
Tools + Photoshop - 3D Printing – Rhino – Hybrid

- 3. PAMPHLET THREE_ Oct 30 – Nov 27 30 %
Assemblies and Fabrication _ Transformative Explorations
Topics surface - scale – data - making
Tools + Grasshopper [Intro]

- 4. MONOGRAPH 10 %
- 5. *Class Participation and In Class Assignments* 10 %

EVALUATION

The course evaluation will be based on the assignments completed during the term. Each assignment has to be completed in order to pass the course. Each assignment in this course is worth 20 points. 5 of those points are awarded upon submission of the assignment on or before the deadline. Late work will only be graded if submitted before the end of a module or with the permission of the instructor. Evaluation will be as follows:

- Assignments 80 %
- Class Participation and In Class Assignments 10 %
- Monograph Assignment 10 %

GRADING SCALE

A student who receives a "C+" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding - evaluated by instructor
A	4.00	3.85-4.00	90-94.99	Excellent - superior performance showing comprehensive understanding of the subject matter

A-	3.70	3.50-3.84	85-89.99	Very good performance
B+	3.30	3.15-3.49	80-84.99	Good performance
B	3.00	2.85-3.14	75-79.99	Satisfactory performance
B-	2.70	2.50-2.84	70-74.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	65-69.99	All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.
C	2.00	1.85-2.14	60-64.99	
C-	1.70	1.50-1.84	55-59.99	
D+	1.30	1.15-1.49	50-54.99	
D	1.00	0.50-1.14	45-49.99	
F	0.00	0-0.49	0-44.99	

READINGS AND REFERENCES

Although there are no required readings for this course, the following will be useful as references for both the technical aspects of communication and the conceptual underpinnings of the course. In addition your instructors will provide suggested readings throughout the term to augment this list:

Project examples similar to those required in this course can be found in

Johnson, Jason & Josh Vermillion, *Digital Design Exercises for Architecture Students*

Conceptual Background

Balmond, Cecil, *Informal*

Corner, Paul, *Taking Measure Across the American Landscape*

Technical Background

Browning, Hugh, *The Principles of Architectural Drafting*

C Ching, Francis, D.K., *Design Drawing*

Ramsay and Sleeper, *Architectural Graphic Standards*

Communication

Tufte, Edward, *Envisioning Information*

RESOURCES

Illustrator:

Lynda.com: <https://www.lynda.com/Illustrator-training-tutorials/227-0.html>

Adobe TV: <https://helpx.adobe.com/illustrator/tutorials.html>

InDesign:

Lynda.com: <https://www.lynda.com/InDesign-training-tutorials/233-0.html>

Adobe TV: <https://helpx.adobe.com/indesign/tutorials.html>

Photoshop:

Lynda.com: <https://www.lynda.com/InDesign-training-tutorials/233-0.html>

Adobe TV: <https://helpx.adobe.com/photoshop/tutorials.html>

AutoCAD:

My Cad Site: <http://www.mycadsite.com/tutorials/>

CADTutor: <http://www.cadtutor.net/tutorials/>

Lynda.com: <https://www.lynda.com/AutoCAD-training-tutorials/160-0.html>

First Level 2D Fundamentals: <http://www.sdcpublications.com/pdfsamples/978-1-58503-959-3-1.pdf>

Rhinoceros:

Learning to Use Rhino: <https://www.rhino3d.com/tutorials>

Rhino Tutorials: <https://vimeo.com/rhino>

Lynda.com: <https://www.lynda.com/Rhino-training-tutorials/302-0.html>

McNeel Wiki: <http://wiki.mcneel.com/rhino/tutoriallinks>

Plethora Project: <http://www.plethora-project.com/2012/01/18/rhino-modeling-the-1f-one-by-zaha-hadid/>

Grasshopper:

Grasshopper Primer: <http://modelab.is/grasshopper-primer/>

Grasshopper Blog: <http://www.grasshopper3d.com/>

Plethora Project: <http://www.plethora-project.com/education/2012/02/05/rhino-grasshopper/>

Generative Landscapes: <https://generativelandscapes.wordpress.com/index-of-examples/>

Maya:

Maya 2016 Essential Training (Lynda.com): <https://www.lynda.com/Maya-tutorials/Maya-2016-Essential-Training/370380-2.html>

A Basic Modeling Workflow: <http://cgi.tutsplus.com/tutorials/creating-a-temple-in-maya-a-basic-modeling-workflow--cg-14076>

Simply Maya: <http://simplymaya.com/autodesk-maya-training/?p=0&s=n&q=23#menu> Maya Tutorial for

Beginners: <https://www.youtube.com/watch?v=tElsku3aKQI>

MEDIA AND RECORDING IN LEARNING ENVIRONMENTS

Part 1

University Calendar: <https://www.ucalgary.ca/pubs/calendar/current/e-6.html>

Recording of lectures (other than audio recordings that are pre-arranged as part of an authorized accommodation) is not permitted. Students may not record any portion of a lecture, class discussion or course-related learning activity without the prior and explicit written permission of the course instructor or authorization from Student Accessibility Services. For any other use, whether by duplication, transcription, publication, sale or transfer of recordings, written approval must be obtained from the instructor for the specific use proposed. Any use other than that described above constitutes academic misconduct and may result in suspension or expulsion.

Part 2

The instructor may use media recordings to capture the delivery of a lecture. The instructor will notify all students and guests in the class that the event is being recorded. If a student or guest wants to take steps to protect privacy, and does not want to be recorded, the instructor will provide the individual (s) with an alternative means of participating and asking questions (e.g., passing written notes with questions). Students cannot be penalized for choosing not to be recorded in situations where participation is part of the course. Students must be offered other ways of earning participation credit that do not involve recording.

Any video-recording would be intended to only capture the instructor and the front of the classroom. Students/other participants would not necessarily be visible on video recordings.

UNIVERSITY OF CALGARY POLICIES AND SUPPORTS

Academic Accommodation

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Academic Misconduct

Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when: (a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work, (b) parts of the work are taken from another source without reference to the original author, (c) the whole work (e.g., an essay) is copied from another source, and/or, (d) a student submits or presents work in one course which has also been submitted in another course (although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar. For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

COPYRIGHT LEGISLATION

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

UNIVERSITY STUDENT APPEALS OFFICE: If a student has a concern about the course, academic matter, or a grade that they have been assigned, they must first communicate this concern with the instructor. If the concern cannot be resolved with the instructor, the student can proceed with an academic appeal, which normally begins with the Faculty. <https://ucalgary.ca/student-appeals/>

More student support and resources (e.g. safety and wellness) can be found here: <https://www.ucalgary.ca/registrar/registration/course-outlines>