



*photos © brian sinclair 2012*

## Introduction

Conventional approaches to architectural design, planning, construction and occupation have historically been bridled with rigidity of assemblies, immutability of spaces, and inflexibility of systems. This elective quarter course examines, explores and envisions environments (interiors, buildings, landscapes, neighborhoods, etc.) which are far more agile, adaptable and dynamic – with the goal of considering, conceiving and constructing resilient environments that accommodate uses and users, versus the more common scenario whereby people have to alter + adjust to static intractable environments. The course is contextualized within integrated design, holistic planning and the pursuit of sustainability. In consideration of the very fragmented and complicated ways of designing and building (and especially in North America), this elective critically examines design with an objective to more meaningfully meet user needs, to ensure better efficiencies, to realize more useable facilities, and to encourage more sustainable environments. It explores key historical & contemporary theory and considers international precedents of innovative and inventive projects, including agility, prefabrication, modularity, systems & cybernetics, and open building strategies that demonstrate + deploy advanced thinking, techniques and technologies in Architecture.

## Objectives

- To critically explore topics and effectively research issues that can meaningfully inform, influence and inspire design.
- To consider architectural design in a more integrated and holistic manner, attending to multiple scales and balancing competing and/or complementary demands & expectations.
- To examine, understand and deploy principles of open building, agile architecture, spatial mutability, prefabrication and systems-approaches to design + construction.
- To develop skills and awareness in architectural and urban design through the exercise of creating and conveying via expanded viewpoints, multiple methods & mixed media.

## Teaching Approach

Agile Architecture and Open Building, as emerging concepts and practices, proves complex, challenging and vital. This course is structured to present a wide array of viewpoints on key ideas, areas and applications. The quarter course elective will meet once a week for 1.5 hours to explore timely issues regarding agility, flexibility and adaptability. Classes will include a diversity of experiences, such as guest lectures, films, discussions, and individual & group assignments aimed at gaining a wide & rich understanding of relatively complex notions. Students are expected to critically consider the range of approaches being discussed in the elective and to begin to formulate, delineate, articulate and demonstrate their own positions.

## Content: Topic Areas

- Agile Architecture
- Open Building
- Prefabrication & Modularity
- Evidence-Based Design
- Mixed-Used Building
- Urban Development | Density & Intensity
- Building Performance | Construction Innovation
- Integration & Holism
- Sustainability | Symbiosis

## Means of Evaluation

The course evaluation will be based on the following assignments completed during the term, which includes a project | presentation, paper & journal. There will be no final examination.

Precedent Study & Class Presentation	40%
Research Paper	40%
Journal	20%
<b>Total</b>	<b>100%</b>

## Grading Scale

Letter Grade	4-Point Scale	4-Point Range	Percent	Description
A+	4.00	4.00	92.5-100	Outstanding - evaluated by instructor
A	4.00	3.85-4.00	85-92.49	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	3.50-3.84	80-84.99	Very good performance
B+	3.30	3.15-3.49	76-79.99	Good performance
B	3.00	2.85-3.14	73-75.99	Satisfactory performance
B-	2.70	2.50-2.84	70-72.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	66-69.99	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	63-65.99	
C-	1.70	1.50-1.84	60-62.99	
D+	1.30	1.15-1.49	56-59.99	
D	1.00	0.50-1.14	50-55.99	
F	0.00	0-0.49	0-49.99	

Notes: 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.

### Required Textbook

Kronenburg, Robert. Flexible: Architecture that Responds to Change (1<sup>st</sup> Edition). London: Laurence King Publishing Ltd., 2007.

### Recommended Textbook

Smith, Ryan E. Prefab Architecture: A Guide to Modular Design and Construction (1<sup>st</sup> Edition). New York: John Wiley & Sons, 2010.

### Important Notes

1. Written work, term assignments and other course related work may only be submitted by e-mail if prior permission to do so has been obtained from the course instructor.
2. It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. (<http://www.ucalgary.ca/drc/node/46>) Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.
3. Plagiarism - 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 (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test),(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. It is recognized that clause (d) does not prevent a graduate student incorporating work previously done by him or her in a thesis. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.

4. Information regarding the Freedom of Information and Protection of Privacy Act (<http://www.ucalgary.ca/secretariat/privacy>) and how this impacts the receipt and delivery of course material
5. Emergency Evacuation/Assembly Points (<http://www.ucalgary.ca/emergencyplan/assemblypoints>)
6. Safewalk information (<http://www.ucalgary.ca/security/safewalk>)
7. Contact Info for: Student Union (<http://www.su.ucalgary.ca/page/affordability-accessibility/su-structure/contact-info>); Graduate Student representative( <http://www.ucalgary.ca/gsa/>) and Student Ombudsman's Office (<http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights>).

### CACB Student Performance Criteria:

The following CACB Student Performance Criteria will be covered in this course at a primary level (other criteria will be covered at a secondary level): A1. Critical Thinking Skills; A2. Research Skills; B4. Sustainable Design; C2. Building Systems Integration. (see CACB SPC matrix for further details)

### Special Budgetary Requirements

Mandatory Fees | The University has approved supplemental fees for the following courses:

#### 2012/2013 SUPPLEMENTARY COURSE FEES

ARST 484/EVDA 580/EVDS 603 - Studio I Design Thinking	\$92.00
ARST 483/EVDA 501/EVDS 601 – Interdisciplinary Seminar	\$200.00
ARST 444/EVDA 582 - Studio II in Architecture	\$92.00
EVDA 621 – Intro to Design Theories	\$200.00 (for new-to-EVDS M1 students only)
EVDA 682.02 – Intermediate Studio	\$92.00
EVDA 682.04 - Comprehensive Arch. Studio	\$92.00
EVDA 782 - Senior Arch. Studio (all sections)	\$92.00

### Contact & Office Information

Dr. Brian R. Sinclair | PF Room # 3103 | [brian.sinclair@ucalgary.ca](mailto:brian.sinclair@ucalgary.ca)

*Please contact the instructor with any questions or concerns. Meetings by appointment.*

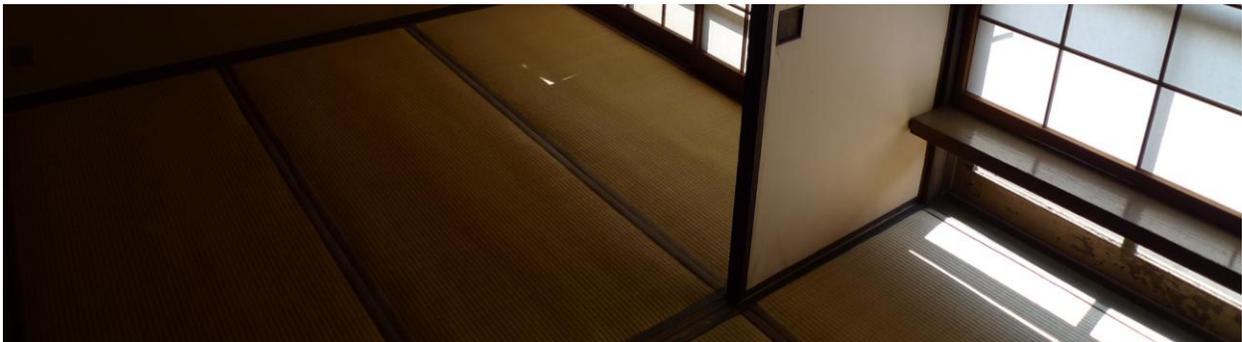


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