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Azrieli School of **Architecture & Urbanism**

ARCU 4801 / Selected Topics in Urbanism
Fall 2019 / Mondays 8:30-11:30 & Friday, Dec. 6th, AA 510
Instructor/ Catherine Bonier - catherine.bonier@carleton.ca
Office Hours/ Thursdays 11:00 – 12:30pm, by appointment - AA 412

Between Architecture and Infrastructure
Urban Systems // Nature, Technology, and Health

INTRODUCTION
This seminar investigates the relationship between the themes of nature, technology, and health. Students will evaluate the ways in which the dialog between these 3 forces shapes cities. Water is one of the central elements of this inquiry, weaving together these themes and linking basic sustenance with the highest cultural aspirations. Students will learn from past and contemporary urban challenges, and evolving hopes for safety, equity, democracy, freedom, power, and beauty.

COURSE THEME AND FORMAT
This is an advanced seminar in selected topics related to urbanism. The course combines lecture and seminar formats. Each three hour session will include presentations by students on assigned topics, and introductions to weekly topics by the instructor. In addition, students will develop their own research questions, and generate final projects that engage issues of urbanism for the 21st century in the global context. **Class discussion and active questioning are key course components.**

This class demands independent intellectual effort and engagement on the part of students. Weekly readings will challenge students to grasp complex urban issues past and present. From this perspective, students will be required to develop their own questions and ideas. Final projects require that students research, document, and understand the challenges of a specific city, in order re-imagine an innovative, improved future based on the realities of that place.

COURSE OBJECTIVES, PEDAGOGY and ASSIGNMENTS
Students will develop their knowledge in relation to urban landscape, health, infrastructure, and technology. Through presentations and term projects, students will advance their research abilities and critical faculties. Research and writing are central components of the course.

Course Objectives
1. To interrogate the relationship between ideas and techniques of urban, environmental, and infrastructural management within historical and global context.
2. To thoughtfully consider how designers, planners, and engineers engage the inherent complexity of social, political, cultural, technical, and scientific issues surrounding urban settlement.
3. To develop excellent skills of interpretation and comparison, using clear and succinct written, visual, and verbal communication to describe and to understand historical and contemporary urban issues.

<u>Assignments and Grading</u>

       weekly blog posts and replies = 10%
       in-class participation, quizlets, and polls = 15%
       presentation prep meeting* = 10% *(1 week before presenting, do reading BEFORE the meeting)
       in-class presentations = 25%
       term project bibliography + storyboard presentation = 10%
       term project final presentation = 15%
       term project revised submission = 10% (graded upon successful incorporation of feedback)
       discretionary = 5%

<u>Project Evaluation</u>

Projects will be evaluated on the (1) evidence of clear understanding of readings and case studies (2) development and articulation of an argument according to the objectives set forth in the project assignment, and (3) the clarity, craft and completeness of the work submitted at the hand-in deadline. Please note that:
- Every day late is a 2% reduction in the project grade, starting immediately after the deadline time.
- Computer failures, uploading problems, and lost data are not valid excuses for late work. Back up all files and plan to finish and to submit work early to avoid difficulties.

<u>Work Expectation</u>

A large portion of your time for this course will be devoted to the weekly readings, which average 50 pages per week but may be slightly more or less. Although many of the readings are difficult, it is expected that you will dedicate the time to develop your own understanding of the texts. If you are having difficulty, please schedule a meeting during office hours. Also use the blog as a means to work with your colleagues to discuss your questions regarding the readings.

<u>Class Participation</u>

• You are required to read all the required texts and to post to the blog every week prior to class.
• You are required actively participate in all class discussions.
• You are required to attend all classes, and to arrive on time.
• Cell phones/ laptops/ tablets may not be used during class, except to give presentations.

How to // Weekly Reading Responses
Uploaded by all students, except those presenting for the week. (CULearn Forum)

Do your readings with the following questions in mind:
       What is the author's expertise, focus, and point of view?
       What is the understanding of health in this time and place?
       What is the challenges to urban health or environment?
       What is the social or governmental response?
       What is the architectural, planning, or engineering response?
       What is the result to city form, city life, public space, and civic society?

By 5pm Sundays, post a comment and response to CULearn which includes the following:
• Comment/ Key idea, or interesting argument by the author:
  This might be an idea you'd like to discuss further in class, even if you don't agree with it.
  You should take the quote, and try to learn more to understand it.
       "Direct quote from the text." (author's last name, pg no)
       1-2 Sentences: Your first understanding or analysis of the quote, from reading
       1 Question: Question about the quote, or what you'd like to know more about or debate.
       ** Each quote from the text **can only be uploaded twice**, so review your peer's comments.
• Response
       Post one comment or question regarding a quote posted by a peer.
• Definitions?
       1-2 Terms that you found new or interesting, with 1-2 sentences defining each.
       Use the OED for all definitions: http://www.oed.com.proxy.library.carleton.ca/

How to // Weekly Reading Presentations

**Digital copies of the 3 required parts of presentations - text, powerpoints, and handouts - are due before the start of class via CULearn. Students who are presenting must arrive 10 min. early to set up.

Each of you will be responsible for presenting critical summaries of urban case studies and readings understood together and presented as a team. You will lead the class discussion on the scheduled theme of the week. Class presenters must conduct additional research (more than assigned readings) to give deeper insights into the weekly reading. Presentations will be 20 minutes in length with 10-15 minutes for discussion, a maximum of 35 minutes. The case study should be described in relation to the reading, rather than entirely separately.

*++ Pairs of students presenting on the same week are required to meet with the instructor 1 - 2 weeks prior to their presentation. ++ Preferable meeting times are between 11-12:30 Wednesdays, but alternate times may be scheduled. The initiative lies with the student to email and arrange this required meeting in advance. **At this meeting they will have already completed the readings for their presentation**, and will be prepared to discuss their beginning research, images, bibliography, and focus, and get help with sources and ideas. The students must have a draft plan for the outline and angle of their presentation.*

1. You are responsible for creating a powerpoint presentation:
+ Usually, it takes 1-2 minutes to present each slide. So, plan on having about 10-20 slides.
+ Include weblinks for borrowed images. Insert on each slide in smallest font size, or on an endslide with image subject and link. Projects without citation and bibliography will not receive a passing grade.
+ Organize a consistent, clear visual presentation.
+ Include maps, plans, drawings, and images for any case studies. By the end of your talk, other students should clearly understand the layout and features of the city you are describing.
+ Do not use clip art. Do use high quality images in plan, aerial, and street view.

2. You are responsible for writing a typed, scripted text version of your presentation:
Your text presentation is not an informal outline or a book report, but a formal critical presentation with thesis, supporting images, quotes, citations, research, and a conclusion and questions. You may read it directly, as one would a conference paper. It must be accompanied by a bibliography of all sources consulted in order to receive a passing grade.

+ A 20 minute presentation is roughly 10 double-spaced pages of 12 pt text or 2,500 words. https://www.visualthesaurus.com/cm/wc/seven-ways-to-write-a-better-speech/

+ Web research is not sufficient to complete a scholarly presentation. You must reference a minimum of two scholarly sources (books, articles from MacOdrum or jstor) which are not web-sourced. Chicago-style citations: https://www.chicagomanualofstyle.org/home.html

+ The Carleton MacOdrum Library provides access to many information resources, including books and journals (both electronic and paper-based), as well as useful databases and maps.
https://library.carleton.ca/
https://library.carleton.ca/find/databases
https://library.carleton.ca/find/gis

+ There are also specialized research librarians who can help you to locate scholarly sources.

3. You are responsible for a presentation outline and framing questions for discussion, which you will print and distribute at the start of your presentation.
Include key terms and definitions that are important to the project or reading. Handouts should include key terms and arguments and dates and must be printed prior to the start of class.

STUDENT RESPONSIBILITIES in this course

BASIC ETIQUETTE
- **Keep the seminar room clean and remove all trash at the end of every class.**
- **Return on time from halftime breaks.**
- **Be courteous and attentive during student presentations.**

ATTENDANCE
Attendance during arranged class hours is mandatory and an essential part of a student's contract with the School and their instructor. It is a student's responsibility to be informed of decisions and announcements made during these hours. Frequent unaccounted-for absences from class meetings, seminars, reviews and desk crits may result in a failing grade whether or not assignments have been completed. Partial attendance on any class day is equivalent to an absence.

PLAGIARISM
- Students should properly cite information/data collected during research and maintain all standards of academic excellence and integrity in written/research aspects of the project. When directly citing an author, use direct quotes and provide page numbers.
- If you are downloading images, be sure to right-click to save image source, rather than trying to find it again later!
- Regarding precedent studies, always reference: building or site name, location, designer, and date of completion. Ensure you indicate why the image is relevant to your project.
- Please use the Chicago style manual as guidance.
- Please refer to the academic handbook for guidance. If in doubt, please consult the instructor

TIME MANAGEMENT
It is your responsibility to plan your time accordingly. Do not plan shift work, appointments or other non-academic activities during class time.

COMMUNICATION
- E-mail is a permanent record of communication and should be used professionally. Prior to contacting your instructor please reference the Course Outline, Project Brief, and CULearn.
- E-mail should be used to make an appointment prior to any meeting
- We will try to respond to non-emergency student e-mails within 48 hours.
- Please do not contact the via phone. If you need to make an appointment, please do so during class or set up a preferred date and time via e-mail
- If you are not receiving e-mails through your Carleton Account it is the student's responsibility to contact CCS to resolve the issue.

CALENDAR (See Schedule PDF on CULearn)

ACCEPTABLE ABSENCES & EXTENSIONS
- Illness, with proper medical documentation, and family grievance are examples of acceptable absences.
- Employment responsibilities, whether on or off campus, are not an acceptable reason for lateness, lack of attendance or an extension.
- It is the student's responsibility to periodically back-up their work. While we empathize with data loss due to corruption, deletion or loss is not grounds for an extension.

STUDENT RESPONSIBILITY
If for any reason the goals of the class seem unmanageable, it is the student's responsibility to schedule a meeting with the instructor to discuss the issue and to actively seek a solution. Meetings can be scheduled outside of office hours upon request. Many support agencies are available on campus to assist students with academic, medical, emotional, or other challenges which may arise.

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*Please note: This course outline is subject to change.

ACADEMIC ACCOMMODATION
You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

•   Pregnancy obligation: please send an email to your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide
•   Religious obligation: write to us with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the Student Guide
•   Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@ carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

STUDENT CONDUCT
Please refer to the following links in the University Calendar for guidelines on Academic Integrity and Student Conduct.

E. Student Conduct
12.0 Academic Integrity
13.0 Offenses of Conduct: Discrimination and Harassment
13.1 Carleton University's Human Rights Policy
13.2 Unacceptable Conduct
13.3 Enforcement
13.4 Formal Procedures

GRADING
For the grade in the "A" range, the instructor will have judged the student to have satisfied the stated objectives of the course in an outstanding to excellent manner; for the "B" range, in an above average manner; for the "C" range, in an average manner with C- being the lowest acceptable grade in the BAS - Design Core courses; for the "D" range, in the lowest acceptable manner in non-Core courses, and for "F", not to have satisfied the stated objectives of the course. Grades will be assigned as A+ (90-100%), A (85-89%), A- (80-84%), B+ (77-79%), B (73-76%), B- (70-72%), C+ (67-69%), C (63-66%), C- (60-62%), D+ (57-59%), D (53-56%), D- (50-52%), F (0-49%) and ABS. A grade of C- or better in each course of the BAS - Design Core is required for a student to remain in Good Standing. (Please refer to the Undergraduate Calendar http://www.carleton.ca/calendars/ugrad/1011/regulations/acadregsuniv2.html#2.3 for regulations concerning grades and other program requirement information and http://www.carleton.ca/calendars/ugrad/1011/programs/architecturalstudies.html for regulations concerning grades and other program requirement information specific to the Architecture program.

Each grade will be based upon a comparison (1) with other students in the course and/or (2) with students who have previously taken the course and/or (3) with the Instructor's expectations relative to the stated objectives of the course, based on his/her experience and expertise.

RETENTION OF WORK and PORTFOLIO*
*NB: while these criteria were developed for architectural studio courses, urbanism students must also document their work and submit final projects for grading, archiving, and possible use by the school.

Keeping a good portfolio is a most important part of architectural education. A portfolio represents a record of the student's progress and design experience over the years and is an indispensable document for any job application in the future. The School therefore requires that each student document their term's work with high resolution scans of manual drawings, photographs of models, and saved files of work produced digitally. From First Year through to graduation, students are to create the following:
- A digital Folder containing jpg files of all term's work
- A digital Portfolio saved as a PDF file.
Please title the digital folder following this example: "ARCS 3105_Last name_2016_Instructor name."
Please use the 11 x 17 landscape format and a simple and clear graphic language for the digital portfolio.

Submit Folder and Portfolio to your instructor digitally, and keep files carefully for your records. Note also that your instructor may require a printed copy of the Portfolio.

The School reserves the right to use the images for the following: retrospective exhibitions of work, accreditation, publications and references for pedagogic purposes. Original work is the property of the students, but the School retains the right to keep work of merit for up to two years after the date of submission. The School will make every effort to preserve the work in good condition, and will give authorship credit and take care of its proper use.

STEWARDSHIP
Architecture, Urbanism and Conservation are about stewardship, awareness, and thoughtful habitation. Please exercise consideration for the physical and social environment around you while using the studios and classrooms. It is neither reasonable nor fair to place the burden of guessing whether an item on the floor is trash or process work upon members of the custodial staff. Respect custodial staff and their mandate to clean the building's public spaces only (and not the studios and seminar areas).

SECURITY AND SAFETY
First aid kits are found throughout the School. Alert the Instructor (during class hours) or call University Security (after hours) if an accident occurs or emergency arises.

Students are asked to take precaution when working after hours. Call the University Security (telephone extension 4444) if you see any suspicious activity and/or feel insecure in the building or on campus. Identify the location of first aid kits, fire exits, fire alarms, and security telephones.

Carleton Foot Patrol offers "safe-walk" services:
https://www.cusaonline.ca/services/servicecentres/footpatrol/

For additional information, refer to the Carleton Environmental Health and Safety website:
http://www.carleton.ca/ehs/

University Safety
613-520-3612 carleton.ca/safety

OTHER SUPPORT ON CAMPUS:

Health and Counselling Services
613-520-6674 carleton.ca/health

Student Affairs
613-520-2573 carleton.ca/student affairs

Academic Advising Centre
613-520-7850 carleton.ca/academicadvising

ACCREDITATION AND PROFESSIONAL EXPERIENCE

In Canada, all provincial associations recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the Bachelor of Architecture and the Master of Architecture. A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Student Performance Criteria
For the purposes of accreditation, graduating students must demonstrate understanding or ability in the student performance criteria listed below, according to an established sequence. The 24 SPCs are as follows:
•   A1. Design Theories, Precedents, and Methods
The student must demonstrate an ability to articulate a design process grounded in theory and practice, an understanding of design principles and methods, and the critical analysis of architectural precedents.
•   A2. Design Skills
The student must demonstrate an ability to apply design theories, methods, and precedents to the conception, configuration, and design of buildings, spaces, building elements, and tectonic components.
•   A3. Design Tools
The student must demonstrate an ability to use the broad range of design tools available to the architectural discipline, including a range of techniques for two-dimensional and three-dimensional representation, computational design, modeling, simulation, and fabrication.
•   A4. Program Analysis
The student must demonstrate an ability to analyze and respond to a complex program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws, and site selection and design assessment criteria.
•   A5. Site Context and Design
The student must demonstrate an ability to analyze and respond to local site characteristics, including urban, non-urban, and regulatory contexts; topography; ecological systems; climate; and building orientation in the development of an architectural design project.
•   A6. Urban Design
The student must demonstrate an ability to analyze and respond to the larger urban context where architecture is situated; its developmental patterning and spatial morphologies; the infrastructural, environmental, and ecological systems; to understand the regulatory instruments that govern this context; the broader implications of architectural design decisions on the evolution of cities; and the impact of urbanism on design.
•   A7. Detail Design
The student must demonstrate an ability to assess, as an integral part of design, the appropriate combinations of materials, components, and assemblies in the development of detailed architectural elements through drawing, modeling, and/or full-scale prototypes.
•   A8. Design Documentation
The student must demonstrate an ability to document and present the outcome of a design project using the broad range of architectural media, including documentation for the purposes of construction, drawings, and specifications.

B. Culture, Communications, and Critical Thinking (Five SPCs):
•   B1. Critical Thinking and Communication
The student must demonstrate an ability to raise clear and precise questions; record, assess, and comparatively evaluate information; synthesize research findings and test potential alternative outcomes against relevant criteria and standards; reach well-supported conclusions related to a specific project or assignment; and write, speak, and use visual media effectively to appropriately communicate on subject matter related to the architectural discipline within the profession and with the general public.
•   B2. Architectural History

The student must have an understanding of the history of architecture and urban design in regard to cultural, political, ecological, and technological factors that have influenced their development.

- • B3. Architectural Theory

The student must have an understanding of conceptual and theoretical frameworks and how they have shaped architecture and urban design.

- • B4. Cultural Diversity and Global Perspectives

The student must have an understanding of the diverse needs, values, behavioural norms, and social/spatial patterns that characterize different global cultures and individuals and the implications of diversity on the societal roles and responsibilities of architects.

- • B5. Ecological Systems

The student must have an understanding of the broader ecologies that inform the design of buildings and their systems and of the interactions among these ecologies and design decisions.

C. Technical Knowledge (Five SPCs):

- • C1. Regulatory Systems

The student must have an understanding of the applicable building codes, regulations, and standards for a given building and site, including universal design standards and the principles that inform the design and selection of life-safety systems.

- • C2. Materials

The student must have an understanding of the basic principles used in the appropriate selection and application of architectural materials as it relates to fundamental performance, aesthetics, durability, energy, resources, and environmental impact.

- • C3. Structural Systems

The student must have an understanding of the principles of structural behavior in withstanding gravitational, seismic, and lateral forces, including the selection and application of appropriate structural systems.

- • C4. Envelope Systems

The student must have an understanding of the basic principles used in the design of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, durability, energy, material resources, and environmental impact.

- • C5. Environmental Systems

The student must have an understanding of the basic principles that inform the design of passive and active environmental modification and building service systems, the issues involved in the coordination of these systems in a building, energy use and appropriate tools for performance assessment, and the codes and regulations that govern their application in buildings.

D: Comprehensive Design (One SPC):

- • D1. Comprehensive Design

The student must demonstrate an ability to produce an architectural design based on a concept, a building program, and a site which broadly integrates contextual factors, structural and environmental systems, building envelopes and assemblies, regulatory requirements, and environmental stewardship.

E: Professional Practice (Five SPCs):

- • E1. The Architectural Profession

The student must have an understanding of the organization of the profession, the Architects Act(s) and its regulations, the role of regulatory bodies, the paths to licensure including internship, and the reciprocal rights and responsibilities of interns and employers.

- • E2. Ethical and Legal Responsibilities

The student must have an understanding of the ethical issues involved in the formation of professional judgment; the architect's legal responsibility under the laws, codes, regulations, and contracts common to the practice of architecture; intellectual property rights; and the role of advocacy in relation to environmental, social, and cultural issues.

- • E3. Modes of Practice

The student must have an understanding of the basic principles and types of practice organization, including financial management, business planning, entrepreneurship, marketing, negotiation, project management, and risk mitigation, as well as an understanding of trends that affect the practice.

- • E4. Professional Contracts

The student must have an understanding of the various contracts common to the practice of architecture.

- • E5. Project Management

The student must have an understanding of the relationships among key stakeholders in the design process; the methods for selecting consultants and assembling teams; building economics and cost control strategies; the development of work plans and project schedules; and project delivery methods.