

Urban Systems: Encounters, Explorations + Experiences in Enigmatic Asia



photographs © brian r sinclair 2019

Instructor:

Dr. Brian R. Sinclair, PhD DrHC FRAIC AIA (Intl)

Preamble

THEORY:

Analysis of a set of facts in their relation to one another.

Abstract thought. Speculation.

The general or abstract principles of a body of fact, a science or an art.

Belief, policy or procedure proposed or followed as the basis of action.

An ideal or hypothetical set of facts, principles or circumstances.

A plausible or scientifically acceptable general principle or body of principles offered to explain phenomena.

A hypothesis assumed for the sake of argument or investigation.

An unproven assumption.

A body of theorems presenting a precise systematic view of a subject.

Merriam-Webster's Collegiate Dictionary (10th Edition)

"Cities are made of scenes. Those scenes have a syntax."

Urban Code, Mikoleit & Purckhauer (2011)

Cities are complex phenomena that present remarkable opportunities, and daunting challenges, for an increasing percentage of our planet's population. Our world is now more urban than rural, a fact that warrants the attention of Environmental Designers and calls for sound and effective decision making in order to heighten our quality of life. Cities prove rich in amenity, diversity, composition and character. They concurrently pose unique obstacles concerning infrastructure, order, management and harmony.

The urban systems course is intended to present an overview to theories, principles and practices in both an historical and contemporary sense. Being closely connected to and interwoven with the Tokyo studio, the course aims to support and reinforce encounters, explorations and experiences in Tokyo. Structurally the course includes lectures, video-taped talks, office visits, project tours and field studies which will illustrate and reinforce the interplay of theories and practices. Several assignments, coordinated with studio, will examine, delineate and demonstrate urban design theory in play in the city.

The Asia study abroad initiative brings together Environmental Design students in a rich interdisciplinary-focused milieu. Urban Design, residing at the nexus of Architecture and Planning, affords an extraordinary vehicle through which to investigate and understand the city. Through its dynamic and three-dimensional quality, urban design approaches vital questions concerning how we inhabit and utilize the spaces and places of urban settlement. It addresses the significant realm between buildings and considers how landscapes, built and natural, operate and contribute to the mix. The course bridges between the specific and the general – accepting that Environmental Designers need to focus on the competent execution of the particular while respecting broader systems. Consideration of scale and scope is essential (e.g., the project), while simultaneously responding the larger ethos (e.g., the neighborhood, the district, etc.). Subscription to holism and the pursuit of synergies are paramount.

Systems + Specifics

SYSTEM:

*A regularly interacting or interdependent group of items forming a unified whole.
An organized set of doctrines, ideas or principles intended to explain the arrangement or working of a systematic whole.
Organized or established procedure.
Harmonious arrangement or pattern.*

Merriam-Webster's Collegiate Dictionary (10th Edition)

*"The Japanese society approaches much of life with a similar respect for space and a critical eye to efficiency. Take clothing, for example: kimonos are designed to be folded then stored flatly, tightly, and efficiently. The bento box for food is another example where the focus is on space: attention to delivery, designed presentation, concern for aesthetics, and no waste. Cemeteries are another example of high efficiency, effective use of room, and the appreciation for scale, mass, surface, and space. As regards design and space, Japanese culture so often places tremendous value on beautiful functionality, on quality, on keeping, on maintaining, on preserving, on innovating, and on appreciating."
Sinclair, 2015, *Cybernetics + Systems**

The Tokyo Urban Systems course in Fall 2019 considers most notably the rich, complex and multifarious urban realm this remarkable city. Tokyo is an amazing city that needs to be understood on its own as well as in comparison to other urban centers. While on one hand there are common qualities that often shape, define and determine city form and function, on the other hand the unique dimensions of place, including geography, history, context and culture, serve to make indelible differences. We will be examining and exploring Tokyo while critically considering analyses and understanding other cities (including selected examples from North America, Europe and elsewhere). Our studies of the city will be manifold, looking into broader systems & assemblies while digging deeper into more tightly demarcated and nuanced precincts, projects & parameters. Aspects that will be covered include urban evolution, urban culture, urban space, urban politics, urban planning, urban innovation and, crucially, urban place-making.

Objectives

*"Nothing is harder, yet nothing is more necessary, than to speak of certain things whose existence is neither demonstrable nor probable. The very fact that serious and conscientious men treat them as existing things brings them a step closer to existence and to the possibility of being born."
Hermann Hesse, *The Glass Bead Game* (1972)*

Urban Design Theory surveys a fundamental base through which to approach analysis and synthesis, from an Environmental Design perspective, in the city. Our understanding of the principles and practices of Urban Design afford us a potent lens through which we can approach both problem-seeking and problem-solving. In the instance of Tokyo, especially considering its complexity and density, it is essential that we operate with sound strategy as we plan, design, intervene, alter and insert. The objectives of the course include:

- ✦ Develop the means, methods and mindset to critically consider, compare and evaluate cities.
- ✦ Develop knowledge and skills concerning the planning, design and development of urban space and form.
- ✦ Develop understanding of the historical evolution of cities, their present circumstances and their emerging trends.
- ✦ Develop the ability to be able to research, assess, interpret and advance dimensions of urban design of cities.
- ✦ Develop more interdisciplinary, imaginative and team-based approaches to research, planning, design and communication.
- ✦ Develop world and self-views concerning urban design and its potential influence and impact upon planning, design, people and place.

Requirements

The urban systems course carefully considers pedagogical aims for Environmental Design students. As such the deliverables for the course find balance between disciplinary means, methods, processes and products. Beyond required attendance and participation in all components of the course, there are three assignments (one group project and two individual components). Working in teams (same composition as studio teams) students will explore specific qualities/conditions/characteristics (to be confirmed by the instructor) of urban design using Tokyo as the living lab. The deliverables for this assignment will include both digital presentation and a written report.

The second assignment (individual) will compare and contrast selected urban qualities within Tokyo to parallel urban qualities in Western cities. Student interest will inform this research. The deliverable for this assignment will be a written report. A third assignment, a semester long journal, provides opportunities for informed observation, critical assessment, inspired connections and creative explorations. Finally attendance/participation is a final and vital component for evaluation. Specific objectives, details, requirements and deadlines will be given, at a later date, for each of these four course evaluative components.

Grading

Grades will be cumulative through the semester. Students are expected to meet all requirements for each assignment to receive a passing grade. In general grades will be based on the following (depending on the topic and the assignment): development (process) 30%, conclusion (product) 30%, presentation 30%, graphic design 10%. Attendance and active participation in all components of the course account for 20% of the final grade.

Grading Scale

Final grades will be reported as letter grades, with the final grade calculated according to the 4-point range.

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	

Notes:

Passing grades must be achieved on all assignments weighted over 30% of the total course assessment. 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. Students are expected to complete all course assignments on time. There will be no final exam. Students must obtain an overall passing grade to pass this course, however, if a student fails any phase of the course worth 30% or more they will fail the course. A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded may request to have the paper re-graded. The student shall discuss the work with the instructor within fifteen days of being notified of the mark or of the item's return to the class. More information can be found in the Graduate Calendar:
<http://www.ucalgary.ca/pubs/calendar/grad/current/gs-o.html>

Schedule F.2019

Weeks 1 – 6 Urban Tokyo: Critically Considering Qualities, Conditions, Factors & Fabric

Component 1: Group Assignment due October 04th | 35%

Weeks 6 – 12 Urban Content + Character: Comparing & Contrasting Tokyo with Western Precedents

Component 2: Individual Assignment due November 15th | 35%

Weeks 1 - 12 Term Wide Aspects

Component 3: Semester Journal | Digital | Individual Assignment due on November 22nd | 20%

Component 4: Attendance and Active Participation in course | 10%

Notes: The schedule is subject to change. All submission dates are tentative.

Recommended Textbook:

LeGates, Richard T. + Stout, Frederic (Editors). (2016) *The City Reader*. (6th Edition). Urban Reader Series. Routledge: London, UK.

Bibliography:

- Alexander, Christopher, Ishikawa, Sara and Silverstein, Murray. (1977) *A Pattern Language*. Oxford University Press.
- American Planning Association (2006) *Planning and Urban Design Standards*. Wiley: New York.
- American Institute of Architects. (2007). *Architectural Graphic Standards* (11th edition). Wiley: New York.
- Bacon, Edmund N. (1974) *Design of Cities*. Penguin Books:New York.
- Bentley, Ian et al (1985) *Responsive Environments: A Manual for Designers*. London: Architectural Press.
- Biswas, Ramesh Kumar. (Editor) (2000) *Metropolis Now! Urban Cultures in Global Cities*. SpringerWein: New York.
- Brenner, Neil and Keil, Roger. (Editors). (2006) *The Global Cities Reader*. Urban Reader Series. Routledge: London, UK.
- Bridge, Gary and Watson, Sophie (Editors). (2010) *The Blackwell City Reader (2nd Edition)*. Wiley-Blackwell Publishing: West Sussex, UK.
- Brownell, Blaine. (2011) *Matter in the Floating World: Conversations with Leading Japanese Architects and Designers*. Princeton Architectural Press: New York.
- Calthorpe, Peter (1993). *The Next American Metropolis: Ecology, Community, and the American Dream*. Princeton Architectural Press: New York.
- Carmona, Matthew and Steve Tiesdell (2007) *Urban Design Reader*, Architectural Press
- Ching, Francis DK. (2009) *Architectural Graphics* (5th edition). John Wiley: New York.
- Ching, Francis DK. (2007) *Architecture: Form, Space & Order*. (3rd edition). John Wiley: New York.
- Clear, Nic (Editor). "Architectures of the Near Future". *Architectural Design*. September/October 2009. Profile No. 2010. John Wiley & Sons: West Sussex, UK.
- Crewe, Katherine and Forsyth, Ann. LandSCAPES: A Typology of Approaches to Landscape Architecture. In: *Landscape Journal* 22:1-03. Pages 37-53. 2003.
- Cullen, Gordon (1961, reprinted 1971). *The Concise Townscape*. Architectural Press: London, UK.
- Dan, Norihiko. (Editor). (2008). *Architecture and Urbanism of Tokyo*. Garden City Publishing: Taipei, Taiwan.
- Duany, Andres and Elizabeth Plater-Zyberk (1991) *Towns and Town-Making Principles*. Rizzoli: New York.
- Gehl, Jan (1987) *Life Between Buildings: Using Public Space*. Van Nostrand Reinhold: New York.
- Hamnett, Stephen & Forbes, Dean (Editors) (2013). *Planning Asian Cities: Risks + Resilience*. Routledge: London, UK.
- Hein, Carola, Diefendorf, Jeffry M, and Ishida, Yorifusa (Ed). (2003) *Rebuilding Urban Japan After 1945*. Palgrave Macmillan: Hampshire UK.
- Hough, Michael (1994) *Cities and Natural Process*. Routledge: London, UK.
- Howard, Ebenezer (1902, reprinted 1965 and others) *Garden Cities of Tomorrow*. Faber: London.
- Isozaki, Arata. (2011). *Japan-ness in Architecture*. MIT Press: Cambridge, MA.
- Jacobs, Alan B. (1993) *Great Streets*. MIT Press: Cambridge, MA.
- Jacobs, Jane (1961) *The Death and Life of Great American Cities*. Random House: New York.
- Jencks, Charles and Karl Kropf (eds.) (1997) *Theories/Manifestoes of Contemporary Architecture* Academy Editions
- Jonas, Marieluise and Rahmann, Heike. (2014). *Tokyo Void: Possibilities in Absence*. Jovis: Berlin, DE.
- Knox, Paul L. (2011) *Cities and Design: Critical Introductions to Urbanism and the City*. Routledge: New York.
- Koolhaas, Rem and Obrist, Hans Ulrich. (2001) *Project Japan: Metabolism Talks*. Taschen: Koln.
- Lahoud, Adrian, Rice, Charles and Burke, Anthony (Editors). "Post-Traumatic Urbanism". *Architectural Design*. September/October 2010. Profile No. 207. John Wiley & Sons: West Sussex, UK.
- Larice, Michael and Elizabeth Macdonald (2007) *The Urban Design Reader*, Routledge: London, UK.

Larkham, Peter. (1998). Urban Morphology and Typology in the United Kingdom. In: *Typological Process and Design Theory*. Editor: Attilio Petrucciolo. MIT/AKPIA: Cambridge, MA.

Lynch, Kevin (1960) *The Image of the City*. MIT Press: Cambridge, MA..

Lynch, Kevin (1976) *Managing the Sense of a Region*. MIT Press: Cambridge, MA..

Lynch, Kevin (1971) *Site Planning*. MIT Press: Cambridge, MA.

McHarg, Ian (1969, reprinted 1994) *Design With Nature*. Doubleday: New York.

Mikoleit, Anne + Purckhauer, Moritz. (2011) *Urban Code: 100 Lessons for Understanding the City*. MIT Press: Cambridge, MA.

Mostafavi, Moshen and Doherty, Gareth. Editors (2010). *Ecological Urbanism*. Lars Muller Publishing: Baden Switzerland.

Mostafavi, Moshen and Najle, Ciro. Editors (2003). *Landscape Urbanism: A Manual for the Machinic Landscape*. Architectural Association: London, UK.

Otten, Reineke. Urban Daily Life. <http://www.urbandailylife.com>

Pallasmaa, Juhani. (2009) *The Thinking Hand: Existential and Embodied Wisdom in Architecture*. (AD Primers Series). Wiley & Sons: West Sussex, UK.

Rapoport, Amos (1977, reprinted 1980) *Human Aspects of Form* Pergamon Press: Toronto.

Reiser, Jesse and Umemoto, Nanako. (2006) *Atlas of Novel Tectonics*. Princeton Architectural Press: New York.

Relph, Edward (1976) *Place and Placelessness*. Pion: London, UK.

Relph, Edward (1981) *Rational Landscapes & Humanistic Geography*. Croom Helm: London, UK.

Relph, Edward (1987) *The Modern Urban Landscape*. Croom Helm: London, UK.

Rossi, Aldo (1982) *The Architecture of the City*. MIT Press: Cambridge, MA.

Sakamoto, Tomoko, Ferre, Albert and Kubo, Michael (Editors). (2003). *The Yokohama Project*. Acta: Barcelona.

Sandalack, Beverly A. and Ulrbe, Francisco G. Alaniz. Open Space Typology as a Framework for Design of the Public Realm. http://www.ucalgary.ca/urbanlab/files/urbanlab/Typology%20of%20Public%20Space_Sandalack-Urbe.pdf

Sinclair, Brian R. Culture, Context, and the Pursuit of Sustainability: Contemplating Problems, Parameters, and Possibilities in an Increasingly Complex World. In: *Planning for Higher Education*, Ann Arbor: Oct.-Dec. 2009. 38-1, pp. 6-22.

Sinclair, Brian R. Devising Design: Agility, Aptness, Equilibrium, Imperfection". Pp 41-58. In: *Building Dynamics: Exploring Architecture of Change* (Editors: B. Kolarevic + V. Parlac). Routledge: London, 2015.

Sinclair, Brian R. "Integration | Innovation | Inclusion: Values, Variables and the Design of Human Environments". *Cybernetics and Systems: An International Journal*, 46:6-7, pp 554-579, 2015.

Sitte, Camillo (1889, reprinted 1965) *City Building According to Artistic Principles*. Random House: New York.

Trancik, Roger (1986) *Finding Lost Space: Theories of Urban Design*. Van Nostrand Reinhold: New York.

Tsukamoto, Yoshiharu, Fujimura, Ryuji, and Shiner, Eric. Typo-Morphology of Tokyo. In: *Perspecta*. Volume 40, Monster 2008. Pages 32-41. MIT Press: Cambridge, MA.

Turabian, Kate (1982) *A Manual for Writers of Term Papers, Theses, Dissertations*. Heinemann: London, UK.

Venturi, Robert, Brown, Denise Scott and Izenour, Steve (1977) *Learning from Las Vegas*. MIT Press: Cambridge, MA..

Waldheim, Charles (2006) *The Landscape Urbanism Reader*. Princeton Architectural Press: New York.

White, Edward T. (1983) *Site Analysis*. Architectural Media Ltd: Tucson, AZ.

Whyte, William H. (1980) *The Social Life of Small Urban Spaces*. Conservation Foundation: Washington DC.

Zeisel, John (1984) *Inquiry by Design: Tools for Environment-Behaviour Research*. Cambridge University Press.

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.

Special Budgetary Requirements

Special budgetary requirements are limited to the optional purchase of course readings and, in specific courses, mandatory supplementary fees to cover certain expenditures, such as field trips. Mandatory supplementary fees must be approved by the University prior to implementation. Instructors are

required to list and describe approved optional and mandatory supplementary fees for courses. This can include possible costs incurred for special materials, equipment, services, or travel. The \$150 supplemental fees for all studio courses is charged to cover workshop costs of use and maintenance of hand tools, assorted power tools, CNC routers, laser cutters, 3D printers, and robotics.

Optional:

For certain courses students may be given the option of purchasing course readings. In these cases the cost of the reading package should be stated in the course outline. When course readings are available for purchase, a minimum of two copies of the readings must be made available at the SAPL Reception.

Mandatory:

The University has approved supplemental fees for the following courses:

ARST 484/EVDA 580 - Studio I Design Thinking	\$150.00
ARST 444/EVDA 582 - Studio II in Architecture	\$150.00
EVDA 682.02 – Intermediate Studio	\$150.00
EVDA 682.04 - Comprehensive Arch. Studio	\$150.00
EVDA 782 - Senior Arch. Studio (all Calgary sections)	\$150.00
EVDL 639 – Landscape Response to Climate Change	\$90.00
EVDL 667 – Landscape Architecture Studio I	\$150.00
EVDL 668 – Landscape Architecture Studio II	\$150.00
EVDL 767 – Regional Landscape Systems Studio	\$150.00
EVDL 777 – Senior Research Studio in Landscape Architecture	\$150.00
EVDS 620 – Urban Design Studio	\$150.00
EVDS 640 – Regional Planning Studio	\$90.00
EVDP 625 – Site Planning Studio	\$75.00
EVDP 626 – Landscape Planning and Ecological Design	\$125.00
EVDP 636 – Community Planning Studio	\$150.00
EVDP 644 – Advanced Professional Planning Studio	\$150.00

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>

Contact & Office Information

Dr. Brian R. Sinclair | brian.sinclair@ucalgary.ca Please contact instructor with questions/concerns. Meetings by appointment.

“Our bodily experience of the city develops following various undulations. For example, if you were to walk down a bustling street, your attention would be concentrated on continuous, unmediated, fascinating spaces. Walking through Tokyo, the storefronts buried in gaudy accessories piled one on top of the other, left, right and center, we are completely surrounded by a thin veil of color and excitement. In a European city, you would not find the same extreme experience: there is no other place where the glittering veil covers space so completely that it becomes part of our attire. This experience envelops our bodies completely.”

Toyo Ito, 2012 (*Forces of Nature*)



photographs © brian r sinclair 2019

