URSY 510: Urban Systems and Society
January 8, 2018

COURSE GOALS

This course aims to examine the societal context in which urban systems operate, focusing on infrastructure systems – energy, water, sanitation, transportation, telecommunications, and information technology – that provide critical services. Infrastructure systems reflect social values. Furthermore, their design, construction and operation will be constrained by social norms, wealth distribution, political priorities, and power inequities. This course aims to provide students with a strong understanding of the social, economic, historical, and geographic context in which infrastructure systems are embedded. Accurately diagnosing the societal context of urban systems is essential for their successful management.

This is a required course of the Urban Systems Pillar in the Masters of Engineering Leadership program. The course is organized around four major themes: (i) Infrastructure services and impacts, (ii) Infrastructure and the development of cities, (iii) The role of government and institutions and, (iii) Urban futures. Each of these topics will be studied through applied cases with the goal of preparing students to recognize and address issues of societal context in professional practice.

LEARNING OBJECTIVES

Upon completion of the course, it is expected that students will be able to:

- Identify major ways in which infrastructure provision and performance affect society, including linkages to environment, health, quality of life, equity, and economy
- Describe the role of infrastructure systems in the development of cities
- Describe and illustrate how societal forces influence the development of infrastructure
- Identify ways in which regulation, planning, and public policy affect infrastructure
- Compare public, private, and other modes of provision of infrastructure services
- Describe emerging trends and technologies in infrastructure systems, including green technologies
- Develop and justify hypotheses about future urban systems and related societal changes
- Assess urban systems problems and solutions in relation to their societal context

COURSE INFORMATION

Division: School of Community & Regional Planning **Period:** Term 2 – Winter 2018

Instructor: Stephanie Chang

Email: stephanie.chang@ubc.ca

Course dates: January 3 to April 6, 2018

Final exam: None

Class meeting times:
Monday – 9:00am to 12:00pm

Office hours: By appointment

Class location: Room 240, 1933 West Mall

COURSE MATERIALS & REQUIREMENTS

Course Materials

There is no textbook for this course. Readings will be compiled in a course reader and will be available electronically through Blackboard Connect. Assigned readings in this course are minimal. Generally consisting of book chapters and academic journal articles, they provide some background on material to be covered in lecture and can help with weekly class preparation. Readings will be supplemented by examples and resources presented in class.

ASSESSMENT SUMMARY

Assignment #1: Urban system problem (group project)	40%
Assignment #2: Urban system policy	30%
Assignment #3: Urban futures challenge	15%
Class Participation	15%

ASSESSMENT

Urban system problem (group project) (40%)

In Assignment #1, students will work in multi-disciplinary teams to develop an in-depth understanding of a specific urban systems problem and how it arises from the complex interaction of technical and societal factors. Potential topics will be provided in the first class and teams will be formed on the basis of student interests. Teams will research the case study throughout the first few weeks and bring material to class for weekly discussions. The final product will take the form of a technical report summarizing and assessing the urban systems problem. Assessment will be based on appropriate application of course concepts, quality of research, and professional writing. All members of the group will receive the same grade; however, in case of extreme disparities in individual contributions, the instructor reserves the right to assign individual marks.

Urban system policy (30%)

Assignment #2 provides students with an opportunity to critically assess potential solutions to urban systems problems. Each student will select an existing urban infrastructure policy, plan, or program ("policy case"). The policy case can be drawn from any region, including internationally, but there must be sufficient descriptive documentation available and it must have already been implemented in practice. The assignment is to produce a policy brief that describes and critiques the policy case with particular consideration of the societal context. Assessment will be based on appropriate application of course concepts, quality of research, and professional writing.

Urban futures challenge (15%)

In Assignment #3, students will consider an emerging urban systems problem, need, or issue and propose a solution (e.g., a policy, plan, program, or design). The solution need not be very complex, ambitious, or original. It should, however, be thoughtfully designed and justified in relation to the problem, with particular attention to issues of societal context. Students will produce a short written proposal and have an opportunity in the final class to pitch and defend it, as well as constructively challenge classmates' proposals.

Students may choose to link the focus of the assignments in order to gain an in-depth understanding of a particular urban systems issue throughout the course, but disparate topics can also be selected to allow a wider-ranging exploration of urban systems topics.

Participation (15%)

Assessment will consider attendance, preparedness, depth of understanding, quality of reasoning, contribution to collective learning, and oral communication performance.

ATTENDANCE

Students are expected to attend all class sessions and participate actively and constructively.

CLASS SCHEDULE

Infrastructure impacts and services		
Class 1	**January 8**	Introduction
Class 2	**January 15**	Economic and environmental impacts
Class 3	**January 22**	Social impacts
Infrastructure and the development of cities		
Class 4	**January 29**	Drivers of change
Class 5	**February 5**	Infrastructure and urbanization
Class 6	**February 12**	*Holiday – University closed*
Class 7	**February 19**	*Midterm break – University closed*
Role of government and institutions		
Class 8	**February 26**	Urban systems organizations and institutions
Class 9	**March 5**	Policy assessment
Class 10	**March 12**	Policy development
Urban futures		
Class 11	**March 19**	Trends and issues
Class 12	**March 26**	Urban futures
Class 13	**April 2**	*Holiday – University closed*

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at http://calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,0.