GGR300: Special Topics - Infrastructure
Summer, 2017
Tuesday and Thursday 12:00 to 2:00 pm, room SS 2125

Prof. Matti Siemiatycki
Room 5041 Sidney Smith

Email: matti.siemiatycki@geog.utoronto.ca
Office hours: Tuesday, 10am – 12pm

Course Description

Infrastructure is the term that describes the transportation systems, sewers, pipes, and power lines that provide urban dwellers with necessary public services. In recent years, billions of dollars of public money have been spent upgrading existing infrastructure, and planning and delivering new facilities. Infrastructure has many impacts on the way that people in cities live. The way that infrastructure systems are planned, financed, and distributed impact on environmental sustainability, job creation, social equity, economic development, and urban livability. Moreover, infrastructure has the potential to both serve existing populations, and shape the way that future communities are built.

Through lectures, discussions, workshops, readings of scholarly articles and case studies, the course will aim to engage students in the key topics and debates related to the provision of urban infrastructure. Topics to be covered will include: project planning, causes and cures for cost overruns, funding models, financing mechanisms such as public-private partnerships, and the politics of facility planning and management.

A Few Ground Rules:

1. Please use e-mail judiciously. All emails can be directed to the professor. Please use email only to ask questions that can be answered with a short reply. If you have a longer question, I will be happy to answer them during my office hours.

2. Assignment Submissions: All assignments are to be submitted in hard copy at the beginning of class on the specified due date. Assignments will not be accepted via email.

3. Late Penalty: Five (5) percentage points (of assignment grade) will be deducted for each day (Saturday and Sunday count as one day each) on all late assignments. Assignments will not be accepted later than one week after the due date. Assignments by e-mail or fax will not be accepted. All late assignments must be submitted to the assignment drop box located outside the Department of Geography main office, room SSH 5047. Please note that the drop box is only available until 5PM on weekdays.

4. Blackboard: This course has a Blackboard site where PowerPoint Slides, readings and other materials from class lectures will be posted. Please make use of Blackboard as a useful reference point for this course.
5. **Readings:** Readings for this course are drawn from journal articles and other published material. All readings can be found on the password-protected Blackboard site for this course.

6. **Plagiarism:** Plagiarism is a serious academic offence. Any cases of plagiarism or cheating on exams or assignments will be handled in accordance with the University of Toronto’s policies.

7. **Test and Essay Questions:** Test and essay questions will be drawn from the material in the readings and the content presented in the class lectures.

**Evaluation and Key Dates**

- **Assignment 1, 25%:** May 30, 2017
- **Major Term Essay:** 40%, June 20, 2017
- **Final Exam:** 25%, TBA
- **Class Participation:** 10%

Detailed descriptions of each assignment will be distributed to students in class during the term. All assignments are due at the beginning of class, and will not be accepted by email. There will be a 5% penalty per day for late assignments, which counts on weekends as well. Assignments will only be accepted for one week after the deadline.
Course Schedule and Readings

Day 1: Introduction: Concepts, Challenges, Opportunities, May 16
Stimulus spending; ‘do no harm planning’; rent-seeking; infrastructure financing and funding

Day 2: Infrastructure, Economic Growth, Land Use and Sustainability, May 18
History of infrastructure – developed and developing countries; Importance of connectivity; economic growth; social equity for those excluded; peak oil; climate change; disasters;

Day 3: Mega-Projects and Risk, May 23
Cost overruns; delivery delays; unmet expectations;

Day 4: FIELD TRIP – TORONTO WATERFRONT TOUR, May 25
Review plans and proposals on Waterfront Toronto website.
* We will meet at 12pm at Queen’s Quay and Spadina (on the south side of the street on the Spadina WaveDeck). The trip will involve a walking tour of the Toronto waterfront that will take approximately 3 hours.

Day 5: Evidence Based Infrastructure Planning, May 30
Program and project appraisal approaches; Procurement strategies

Assignment 1 Due

Day 6: Infrastructure Planning and Community Engagement, June 1
Public participation; deliberative planning; social marketing; opposing infrastructure projects


**Day 7: Innovation in the Infrastructure Sector, June 6**

Revolutionary and Evolutionary Innovation; Productivity;


**Day 8: Who owns, regulates and plans infrastructure projects? June 8**

Role of the public, private and non-profit sectors; diversity in the infrastructure industry


World Economic Forum Infrastructure Gender Gap Report
http://reports.weforum.org/future-of-jobs-2016/basic-and-industry/

**Day 9: Politics of Urban Infrastructure, June 13**

Stimulus spending; ‘do no harm planning’; rent-seeking; strategic misrepresentation


**Day 10: Infrastructure Public-Private Partnerships, June 15**


**Day 11: Infrastructure in Indigenous Communities, June 20**

Condition of infrastructure in Indigenous communities; who plans infrastructure, owns and operates infrastructure

Day 12: Infrastructure in Developing Countries, June 22

Role of international development agencies such as the World Bank and IMF; economic growth; social equity


Major Term Essay Due