URBP 626: PRINCIPLES AND PRACTICE IN PLANNING 2
RECONSTRUCTING RESILIENT CITIES AFTER DISASTERS

URBP 626, CRN 16811

The instructor:
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Time & Location:
Thursdays at 2:30 to 5:25 pm (from February 8 to April 5, 2018)
Office Hours: By appointment
MDHAR 409

COURSE DESCRIPTION
This course introduces the context and process of reconstruction following natural disasters and explains the roles that disaster managers, urban planners, affected populations, various agencies, and design teams can play in reconstruction and recovery processes. The course aims at developing students’ skills of critical thinking, design sensitivity to post-disaster scenarios, empathy, and synthesis of complexities. It broadens students’ understanding of the potential short and long-term impacts. During the classes students critically review existing mainstream approaches to urban resilience and adaptation to climate change. The course provides information on the options that should be considered in various aspects of reconstruction and insight into what has worked elsewhere. Although every reconstruction process is – of course – unique and responds to contextual conditions, this course reviews common patterns in reconstruction experiences, leading to a critical understanding of drawbacks and opportunities in recovery and development. It describes the most common approaches to urban resilience and vulnerability. This course indeed enables students to carefully synthesize the contextual complexities and comprehend how disasters and reconstruction interventions can affect cities and their populations’ general wellbeing.

Learning Outcomes
This course is designed to introduce students to concepts related to post-disaster reconstruction, with an emphasis on urban resilience, and the impacts of reconstruction processes on the economic, social, and environmental dimensions of recovery. By the end of this class, students are able to:

- Critically discuss existing approaches to urban resilience, vulnerability, and adaptation to climate change;
- Distinguish root causes, dynamic pressures, and underlying factors of vulnerabilities in urban areas;
- Comprehend the potential impacts of disasters and explain different disaster management phases;
- Understand opportunities and challenges during recovery and reconstruction programs after disasters;
- Distinguish the short- and long-term impacts of hastily interventions after disasters;
- Understand the controversies surrounding the role of urban planners in enhancing urban resilience and decreasing vulnerabilities before and after disasters;
- Synthesize context-specific complexities and consider 1) socio-cultural context, 2) climate and geography, 3) governance structure, and 4) public participation in planning resilient cities.

Course Design
The course structure includes four two-hour seminars, two two-hour workshops, plus a field trip and a session allocated to students’ final presentations at the end of the semester. Additional voluntary meetings are scheduled throughout the term to discuss students’ presentations. The seminars include topics related to disasters impacts, disaster management processes, resilience, vulnerability, and adaptation to climate changes. Each class starts with a 45-minute lecture given by the instructor, followed by a 20-minute presentation by a
group of students. The students’ presentations are then followed by lively class discussions about assigned texts and about the final project (the main assignment). Supplementary reading materials are suggested to students to help them enrich their presentations. Furthermore, 2-3 compulsory reading materials are assigned on a weekly basis, and each student is expected to read the materials.

The mid-term assignment is a short essay (maximum 500-word), reflecting students’ understandings and their perceptions about the concept of urban resilience and in answer to the following question: How, as an urban planner, do you conceive a resilient city and what would be its elements? What tools and methods are appropriate for planning a resilient city? Students need to submit their essay in Minerva by March 14, 2018.

For the main (final) assignment, the students are expected to study the 2017 flood experience in the Montreal agglomeration, investigate the process of recovery and reconstruction after this disaster, and then present their recommendations. This will entail coming up with an argument for zoning and land-use planning, relocating or redeveloping in situ, designing institutional structures, participatory decision-making, to name a few. According to the lessons learned during the seminars and the review of different case studies, the students are able to criticize the recovery and reconstruction policies and interventions in the Montreal agglomeration and recommend improvements to policy and implementation in order to enhance urban resilience and decrease future risk of disasters.

Since the first class, the students will form groups (maximum four students in every group) and begin working on their final projects. The instructor encourages them to apply the lessons learned from the seminars to study the experience of recovery and reconstruction after the 2017 floods in the Montreal agglomeration. Students are expected to develop recommendations; for instance, they are encouraged to think about solutions for preventing the duplication of pre-disaster vulnerabilities; increasing adaptive capacities; bridging the gap between authorities, experts, and community members; accelerating the recovery process; and thinking about the affordability and sustainability of solutions.

The combination of seminars, workshops, and assignments gives students a significant opportunity to understand the process of reconstruction, existing relevant arguments and controversies in the literature, and the application of lessons learned to a real-world scenario.

**COURSE SYLLABUS**

**Week 1 (Feb. 8): Course description and an introduction to natural disasters and different approaches to disaster management**

During the first class, the instructor briefly explains the objectives, intended learning outcomes, teaching and evaluation methodology, and required text and reading list in this course. He then describes the potential impact of natural hazards on urban settlements, the roles that affected populations and various agencies play in the post-disaster environment, and different approaches to disaster management cycle.

The instructor then explains the final assignments, and in collaboration with the students, they identify the scale of the final projects.

**Compulsory readings**


**Extra readings**


**Week 2 (Feb. 15): Resilience and Vulnerability**

The instructor develops an introduction to the concepts of resilience and vulnerability, explains how these two
concepts emerged, progressed, and entered the disaster management and urban planning fields. He reviews arguments in favour and against these two concepts, brings some examples of their implications in the theory and practice. He then discusses how these two concepts confront and complement each other. The theoretical arguments are supported by examples from different case studies around the globe.

In the second half of the class, the instructor discusses the concept of urban resilience and bring several examples from Making Cities Resilient (UNISDR), 100 Resilient Cities (Rockefeller Foundation), and so on. The discussions circulate around the idea of how urban planners can, or must, adopt and incorporate the concept of resilience in their work. For instance, the instructor and students discuss how an appropriate land use planning can potentially lead to resilience enhancement and vulnerability and risk reduction. They review complex issues associated with the need for access to land and secure tenure in reconstruction. In addition, discussions cover arguments such as the emergent opportunities for making cities more resilient and decreasing their vulnerabilities after disasters.

Compulsory readings


Extra readings


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Week 3 (Feb. 22): A field trip to the flooded areas of Pierrefonds (West Island) between 13h00 and 18h00

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Week 4 (March 1): Climate Change – Adaptation and Mitigation

In this class, the instructor discusses the importance of climate change and the increasing risks of disasters. He explains the concepts of adaptation and mitigation and describe their differences and similarities. The discussion focuses on the importance of social adaptation to climate change. In fact, students and the instructor discuss potential obstacles and opportunities for adaptation to climate change, and they debate why some communities adapt to climate change while others remain vulnerable.
Student presentation
In the second half of the class every group of students present their progress in their final projects.

Compulsory readings

Extra readings

MID-TERM ASSIGNMENT (A 500-WORD ESSAY)
After reading the compulsory materials and based on their personal knowledge, students should answer the following question.

*How, as an urban planner, do you conceive a resilient city and what would be its elements? What tools and methods are appropriate for planning a resilient city?*

Every student needs to submit a maximum 500-word text into Minerva by March 14, 2018 at 6pm.

Week 5 (March 15): Invited lecturer –
To be confirmed!!!

Student presentation
During the second half of the class, every group of students presents their progress in their final projects and will have time to work on their project in the workshop.

STUDENTS ARE EXPECTED TO ATTEND THE PHD SYMPOSIUM ON MARCH 22

Week 6 (March 29): Discussing the progress of student projects (workshop)
In the final class, every group of students presents the draft of their final projects and receives comments from the instructor and other students.

Week 7 (April 5): Students final presentations
Every group of students present their final project in front of a jury committee - professors from Université de Montréal’s faculté de l’aménagement and McGill’s school of urban planning. In this day, every group of students needs also submit its final report (maximum 5000 words) on Minerva.
**FINAL ASSIGNMENT:** The experience of recovery and reconstruction after the 2017 floods in the Montreal agglomeration

**Due date:** Week 8 (April 5, 2018)

**Format:** There will be two parts to this assignment:

i) An oral presentation of 20 minutes per group that summarizes the report

ii) A report in a conference paper format (maximum 5000 words excluding references)

**Outlines:**

- The context of disaster (its magnitude, location, impacts, etc.)
- The recovery and reconstruction policies (strengths and weaknesses)
- Recommendations regarding housing reconstruction technology, land use and physical planning, the organizational approach for reconstruction management, etc.
- Conclusion

**The estimated time students are likely to spend engaged in learning activities required by the course.**

Every week, students attend a two-hour class. 4 hours are necessary for course work and assignments and 14 hours are required for the final assignment. In total, this course requires 50 hours from each student throughout a term.

**Evaluation:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in tutorial discussions</td>
<td>10</td>
</tr>
<tr>
<td>Mid-term assignment (the short essay)</td>
<td>30</td>
</tr>
<tr>
<td>Final group deliverables materials + Presentations</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total (%):</strong></td>
<td>100 %</td>
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**Academic Integrity**

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity for more information).

**Disabilities**

If you have a disability, please contact the instructor to arrange a time to discuss your situation. It would be helpful if you contact the Office for Students with Disabilities at 398-6009 (online at http://www.mcgill.ca/osd) before you do this.

**BIBLIOGRAPHY**

**Compulsory Readings**


Extra readings


http://info.worldbank.org/etools/docs/library/114715/istanbul03/docs/istanbul03/07bala3-n%5B1%5D.pdf