INTEGRATED CAPSTONE DESIGN COURSE

CIVIL ENGINEERING 4X06
(Fall 2017)

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Fall Schedule:

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<td>Mondays</td>
<td>10:30-11:20 (C01)</td>
<td>Project Groups Tutorial</td>
<td>TSH-B105</td>
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<td>Wednesdays</td>
<td>10:30-11:20 (C01)</td>
<td>Municipal Eng Info Transfer</td>
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<td>Thursdays</td>
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<td>12:30-2:20 (L01)</td>
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Winter Schedule:
All weekly class periods are generally set aside for design studio work. Certain periods will have regular TA attendance for consultation. Final reports will be due on Friday March 2\textsuperscript{nd}, 2017 and poster presentations will occur on March 9\textsuperscript{th}.

Text: Materials on Avenue
Supplementary Materials on Reserve in Thode Library

Course Requirements:

Confidential Peer Evaluations 10%
Proposal (report and meeting) 10%
Chapter Hand-ins / Interim Presentations/Survey Completions 30% *(individual)
Final Poster Presentation 10%
Final Design Project Report 40% *(group and individual)

*(Percentage to letter grade conversion scale is the same as that used by the Registrar’s Office)

Late projects will be subject to a 10% per day penalty.

*Individual and Group Marks
In order to ascertain that each member of a group is contributing positively to the project the chapter hand-ins and final report will largely be individual marks. In the proposal each team must identify what chapters their group members are responsible, noting that any number of group members may be assigned to each technical chapter. The members assigned to each chapter will receive the same mark for that chapter. For the final report, of the 40%, 10% of the grade will be a group mark which reflects the overall quality of the report and 30% will be individual marks based upon the chapters that each student is responsible for. During the course groups may resubmit up to four chapters for re-marking, however the entire group must agree that a chapter can be resubmitted.

**Chapter Due Dates**
Chapters are to be submitted on Mondays and there will generally be a one-week turnaround for marking and feedback. Groups are responsible for picking up their marked chapters during the Monday group tutorial slot. The last day to submit chapters for grading and feedback is Monday February 12th.

**Groups**
All students will form self-selected groups of 5-6 people. Proposals are due on the 25th of September and meetings for each group will be set to take place between the groups and the instructors/TAs in the week of October 2nd. **Anybody that is not part of a group by September 29th 2017, will be required to withdraw from this course.**

**Course Description:**
This course will focus upon the maturing area of sustainability, with an emphasis on how sustainability relates to civil engineering and the sub-disciplines of civil engineering. This course is the integrated capstone design course for students in civil engineering, and places considerable emphasis on the fundamentals of design that minimize environmental impact and maximize the resiliency and vibrancy of built communities and their built infrastructure. The course project will focus on a real-world design application from a broad sustainability perspective, where a number of civil engineering and related sub-disciplines come into play.

**Special Note:**
The instructor and the university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

The Faculty of Engineering is concerned with ensuring an environment that is free of all discrimination. If there is a problem, individuals are reminded that they should contact the Department chair, the Sexual Harassment Officer or the Human Rights Consultant, as the problem occurs.