

Final Project Outline:

BalusARCh, *a balustrade for the library's terrace at McGill downtown campus*

The challenge:

The project will consist on the design and fabrication of a prototype for a balustrade solution at the library next to the entrance to the library at McGill downtown campus. The current architectural solution consists on an approximately 90cm raised edge, constructed in local stone, similar to that used in the façade of the building extension located underneath the terrace. This solution provides at the same time for a very convenient seating space just in front of the entrance to the library. This terrace is usually well frequented throughout the day by both university staff and students. While the current solution provides for comfortable seating, it also does not compromise the views to neither the terrace nor the adjacent green field. It is therefore quite a permeable solution which intends to blend the library terrace with the rest of McGill's campus. This has however a clear inconvenient and that is the lack of effective protection to prevent people falling off the edge of the bench. While the current solution provides for seating, it also allows people to walk on top with no additional protection measures being provided. Recent events have proved to McGill's Facilities Department the need to provide an alternative solution which ensures well-being, comfort and safety of its users without compromising either of these aspects.

Goal:

To provide a solution for the balustrade at McGill's Library Terrace which protects users from falling off the edge but does not fully compromise the degree of permeability provided by the current solution.

Requirements:

- Groups of six will be formed at the beginning of the course. All required submissions and assignments will therefore be made in groups of six students.
- Each group will choose whether they would like to develop their solution in strict compliance with the National Building Code of Canada (NBCC) or whether they would prefer to ask for a formal '*derogation from the standards*' to the relevant authorities exclusively for the realization of this project.
- Students will be asked to fabricate a prototype of the balustrade of at least 1m long.
- Students are free to choose among several fabrication techniques (CNC milling, plasma cutter, 3d printing, laser cutting, etc).

- There are not specific requirements for the materials to be used. However, during the design phase and prior to start fabrication, students will need to consider the advantages and disadvantages associated with their material(s) choice, as well as the implications linked to the fabrication tools required for the specific material(s) chosen.
- The budget to be provided to each group for the cost incurred in fabricating their prototypes (including all necessary trials and tests) is 500CDN*.
- Students will be required to present their prototypes together with the design and fabrication processes involved by the end of the course (presentations scheduled for 8th Dec 2011; refer to the complete course outline and schedule for further reference).
- Students will also be required to provide a printed portfolio documenting the design and fabrication processes involved by the end of the course (deadline for submissions: 15th Dec 2011; refer to the complete course outline and schedule for further reference).
- For further information on the project specific requirements, the assignment and the evaluation, refer to the complete course outline.

**to be confirmed by Maria Mingallon in liaison with Prof. David Cobo*