

Department of Civil Engineering

CIVE 527 – Renovation & Preservation: Infrastructure Fall 2012

Instructor: Prof. Andrew J. Boyd

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Lectures: M,W 10:05 – 11:25 am [ENGMD 276]

T 10:05 – 11:25 am [ENGMD 276] - Dec 4 only

Tutorial: T 8:35 – 9:55 am [Trottier 1100]

Office Hours: M,W 9:00 am - 10:00 am [MD 482] or by appointment

Course Description: Maintenance, rehabilitation, renovation and preservation of

infrastructure; infrastructure degradation mechanisms;

mechanical, chemical and biological degradation; corrosion of steel; condition surveys and evaluation of buildings and bridges; repair and preservation materials, techniques and

strategies; codes and guidelines; case studies

Required Text: There is no required text for this course. Lectures and other

handouts will be made available via website posting

Grading: Project: 20%

Test 1: 40% Test 2: 40%

Course Policies: Make-up exams will be granted upon presentation of a

legitimate and relevant physician's certification. Other requests will be considered IF requested prior to the scheduled week of

the exam.

Attendance Policy: Students are responsible for all information covered in class or

tutorial sessions, regardless of whether it appears in the lecture

notes or other handouts. Attendance and participation in

tutorial sessions is mandatory.

Tentative List of Topics to be Covered

Condition Assessments & Inspections

Properties of Construction Materials

Investigative Techniques
Non destructive
Destructive

Load Testing

Structural Health Monitoring

Trenchless Technology

Deterioration mechanisms

Repair Strategies

Service Life Prediction

Codes and Guidelines

Case Studies

McGill Policy Statements

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 <u>www.mcgill.ca/students/srr/honest/</u> for more information

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.