

CIVE 5603/BLDG 5201: Advanced Building Characterization, Conservation and Rehabilitation

Fall 2022

Lectures: Tuesday 6:05 - 8:55 EST

Instructor: Michael Gutland

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Office Hours: Available upon request

Course description

This course will provide graduate students with an understanding of the fundamental concepts and techniques for the identification, documentation and conservation of heritage buildings. The course includes lectures and workshops by experts representing key disciplines and practice areas involved in heritage conservation and documentation.

The course comprises three hours per week of lectures, plus additional activities assigned by the course instructor.

At the completion of the course, the student will be able to:

- Discuss and apply the fundamental concepts involved in the identification and conservation of heritage places in Canada and internationally;
- Apply and conduct research to identify heritage values and attributes of buildings and sites;
- Understand and apply heritage conservation principles, standards and guidelines in projects and decision making;
- Understand digital workflows for identifying, recording, modelling, assessing, analyzing and interpreting existing buildings and sites;
- Apply and adopt ethical obligations when applying digital tools to capture and disseminate information about heritage sites;
- Apply and conduct techniques for recording and modelling existing buildings and sites;
- Understand environmental sustainability challenges facing existing building and sites, including those related to climate change;
- Apply and conduct research on construction materials, assemblies and building envelopes for rehabilitation and preventative maintenance purposes;
- Understand the role of monitoring systems and non-destructive techniques in improving the maintenance and care of existing buildings;
- Understand and apply heritage conservation approaches such as heritage impact assessments and conservation plans;

- Understand the roles of different disciplines, government authorities and organizations in heritage conservation and rehabilitation;

Evaluation

Assignments (4 total, worth 12.5% each)	50%
Group Project	40%
Participation in lectures and class discussions	10%

Course Materials

All relevant course materials including lecture videos, notes, readings and other resources, will be posted to Brightspace.

Students should download “*Standards and Guidelines for the Conservation of Historic Places in Canada*” from the Canada’s Historic Places website [Link](#)

Assignments

Four assignments and one group project will be given throughout the term. They will be posted a minimum of two weeks before they are due. Refer to course schedule on Brightspace for deadlines. Late assignments will be accepted but with a 10% per day mark reduction. Assignments are to be completed individually; evidence of direct copying will be treated as cheating and will be handled accordingly (i.e., reported to the Dean’s office).

Exams

There are no exams in this course

Software

Students may need to download the following software to complete the course project:

- Agisoft Metashape (photogrammetry, [30 day free licenses available](#))
- Autodesk AutoCAD (student licenses available)
- Autodesk Recap (student licenses available)
- A simulation software of their choice to complete the course project

Communication

The primary means of communication with the course instructors and TAs is via the email addresses given. There will be no dedicated office hours. Virtual or in-person meetings with the course instructor or TA can be scheduled upon request.

General Regulations

Attendance: Students are expected to attend all lectures. The University requires students to have a conflict-free timetable. For more information, see the current *Undergraduate Calendar, Academic Regulations of the University, Section 1.2, Course Selection and Registration and Section 1.5, Deregistration*.

Appeal of Grades: The processes for dealing with questions or concerns regarding grades assigned during the term and final grades is described in the *Undergraduate Calendar, Academic Regulations of the University, Section 2.7, Informal Appeal of Grade and Section 2.8, Formal Appeal of Grade*.

Academic Integrity: Students should be aware of their obligations with regards to academic integrity. Please review the information about academic integrity at: <https://carleton.ca/registrar/academic-integrity/>. This site also contains a link to the complete Academic Integrity Policy that was approved by the University's Senate.

Plagiarism: Plagiarism (copying and handing in for credit someone else's work) is a serious instructional offense that will not be tolerated.

Academic Accommodation: You may need special arrangements to meet your academic obligations during the term. You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://www.carleton.ca/equity/> For an accommodation request, the processes are as follows:

- **Pregnancy or Religious obligation:** Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see <https://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf>
- **Academic Accommodations for Students with Disabilities:** The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision.
 - o If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation.
 - o If you are already registered with the PMC, please request your accommodations for this

course through the **Ventus Student Portal** at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). Requests made within two weeks will be reviewed on a case-by-case basis. For final exams, the deadlines to request accommodations are published in the **University's Academic Calendars**.

- **Survivors of Sexual Violence:** As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <https://carleton.ca/sexual-violence-support/>.
- **Accommodation for Student Activities:** Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

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