

Green Building and Planning, ENVR 3750, Winter 2017

Department of Environment and Geography
Clayton H. Riddell Faculty of Environment, Earth, and Resources
University of Manitoba

General Details

- Instructor: Farhoud Delijani, PhD, P.Eng.
- E-mail: Farhoud.Delijani@umanitoba.ca
 - Communication with students is conducted only through @myumanitoba.ca email accounts
- Office: 212 Sinnott
- Telephone: 474-6785
- UMLearn is the considered the primary online source for updated handouts and outlines, class presentations, video links and other links.
- Lectures: Tuesdays and Thursdays 10:00-11:15am
- Lecture Room: 217 Wallace Bldg.
- Required Readings: Lecture notes which will be provided on UMLearn.
 - Additional supplementary reading:
Sustainable construction green building design and delivery
Charles J. Kibert Ebooks Corporation.
Hoboken, N.J. : John Wiley & Sons c2013 (Available via your U of M online library account)

Course Description

Sustainable Building, or Green Building describes projects that are sited to promote livable communities; protect sensitive lands and preserve natural resources; are energy efficient and/or use renewable energy; incorporate environmentally-friendly building materials and practices; and promote occupant health and well-being. As with all issues of sustainability the solutions are particular to the place and people.

This course provides an overview of the concepts and tools of Green Building Design and Green Planning. The course covers the history and trends in Green Building and Planning, related policies, materials, tools and techniques.

Prerequisite: ENVR 2000 and 57 credit hours of course work, or permission of department head." 3.0 Credit Hours.

Course Objectives

- To gain basic understanding of Green and Sustainable Building and planning and the environmental impacts
- To understand the need and demand for Green Buildings

- To get familiar with green, alternative and, innovative building materials, systems, and construction methods
- To gain knowledge about green building policies, methods and, standards
- To understand the implications and practicality aspects of Green Building techniques and standards in real-world buildings

Upon successful completion of this course, the student will be able to:

- Describe what green building is
- Understand the benefits and advantages of green building practices
- Identify and describe green systems and features in residential and commercial buildings
- Define what makes up a healthy building
- Describe green and sustainable materials and practices

Expectations for Attendance

- Students are expected to attend class, be on time, and take notes (though there is no numerical penalty; some of the material and explanations are not necessarily on UMLearn). The instructor does not provide paper copies of notes.
- Students may not record classes through any device unless it is arranged with the instructor prior to the course and if agreed upon through Student Accessibility Services (see “Students with Disabilities” below).
- Students may not use cell phones during class and if using laptops must use them only for class-related purposes.

Course Work

- **Term Assignments** – worth total of 50% of the final course grade. There are two assignments worth 15% and 30% respectively. They are described in more detail in a separate handout with details of acceptable referencing styles, rubrics, and details about evaluative feedback.
 - An individual project/case study including a 5 min presentation (worth 15%) (Submission date: Tuesday February 28th in class)
 - A group project including a 20 minutes group presentation (worth 30%) (Submission date: Thursday April 6th in class)
- Late submissions will not be accepted without permission prior to the submission date and in person with acceptable and documented reasons. Assignments, projects and tests in other courses are not acceptable reasons. Penalty for late work is 5% per day.
- **Site Visit Reports** – worth 5% of final course grade. There will be at least two site visits during this course. Date, location and, time of the visits, to be announced.

- **Final Examination** – worth 50% of final course grade. The exam is scheduled in the final exam period and may consist of 10 questions. The duration of the exam is 2 hours (**Students must pass the final exam to pass the course**).

What Does The Grade Mean?

A+	90-100
A	80-89
B+	75-79
B	70-74
C+	65-69
C	60-64
D	50-59
F	0-49

What If Something Goes Wrong?

If you miss a deadline, you must provide written proof of either illness or compassionate distress (e.g. a doctor's certificate) in order to be granted an extension. You must inform the instructor promptly and the proof must be presented within 7 working days. If you cannot take the final examination due to illness or compassionate distress you must make arrangements with your own Faculty office.

Plagiarism & Cheating

Unfortunately, every year people are found to be cheating in their course work and exams at the University of Manitoba. Please don't - the penalties are severe.

- **Academic Dishonesty:** Students should acquaint themselves with the University's policy on plagiarism and cheating and examination impersonation in the University of Manitoba Undergraduate Calendar. Further details can be found at http://umanitoba.ca/student/resource/student_advocacy/cheating_plagiarism_fraud.html (the Student Advocacy web page).
- **Penalties for Plagiarism:** The common penalty for plagiarism in a written assignment, test or examination is F on the paper and F for the course. For the most serious acts of plagiarism, such as the purchase of an essay or cheating on a test or examination, the penalty can also include suspension for a period of up to five years from registration in courses taught in a particular department or from all courses taught in a Faculty. The Faculty also reserves the right to submit student work that is suspected of being plagiarized to Internet sites designed to detect plagiarism.
- **All work is to be completed independently unless otherwise specified.**
- No notes, books, or electronic devices are permitted in the final exam whether accessed or otherwise.

What Is The VW Date?

The VW date (Voluntary Withdrawal date) is the last date for withdrawal from a course without academic penalty. So if you find a course just is not right for you, you can withdraw but you must do so before the VW date. For this course, it is Friday March 31st, 2017.

Students with Disabilities

Students with disabilities need to contact the office of Student Accessibility Services (155 University Centre) to arrange appropriate accommodations. Students should arrange to meet with the instructor at an appointment in office hours early in the course to discuss any accommodations in order to ensure the student's privacy.

Class Schedule (subject to change with advance notice) and Important Dates

- *Thursday January 19 – Introduction, Personal Green Building Philosophy Statement (To be included in your individual project/case study)*
- *Tuesday January 24 – What is green? Why Green?*
- *Thursday January 26 – What is green? Why Green?*
- *Tuesday January 31– Carbon Footprint and Building Materials*
- *Thursday February 02 – Energy Efficiency in Buildings*
- *Tuesday February 07 – Green Building Certifications and Standards (LEED)*
- *Thursday February 09 – Green Building Certifications and Standards (Passive, Active and, NetZero Houses)*
- *Tuesday February 14 – Sustainability in Buildings*
- *Thursday February 16 – Sustainability in Buildings*
- *Tuesday February 21 – **Reading Week***
- *Thursday February 23 – **Reading Week***
- *Tuesday February 28 – Individual Case Studies and Class Discussions*
- *Thursday March 02 – Individual Case Studies and Class Discussions*
- *Tuesday March 07 – Individual Case Studies and Class Discussions*
- *Thursday March 09 – Individual Case Studies and Class Discussions*
- *Tuesday March 14 – Green, Innovative and, Alternative Building Materials*
- *Thursday March 16 – Green, Innovative and, Alternative Building Materials (Site visit)*
- *Tuesday March 21 – Energy Consumption Evaluation in Green Buildings*
- *Thursday March 23 – Energy Consumption Evaluation in Green Buildings*
- *Thursday March 28 – Modular and Prefabricated Buildings and Building Components: The How To*
- *Tuesday March 30 – Modular and Prefabricated Buildings and Building Components: The How To*
- *Thursday April 04 – Group Project Presentations*
- *Tuesday April 06 – Group Project Presentations*
- *Thursday April 11 – Group Project Presentations*
- *Tuesday April 13 – Group Project Presentations*
- *Thursday April 18 – Group Project Presentations*
- *Tuesday April 20 – Wrap-up, What We Have Learned!*
- ***Final Examination Period April 22 to April 29***

Schedule “A”

Schedule “A” is the new requirement passed by the University of Manitoba Senate in 2016 that requires that a mandated list of supports for services plus contact information is provided to students. *While this information is important and useful, should you require advice and support, the instructor is happy to meet with you and discuss issues and concerns*

Writing and Learning Support

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor’s feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: <http://umanitoba.ca/student/academiclearning/>
You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tj0bB4>. In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <http://bit.ly/1sXe6RA>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries’ homepage: www.umanitoba.ca/libraries.

Mental Health

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

Student Counselling Centre

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. Student Counselling Centre:

<http://umanitoba.ca/student/counselling/index.html>

474 University Centre or S207 Medical Services (204) 474-8592

Student Support Case Management

Contact the Student Support Case Management team if you are concerned about yourself or another student and don’t know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team. Student Support Intake Assistant <http://umanitoba.ca/student/case-manager/index.html>

520 University Centre (204) 474-7423

University Health Service

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation. University Health Service

<http://umanitoba.ca/student/health/>

104 University Centre, Fort Garry Campus (204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness

Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

Health and Wellness Educator <http://umanitoba.ca/student/health-wellness/welcome.html>

Katie.Kutryk@umanitoba.ca

469 University Centre (204) 295-9032

Live Well @ UofM

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site:

<http://umanitoba.ca/student/livewell/index.html>

Copyright

All students are required to respect copyright as per Canada's Copyright Act. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community.

Visit <http://umanitoba.ca/copyright> for more information.

University and Unit policies, procedures, and supplemental information available on-line:

Your rights and responsibilities

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The Academic Calendar

<http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections University Policies and Procedures and General Academic Regulations. While all of the information contained in these two sections is important, the following information is highlighted.

- If you have questions about your grades, talk to your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form <http://umanitoba.ca/registrar/>
- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the Academic Integrity regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support <http://umanitoba.ca/academicintegrity/> View the Student Academic Misconduct procedure for more information.

Respectful Work and Learning Environment

The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected to conduct yourself in an appropriate respectful manner. Policies governing behavior include the:

- **Respectful Work and Learning Environment**
 - http://umanitoba.ca/admin/governance/governing_documents/community/230.html

- **Student Discipline**
http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html
- **Violent or Threatening Behaviour**
http://umanitoba.ca/admin/governance/governing_documents/community/669.html

Sexual Assault

If you experience Sexual Assault or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting.

- The Sexual Assault policy may be found at:
http://umanitoba.ca/admin/governance/governing_documents/community/230.html
- More information and resources can be found by reviewing the Sexual Assault site
<http://umanitoba.ca/student/sexual-assault/>
- For information about rights and responsibilities regarding Intellectual Property view the policy
http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-_2013_10_01.pdf

Academic Programs and Regulations

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site <http://umanitoba.ca/faculties/>
Contact an Academic Advisor within our faculty/college or school for questions about your academic program and regulations <http://umanitoba.ca/academic-advisors/>

Student Advocacy

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.

<http://umanitoba.ca/student/advocacy/>

520 University Centre 204 474 7423

student_advocacy@umanitoba.ca