

Exploring Sustainability
Tuesday, Thursday 9:30 – 10:45**UNIV 207**
PF 129

Dr. Noel Keough nkeough@ucalgary.ca. 403 220-8588
(office hours by appointment)
Teaching Assistant: Abinav Sunil; asunil@ucalgary.ca

PF 4137

Introduction

Over the past several decades governments, corporations, not for profit and community organizations and citizens have been struggling to understand the implications of rapid industrialization, population growth, resource depletion, and information technology on our health, happiness and quality of life. The concept of sustainability has played a key role in the struggle. Sustainability offers a new way of understanding the world and our place in it. It has become a key concept in design at all scales of human intervention in the world. Sustainability, both in theory and practice is complex and challenging. This course will present a wide range of perspectives on the vitally important concept.

Objectives

1. Students will gain a broad understanding of the social, ecological, economic, cultural, political dimensions of sustainability, its promise and the challenges it presents.
2. Students will understand the diversity of ways in which sustainability is practiced in real world situations and be able to critically assess claims of sustainability.
3. Students will gain an understanding of how they can contribute to creating a sustainable world in their personal, academic and work lives.

Teaching Approach

Your course instructor and guest speakers will offer perspectives on sustainability from business, government, the not for profit sector and academia. Topics will cover a range of scales, from the smallest devices we use on a daily basis, to neighbourhoods, cities, countries and critical international issues. Classes will include lectures, videos, discussion and activities. We will be bringing real world issues into the classroom discussions on a regular basis. You will be encouraged to be engaged in the course, asking questions, challenging speakers, formulating your own ideas. The course will introduce the idea of inter-disciplinarity with a diverse group of guest speakers from The Arts, Sciences, Social Sciences, the Professions, all with a common interest in understanding, educating about and practicing sustainability.

Weekly Class Schedule

We will start off each week with a lecture (Tuesday). Thursday will be time for class discussion and debate on topics introduced in the lecture and to explore sustainability with hands on activities. Detailed lecture schedule to be provided at a later date. Lecture topics will include Principles of Sustainability • Measuring Sustainability • Ecological Economics • Technology and Design • Urban Food Systems • Sustainability in the Global Village • Alternatives to the Private Automobile • Beyond Fossil Fuels • Making a Fairer World • Governing for a Sustainable Future • Climate Change • The Personal and the Political • Ecological Footprint

Means of Evaluation

There will be no final exam. Students must obtain an overall passing grade to pass this course. Quality of writing (spelling, grammar, clarity) will be a component of the assessment of all assignments.

| | | |
|---|--------------|-----|
| Assignment 1. Key Issues in Sustainability Research Paper 1 | (February 5) | 15% |
| Assignment 2. Key Issues in Sustainability Research Paper 2 | (March 3) | 15% |
| Multi-Choice Exams: Mid-term [Feb 12 (15%)] and Final [April 9 (15%)] | | 30% |
| Assignment 3: Global Problems/Local Solutions. Make Calgary Equitable | (April 14) | 30% |
| Assignment 4: My Learning Journal | (April 16) | 10% |

Course Texts

Exploring Sustainability Reader

The 2011 State of Our City Report: Sustainable Calgary Society: www.sustainablecalgary.org

Other Readings will be assigned on a weekly basis

Supplementary Reading

George Monbiot: monbiot.com

Orion Magazine: orionmagazine.org

2013 IPCC Report: <http://www.ipcc.ch/report/ar5/wg1/#.UrOYYXmA33g>

IPCC - Intergovernmental Panel on Climate Change, www.ipcc.ch/. In particular, its page called "Publications and Data",

http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml

Special Issue of journal "Landscape Ecology", Volume 28, Issue 6, July 2013, "Key Concepts and Research Priorities for Landscape Sustainability".

<http://link.springer.com/journal/10980/28/6/page/>

Weekly Schedule (38 Classes)

| | | |
|--------------------------------------|------------|-------------------------------------|
| Tuesday (Lecture) | January 13 | Instructor and Course Introductions |
| Thursday (Discussion/Video/Activity) | January 15 | |

| | | |
|----------|------------|---|
| Tuesday | January 20 | Sustainability Reporting and Measurement |
| Thursday | January 22 | Sustainability Reporting and Measurement II |

| | | |
|----------|------------|--|
| Tuesday | January 27 | The Concept of Sustainability in Ecological Literature |
| Thursday | January 29 | Discussion and Activities |

| | | |
|----------|------------|---------------------------------|
| Tuesday | February 3 | Ecosystems and Public Health |
| Thursday | February 5 | Class Discussion and Activities |

| | | |
|----------|------------|--|
| Tuesday | February 3 | Ben Millen: Product Footprint Analysis |
| Thursday | February 5 | Urban Agriculture/Food Security – Bert Einsiedel |

| | | |
|-----------|-------------|----------------------|
| Monday | February 10 | The Social Economy |
| Wednesday | February 12 | Multiple Choice Exam |

READING WEEK: February 15 - 22

| | | |
|----------|-------------|---|
| Tuesday | February 24 | International Perspectives – Energy |
| Thursday | February 26 | Class Discussion and Activities |
| Tuesday | March 3 | What is Sustainable Design – Barry Wylant |
| Thursday | March 5 | Class Discussion and Activities |
| Tuesday | March 10 | What is Sustainable Architecture - Brian Sinclair |
| Thursday | March 12 | Class Discussion and Activities |
| Tuesday | March 17 | Habitat Alteration Due to Climate Change |
| Thursday | March 19 | Class Discussion and Activities |
| Tuesday | March 24 | The Manchester Project: Next Generation Cities |
| Thursday | March 26 | Class Discussion and Activities |
| Tuesday | March 31 | Sustainability Pioneers |
| Thursday | April 2 | My Future in a Sustainable World |
| Tuesday | April 7 | |
| Thursday | April 9 | Multi-Choice Exam (2 – one at mid-term) |
| Monday | April 14 | Last Day of Classes – Evaluation and Review |
| Friday | April 16 | Journal Assignment Due |

Grading Scale

| Grade | Grade Point | Percent | Description |
|-------|-------------|----------|---|
| A+ | 4.00 | 92.5-100 | Outstanding |
| A | 4.00 | 85-92.49 | Excellent - superior performance showing comprehensive understanding of the subject matter |
| A- | 3.70 | 80-84.99 | Very good performance |
| B+ | 3.30 | 76-79.99 | |
| B | 3.00 | 73-75.99 | Good – clearly above average performance with knowledge of subject matter generally complete |
| B- | 2.70 | 70-72.99 | |
| C+ | 2.30 | 66-69.99 | |
| C | 2.00 | 63-65.99 | Satisfactory – basic understanding of the subject matter |
| C- | 1.70 | 60-62.99 | Receipt of a grade point average of 1.70 may not be sufficient for promotion or graduation (see individual undergraduate faculty regulations) |
| D+ | 1.30 | 56-59.99 | |
| D | 1.00 | 50-55.99 | Minimal pass – marginal performance |
| F | 0.00 | 0-49.99 | Fail – unsatisfactory performance or failure to meet course requirements. |

Notes:

1. Written work, term assignments and other course related work may only be submitted by e-mail if prior permission to do so has been obtained from the course instructor. Submissions must come from an official University of Calgary (ucalgary) email account.
2. It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. (<http://www.ucalgary.ca/drc/node/46>) Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.
3. Plagiarism - Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when:(a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test),(b) parts of the work are taken from another source without reference to the original author,(c) the whole work (e.g., an essay) is copied from another source, and/or,(d) a student submits or presents work in one course which has also been submitted in another course(although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often

involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. It is recognized that clause (d) does not prevent a graduate student incorporating work previously done by him or her in a thesis. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.

4. Information regarding the Freedom of Information and Protection of Privacy Act (<http://www.ucalgary.ca/secretariat/privacy>) and how this impacts the receipt and delivery of course material
5. Emergency Evacuation/Assembly Points (<http://www.ucalgary.ca/emergencyplan/assemblypoints>)
6. Safewalk information (<http://www.ucalgary.ca/security/safewalk>)

Contact Info for: Student Union (<http://www.su.ucalgary.ca/page/affordability-accessibility/contact>); Graduate Student representative(<http://www.ucalgary.ca/gsa/>) and Student Ombudsman's Office (<http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights>).