INSTRUCTOR & CO-ORDINATES:
• Mike Brklacich
  o Chancellor’s Professor, Department of Geography & Environmental Studies
  o Associate Dean, Faculty of Arts and Social Sciences
• Email: mike_brklacich@carleton.ca
• Offices: Paterson 330, Ext 8056 & Loeb B457, Ext 7553

OFFICE HRS:
• Usually in Loeb B457 on (i) Tue, after 4:00 pm and after class & (ii) parts of Fri.
• By chance or by appointment
• You are encouraged to confirm times by email or telephone

COURSE MEETINGS & VENUE:
• Every Tues from 9 Sept to 1 Dec, 6:05 to 8:55pm\(^1\), Loeb A220

Note: The class on Tue 13 Oct will be moved to Thu 15 Oct (usual time & venue).

FRAMING THE COURSE: Global climate change research has grown from its roots in the environmental sciences during the 1980s and there have been at least three substantial shifts over the past decade or so. First, climate change research is now firmly planted at the intersection of environmental and social sciences. The quest to better understand complex climate systems and human interference with these systems continues and contemporary questions pertaining to the vulnerability and security of communities and places have prompted scientists, resource managers and policy analysts to explore, develop and apply a range of interdisciplinary approaches. Another major trend has been the repositioning of climate change within public policy. Climate change is no longer cast solely as an environmental concern. It is now framed as an issue that is directly linked to broader issues of social and economic transformations in the developing and industrialized world. And the third trend pertains to the move towards climate solutions. It has been 26 years since the Intergovernmental Panel on Climate Change (IPCC) issued its first report that focused on identifying concerns and there is now greater attention being placed on “climate solutions” ranging from efforts to curtail human interference of climate systems through to opportunities for adaptation to uncertain futures. Despite these advances, our understanding of human dimensions of GEC remains quite limited and recurring questions that will be examined throughout this course include:

• What are the limits of our current understanding of human activity & GEC relationships?
• What are the barriers that must be overcome before we can improve our understanding?
• What conditions favour the development and implementation of climate solutions?

Weeks 1 through 4 will set the context for the remainder of the course by reviewing how human activities have impacted earth system processes and discussing important issues concerning the integration of social science perspectives within a global environmental change framework. Students who do not have an environmental background may have to do additional reading. Once this foundation is in place, weeks 5 to 12 will be used to explore a wide range of topics relating to human dimensions of GEC. The course will conclude with a discussion on research thrusts designed to advance our understanding human dimensions of GEC.

\(^{1}\) Please ensure you have a safe way home after class. You are encouraged to consult Carleton’s Department of University Safety website for additional information, including services provided by the University.
**TEACHING APPROACH, TOPICS AND READINGS:** The course will employ a variety of teaching approaches ranging from mini lectures, workshops, seminars, panel discussions, global environmental change behind the headlines discussions, and Q&A periods. In all cases, the emphasis will be on critical engagement with course readings, discussion and interaction within the class. Each seminar will be prefaced by a brief introduction to the topic and recommended readings.

There is no course textbook. A reading list will be distributed no later than the 2nd meeting & you will be able to download readings from Carleton’s e-journal collection or from publicly available websites. A few useful websites relating to GEC & human dimensions of GEC follow:

- Environmental Change and Security Project, Woodrow Wilson International Center for Scholars
  - www.wilsoncenter.org/ecsp
- Future Earth: www.futureearth.info
- International Geosphere & Biosphere Project (IGBP) www.igbp.net
- Intergovernmental Panel on Climatic Change (IPCC) www.ipcc.ch
- NRCan: Climatic Change Impacts & Adaptation Program
  - nrcan.gc.ca/earth-sciences/climate-change/community-adaptation/54
  - nrcan.gc.ca/environment/resources/publications/impacts-adaptation/reports/assessments/2014/16309
- United Nations Framework Convention for Climate Change (UNFCCC) unfccc.int/2860.php
- Pacific Institute for Climate Solutions (PICS) pics.uvic.ca

**COURSE COMPONENTS, EVALUATION & COURSE DEADLINES:** Each student will be evaluated on the following 4 course components. All written assignments should be prepared using a 12-point (10cpi) font and be double-spaced. Due date extensions without penalty will be granted only when circumstances beyond the student’s control result in the need for extra time. The instructor will consider a request only if it is verified by a 3rd-party and received within 5 days of the specified due date. Otherwise a penalty of one grade point per two days will be assessed to assignments submitted after the specified due date.

**Briefing Notes (BN) (2 x 15% = 30%):** BNs of 1000 - 1300 words on 2 topics other than the seminar topic you will lead or your term paper (if you opt for this capstone activity - see below) or other approved topic. BNs typically provide brief summaries and take a specific stance. More info on BNs to follow. The BN can focus on selected aspects of the seminar or the entire seminar. BNs are due one week after the seminar or designated event. Pls submit BNs by email a WORD or PDF file, using the following file naming convention: LASTNAME_50055701_BNx  where x = 1 or 2.

**Seminar Presentation (20%):** Seminars will be led by 1 to 2 students (depending on total enrolment). Topics will be included in the Seminar Schedule and topic selection will occur during the 2nd meeting. Student-lead seminars are scheduled to commence in week 4 or 5 and continue through to second last meeting. A group mark will be assigned for this component of the course. Should you wish to use readings other than the ones recommended by the instructor, please ensure the class is advised of these changes at least one week in advance of your seminar. Also, please provide the instructor with seminar materials (ppt, handouts, etc) at least 24 hrs prior to your seminar, indicating if you wish to have it posted on the course website.

**Course Contribution (20%):** This will be determined by the instructor and reflect your overall contribution to the course. Quality of contributions will be factored into this assessment.

**Capstone Activity (30%):** Students are required to complete 1 of 2 capstone activities (a final exam or a term paper) and are to inform the instructor by email of their choice by 29 Sept 2015. Should you elect the term paper, please note that a proposal is due no late 6 Oct 15. If a proposal for the Term Paper is not submitted by 6 Oct 2015, then you will have elected the Final Exam option.
**Final Exam Option:** The final examination will occur in **Dec 2015, most likely on one of 8 & 9, or 12 & 13 - date to be confirmed ASAP.** There will be one question, it will be made available at 9h00 on Day 1 and you will have until 11:59pm of Day 2 to prepare a response of no more than 2,500 words. You will be able to refer to course and other materials during the exam. The response to the question will require considerable interpretation as well as the integration and synthesis of material presented throughout the course. Half of the examination mark will be based upon the thoroughness of your response and the other half will be based upon the integration and synthesis of course materials used to address the question. More information will be provided during the last half of the course.

**Term Paper Option (Proposal: 5%, Final Paper 25%):** The term paper of no more than 4,500 words is to **review and appraise** a topic related to human dimensions of GEC. The topic must be substantially different from your Briefing Notes and your Seminar Presentation. Potential topics might include a review & appraisal of:
- a specific type of GEC and region or sector (e.g. Comparison of Climatic Change Impacts on Coastal Communities in Developed & Developing Nations)
- a thematic area relating GEC-human dimensions research (e.g. Addressing Uncertainty or Equity in GEC Accords),
- issues relating to research frameworks and methods for addressing GEC – human dimension question (e.g. alternative schemes to reduce or capture carbon emissions),
- a GEC-related organization, video, website, etc (e.g. IPCC, or another approved topic.

Your 1-page **proposal is due no later than 6 Oct 15** and this will be followed-up with a meeting with the instructor to discuss the proposal. Your **Term Paper must be submitted** to the instructor **no later than 11:59pm on 8 Dec 15.** Please submit your paper as an a WORD or PDF file & follow-up with double-sided paper copy. Please use the following file naming convention: LASTNAME_50055701_CAPSTONE_PAPER.

**INSTRUCTIONAL & CONDUCT OFFENCES:** Instructional offences include among other activities cheating, contravening examination regulations, plagiarism, submitting similar work in 2 or more courses without prior permission, and disrupting classes. Conduct offences apply in areas of discrimination and sexual harassment. Further information about University regulations which define and regulate these offences is presented in the Graduate Calendar.

**COURSE COMMUNICATIONS:** cuLearn will be used as the primary node for course communications. Please note all email exchanges will use Carleton email accounts.

**ACADEMIC ACCOMMODATIONS**

For students with disabilities: Contact the Paul Menton Centre (PMC) to register for formal evaluation of disability-related needs in order to obtain the necessary letters of accommodation. Registered PMC students are required to contact the Centre (613 520 6608) every term to ensure that the instructor receives your letter of accommodation, no later than two weeks before the first assignment is due. **Paul Menton Centre, Room 500, Unicentre**

For religious observance: Students must work out accommodation (for alternate dates and/or means of satisfying academic requirements) on an individual basis with the instructor in the first two weeks of class. Consult the Equity Services website or an Equity Advisor for the policy and list of Holy Days. **Equity Services 613 520 5622**

For Pregnancy: Pregnant students requiring academic accommodations are encouraged to contact and Equity Advisor in Equity Services (ext. 5622) to complete a letter of accommodation. The student must then make an
appointment to discuss her needs with the instructor at least two weeks prior to the first event in which it is anticipated the accommodation will be required.

**GEOG5005/INAF5701: SEMINAR SCHEDULE (as of 7 Sep 15)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Seminar Topics &amp; Related Course Activities¹</th>
<th>Seminar Leader(s)</th>
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<tbody>
<tr>
<td>8 Sep</td>
<td>• Course Introduction &amp; Overview&lt;br&gt;• Anthropocene Now: Humans as GEC Agents <strong>(Part 1)</strong></td>
<td>MBrk</td>
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<tr>
<td>15 Sep</td>
<td>• Anthropocene Now: Humans as GEC Agents <strong>(Part 2)</strong>&lt;br&gt;• Student Seminar Selection&lt;br&gt;• Discussions on Leading Seminars &amp; Preparing Briefing Notes</td>
<td>MBrk</td>
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<tr>
<td>22 Sep</td>
<td>• Integrated Climatic Change (CC) Science</td>
<td>MBrk</td>
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<tr>
<td>29 Sep</td>
<td>• Human &amp; Environmental Security Concepts</td>
<td>MBrk</td>
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<td>3 &amp; 10 Nov</td>
<td>5. CC and Human Health&lt;br&gt;6. CC &amp; Food Security&lt;br&gt;7. CC &amp; Water Security&lt;br&gt;8. Urban Perspectives on CC</td>
<td>Student-led seminars</td>
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<tr>
<td>17 &amp; 24 Nov</td>
<td>9. CC &amp; Sustainable Development&lt;br&gt;10. CC &amp; Migration&lt;br&gt;11. Climate Solutions</td>
<td>Student-led seminars</td>
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<tr>
<td>TBA</td>
<td>• Mid-course Synthesis</td>
<td>MBrk</td>
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<tr>
<td>1 Dec</td>
<td>• CC Challenges &amp; Opportunities Over the next Decade&lt;br&gt;• Final Exam Preparation</td>
<td>MBrk</td>
</tr>
<tr>
<td>TBA</td>
<td>• CC and the Humanities&lt;br&gt;• Divestment Strategies as a CC Solution&lt;br&gt;• Global Environmental Agreements: What Might We Expect in Paris in Dec 2015?&lt;br&gt;• Northern Perspectives on CC</td>
<td>MBrk</td>
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| 18 Sep | • Assessing & Responding to Climate Change (Sponsored by EPAF) | River Bldg Rm 1200
River Bldg Rms 2220-2228 |
| 1 Oct & 2 Oct | • Climate Change & Renewable Energy Policy in the EU an Canada (Sponsored by EURS & EUCE) |               |
| Dec TBA | • Capstone Activity (Submit term paper or take-home exam) | MBrk              |

¹ Subject to change