**GEOG 432 LEC 01  Global Change and Hazards  Winter 2022 classes: January 10th – April 12th, 2022**

**GFC HOURS (3-1/2T)**

<table>
<thead>
<tr>
<th>Section</th>
<th>Days</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEC 01</td>
<td>MWF</td>
<td>13:00-13:50PM</td>
<td>EDC 057</td>
</tr>
<tr>
<td>TUT 01 &amp; TUT 02</td>
<td>TBA</td>
<td>Asynchronous</td>
<td>Web-based</td>
</tr>
</tbody>
</table>

Instructor: Darren Sjogren  
Office: ES 456

Telephone: (403) 220-2575  
Email: sjogren@ucalgary.ca

Office hours:  
Monday 14:00-15:00 (in-office and virtual)  
Tuesday 14:00-15:00 (virtual only)  
OR by appointment (contact using chat in TEAMS)

**The Department of Geography** condemns the longstanding and continued injustices against those marginalized by racism, sexism, homophobia, transphobia, classism, xenophobia, able-bodied normativity, mental health profiling, and other forms of prejudice. We are pained by the fact that injustices are unevenly borne. [https://arts.ucalgary.ca/news/anti-racism-statement](https://arts.ucalgary.ca/news/anti-racism-statement)

**Territorial Acknowledgement**

The Department of Geography would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III. [https://www.ucalgary.ca/indigenous/cultural-protocol](https://www.ucalgary.ca/indigenous/cultural-protocol)

**Official Course Description**

Examination of the factors that influence vulnerability and resiliency to environmental hazards. Emphasis on how human activities change both the dynamics of natural processes and the spatio-temporal variability of vulnerability and resiliency.

**Course Objectives**

The primary course objective is to explore natural disasters as complex interactions between human and physical processes. It will focus on hazards associated with extreme weather & climate change (e.g., cyclones, floods, droughts, wildfires). The physical processes that create hazards and factors that amplify or dampen their impact on humans or infrastructure will be emphasized. The factors that influence human vulnerability and resiliency will be stressed. Exploration of these interactions will be accomplished through lectures, in-class videos, class discussions, assignments, and a project.

**Course Learning Outcomes**

The Department of Geography is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes to which they contribute, and the expected level of achievement.

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>PLO(s)*</th>
<th>Level(s)**</th>
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</thead>
<tbody>
<tr>
<td>By the end of the course, a successful student will be able to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explain the geographical distribution of vulnerability factors and natural hazards</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Explain why disaster severity is related to event intensity and human vulnerability</td>
<td>1,2</td>
<td>2</td>
</tr>
<tr>
<td>Explain why event intensity and human vulnerability are spatio-temporally variable</td>
<td>1,2</td>
<td>2</td>
</tr>
<tr>
<td>Explain the challenges to increasing resiliency to disasters</td>
<td>1,2</td>
<td>2</td>
</tr>
<tr>
<td>Evaluate which elements of human vulnerability contributed to historic disasters</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Evaluate how a changing climate will impact human vulnerability</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Create multimedia presentations and web-based maps</td>
<td>3,4,6,7,8</td>
<td>2</td>
</tr>
<tr>
<td>Summarize and evaluate information from different sources</td>
<td>7, 8</td>
<td>2</td>
</tr>
</tbody>
</table>

*PLOs = Program Learning Outcomes: 1 = reflect and communicate diverse human-environment perspectives, 2 = identify and explain human-environment processes, 3 = implement sampling, data collection, analyses and communication methods, 4 = analyze spatial and temporal aspects of human-environment systems, 5 = employ knowledge, arguments, and methodologies for solving human-environment problems, 6 = evaluate geospatial data and manipulate it to create cartographic products, 7 = communicate geographic concepts using oral, written, graphic, and cartographic modes, and 8 = demonstrate literacy skills. **Levels: 1 = Introductory, 2 = Intermediate, and 3 = Advanced.
Prerequisites
Prerequisites: 3 units in courses labelled Geography at the 300-level or above.

The assignments and project will require basic knowledge of computers including use of word processing and spreadsheet software. Required mapping in the assignments and project will use web-based software; instruction on its use will be the focus of the tutorials.

Learning Resources
Recommended Textbook:

Additional readings and videos will be assigned throughout the course. A bibliography or links to required readings or videos will be indicated with the associated topic on Microsoft TEAMS. All readings or videos will be freely available online or through the UofC Library resources.

Learning Resources - Technologies and Requirements
Unlike the lecture component, the tutorial components of this course will be done online. To successfully engage in these learning experiences, students should have reliable access to the following technology:

- A computer with the latest security and malware updates
- A current and updated web browser
- Microsoft Office 365 (more info below)
- Speakers, headphones, or equivalent
- Broadband internet connection

Note: Because the assignments use web-based software, any computer (Mac or PC) with an updated browser will work. This means that the student will have access to the materials in any of the computer labs on campus if they do not have their own computer.

Learning Resources - Teams for Education Learning Management System
This course will use the Microsoft Teams for Education online learning management system for most online course materials and interaction (e.g., video calls, text-based chat, posting of lecture materials, recorded videos, assignment submission, online gradebook, etc.). To use Microsoft Teams, students are required to enable multi-factor authentication (MFA) on their UCalgary Office365 accounts. For more information on multi-factor authentication and how to get started, see LINK. For information on obtaining and installing Microsoft Teams, see LINK. A Microsoft Teams software client capable of video calls will be required for some course components.

Enrolled students will receive an invitation to the course Microsoft Teams workspace before the first week of the classes. Note: Microsoft Teams will replace Desire2Learn (D2L) and Zoom for the delivery of content in this course.

Learning Resources – ArcGIS Online software
The assignments and project in this course will primarily use Esri’s ArcGIS Online software. There is no need to install this software because it is web-based. Anyone with a University IT account can create an Esri Account for access to ArcGIS Online without having to submit a request. Updated instructions are available in the following articles, previous instructions have been removed.

- ArcGIS – Esri Account (How to access ArcGIS Online and Esri Training)

Existing ArcGIS Online users have a couple of options; continue to use their existing Esri Account or create a new Esri Account accessible through their University IT login. For details, please see the ‘ArcGIS – Esri Account Options’ article.
Assessment Methods
Online & In-class engagement  15%
Assignments    20%
Term Project    25%
Exam #1    25%  In-class exam on March 04.
Exam #2    15%  In-class exam on April 11.

*See course schedule for details and due dates.

Notes:
• There will NOT be a registrar-scheduled final exam in this class.
• It is NOT essential to pass all elements/components to pass the course as a whole.
• Only pens, pencils and erasers are allowed in exams. No other materials or devices are allowed.
• Late assignments will be assessed a penalty unless accompanied by the documentation indicated in the section “Missed Course Components” (below).

Policy on Late Assignments
Deliverables will be submitted through TEAMS and, as a result, will be automatically time stamped. A deliverable is considered late if the time stamp is later than the published due date/time. Deliverables received within 1 minute to 24 hours of the due date will be assessed a 10% penalty. This means if your assignment receives a grade of 78% it will be entered as 68% (78 - 10= 68) on the grade sheet. If it is received between 24 and 48 hours, it will be assessed a 20% penalty. If the assignment is received greater than 48 hours from the due date it will be assessed a penalty of 30%, and so forth.

Grading System

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>92 – 100</td>
</tr>
<tr>
<td>A</td>
<td>88 – 92</td>
</tr>
<tr>
<td>A-</td>
<td>84 – 88</td>
</tr>
<tr>
<td>B+</td>
<td>80 – 84</td>
</tr>
<tr>
<td>B</td>
<td>76 – 80</td>
</tr>
<tr>
<td>B-</td>
<td>72 – 76</td>
</tr>
<tr>
<td>C+</td>
<td>68 – 72</td>
</tr>
<tr>
<td>C</td>
<td>64 – 68</td>
</tr>
<tr>
<td>D+</td>
<td>60 – 64</td>
</tr>
<tr>
<td>D</td>
<td>56 – 60</td>
</tr>
<tr>
<td>D</td>
<td>0 – 49</td>
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</tbody>
</table>

Flexible Grade Option (CG Grade)
https://www.ucalgary.ca/pubs/calendar/current/f-1-3.html

Course Components - Details
This course has multiple interconnected components. Note: assessment weight and grading scheme provided below.
• Lectures
  o In-person (EDC 057), PowerPoint slides (in PDF format) will be provided along with links to videos or websites used in demonstrations.
  o Lectures may be recorded in some situations (see information below on recording).
  o Lectures will provide the theoretical background which will support the other course components.
• OE & ICE (groups)
  o Students will work in groups (determined by instructor and changing for each assignment).
  o Each student will select an appropriate source to review (peer-reviewed articles or web sites).
  o Each student will post a précis of their article on their TEAMS Channel and assignment template.
  o Each group will compose a short summary of their group’s articles and will add it to the assignment template.
  o Groups will give an informal summary of their findings in class (3-5 minutes).
• Tutorials & Assignments (individual)
  o Tutorials will be pre-recorded by the TA and will provide instruction for the assignments.
  o Tutorial and assignments are completed on the student’s schedule. The Tutorial hours are consistent with the 1/2T hours allocated to this component.
- The assignments will be individual submissions, but we encourage students to collaborate to solve problems. All submissions must be the individual student’s original work.
- The TA will be available for help at pre-defined times of the week for help (virtual office hours using TEAMS).

- **Project (groups)**
  - Students will work in groups of their choice to create a multinational comparison of hazard vulnerability.
  - Lectures, OE&ICE, and Tutorials/Assignments will provide the theoretical and practical preparation for completing the project.

- **Exams**
  - Combination of multiple choice and short answer questions.
  - Based on all course material.
  - Both exams are comprehensive (cover all material presented).

**Missed Course Components**

- **For all missed components**
  - Notify the instructor as soon as possible, preferably before the deadline.

- **Missed Exams** follow the steps below.
  - Get documentation as outlined at [https://www.ucalgary.ca/pubs/calendar/current/m-1.html](https://www.ucalgary.ca/pubs/calendar/current/m-1.html)
  - If the justification is accepted, the instructor will allow a deferred exam. The deferred exam will be administered by the Department of Geography. Times to be determined.
  - If the justification is not accepted, a grade of “0” will be recorded.

- **Missed assignment deadlines** follow the steps below.
  - Get documentation as outlined at [https://www.ucalgary.ca/pubs/calendar/current/m-1.html](https://www.ucalgary.ca/pubs/calendar/current/m-1.html)
  - If the justification is accepted, the instructor will grant an extension.
  - If the justification is not accepted, a late penalty will be assessed.

- **Missed Online (OE) and/or In-class engagement (ICE)** follow the steps below.
  - Get documentation as outlined at [https://www.ucalgary.ca/pubs/calendar/current/m-1.html](https://www.ucalgary.ca/pubs/calendar/current/m-1.html)
  - If the justification is accepted, the instructor will adjust the weighting of the OE & ICE sessions.
  - If the justification is not accepted, a grade of “0” will be recorded.

- **Missed project deadlines** follow the steps below.
  - Get documentation as outlined at [https://www.ucalgary.ca/pubs/calendar/current/m-1.html](https://www.ucalgary.ca/pubs/calendar/current/m-1.html)
  - If the justification is accepted, the instructor will grant an extension.
  - If the justification is not accepted, a late penalty will be assessed.

**Exams & Deferrals** [https://www.ucalgary.ca/registrar/exams](https://www.ucalgary.ca/registrar/exams)

**Supplementary Fees**
No supplementary fees have been assessed for this course.

**Referencing Standard**
In written work presented in this class, the accepted method for referencing the work of others will be the Chicago Manual of Style: [https://www.chicagomanualofstyle.org/home.html](https://www.chicagomanualofstyle.org/home.html)

**Important Dates**
The last day to drop this course and receive a tuition fee refund is **Thursday, January 20th, 2022**. The last day to withdraw from this course is **Tuesday, April 12th, 2022**. No classes February 20 – 26th, 2022.

For additional detailed course information posted by the instructor, visit the course Microsoft TEAMS site. Link to the TEAMS site can be found at Desire2Learn page online at [https://d2l.ucalgary.ca/d2l/home](https://d2l.ucalgary.ca/d2l/home).
Writing support
Please note writing support resources provided by the Student Success Centre https://ucalgary.ca/ssc/resources/writing-support and the library https://library.ucalgary.ca/guides/writinghelp

University of Calgary Academic Integrity Policy
Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at: www.ucalgary.ca/pubs/calendar/current/k.html.

Plagiarism, Cheating, and Student Misconduct
The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are strongly advised to read the Student Misconduct section in the University Calendar at: www.ucalgary.ca/pubs/calendar/current/k-3.html. Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student’s work as your own, (2) presenting an author’s work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at: https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure

For students wishing to know more about what constitutes plagiarism and how to properly cite the work of others, the Department of Geography recommends that they attend Academic Integrity workshops offered through the Student Success Centre: https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity

Instructor Intellectual Property
Information on Instructor Intellectual Property can be found at https://www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy

Freedom of Information and Protection of Privacy
Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor’s office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor’s office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

Research
Students will NOT participate as subjects or researchers on human subjects.

Posting of Grades and Picking-up of Assignments
Graded assignments will be returned digitally by the instructor or teaching assistant using the “Assignments” function in TEAMS. Grades will be available in the “Grades” function in TEAMS. Grades and assignments will not be available at the Department of Geography’s main office and assignments cannot be dropped off at the Department Office.

Academic Accommodations
It is the student’s responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at: https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html
Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure
Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: freeman@ucalgary.ca).

**Use of internet and electronic devices in class**
Students are encouraged to use electronic devices in the classroom if it is for the purpose of the course. Any use of an electronic device that disrupts the class and interferes with other student’s learning in any way will not be tolerated.

**Guidelines for TEAMS Meeting Sessions**
Teams is a video conferencing program will be used to facilitate the Online Engagement component of the course and for hybrid (in-person & virtual office hours).

To help ensure TEAMS sessions are private, do not share TEAMS link or password with others, or on any social media platforms. TEAMS links and passwords are only intended for students registered in the course. TEAMS recordings and materials presented in Teams, including any teaching materials, must not be shared, distributed, or published with the instructor’s permission.

The use of video conferencing programs relies on participants to act ethically, honestly, and with integrity; and in accordance with the principles of fairness, good faith, and respect (as per the Code of Conduct). When entering TEAMS or other video conferencing sessions, you play a role in helping create an effective, safe, and respectful learning environment. Please be mindful of how your behavior in these sessions may affect others. Participants are required to use names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities. Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g., Student Non-Academic Misconduct Policy). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms.

If you are unable to attend a TEAMS’ session, please contact your instructor to arrange an alternative activity for the missed session (e.g., to review a recorded session). Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in TEAMS sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

The instructor may record online Teams class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Teams session. These recordings will be used to support student learning only and will not be shared or used for any other purpose.

**Media Recording (if applicable)**
There MAY be times when the instructor may capture the lecture to be made available for students online. If this occurs, the instructor will notify the students that recording is occurring, they will train the recording device on themselves (no student will be recorded), and will post the recording to the secure TEAMS site for the course.

**Course evaluations and student feedback**
Student feedback will be sought at the end of the course through the standard University Student Ratings of Instruction (USRI) and Faculty course evaluation forms.

**Accessibility**
Links to the recorded tutorials will be delivered on TEAMS. Accessibility options will be turned on so that captioning and transcripts are available.

**Copyright Legislation**
All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright [https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy](https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the copyright act [https://laws-lois.justice.gc.ca/eng acts/C-42/index.html](https://laws-lois.justice.gc.ca/eng acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplines under the Non-Academic Misconduct Act.
**Wellness and Mental Health Resources**
The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [https://www.ucalgary.ca/wellnesscentre/services/mental-health-services](https://www.ucalgary.ca/wellnesscentre/services/mental-health-services)) and the Campus Mental Health Strategy website ([http://www.ucalgary.ca/mentalhealth/](http://www.ucalgary.ca/mentalhealth/)).

Students requiring assistance are encouraged to email the **Student at Risk line** if they or others appear to need wellness assistance: sar@ucalgary.ca For more immediate response, please call: 403-210-9355 and select option #2.

**Sexual Violence Policy**
The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. Please see the policy available at [https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf](https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf)

**Contact Information for Student and Faculty Representation**
- Student Union VP Academic 403-220-3911, suvpaca@ucalgary.ca
- Students Union Representatives for the Faculty of Arts – 403-220-3913, arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca
- Student Ombuds Office information can be found at: [www.ucalgary.ca/ombuds/](http://www.ucalgary.ca/ombuds/)

**Emergency Evacuation/Assembly Points**
Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary’s Emergency Management website: [https://www.ucalgary.ca/risk/emergency-management](https://www.ucalgary.ca/risk/emergency-management). In case of emergency the Assembly Point for this classroom is **Scurfield Hall Atrium**.

**Campus Safewalk**
Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.