



ORIGINAL COURSE IMPLEMENTATION DATE: September 1994  
 REVISED COURSE IMPLEMENTATION DATE: September 2017  
 COURSE TO BE REVIEWED: (six years after UEC approval) November 2020  
 Course outline form version: 09/15/14

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

<b>Course Code and Number:</b> GEOG 201	<b>Number of Credits:</b> 4 <a href="#">Course credit policy (105)</a>																
<b>Course Full Title:</b> Climate and People <b>Course Short Title (if title exceeds 30 characters):</b>																	
<b>Faculty:</b> Faculty of Social Sciences	<b>Department (or program if no department):</b> Geography and the Environment																
<b>Calendar Description:</b> <p>An exploration of the physical processes responsible for determining Earth's weather and climate. This exploration will include the human dimension of weather and climate phenomena.</p> <p>Note: Field trips outside of class time will be required. Please refer to the department website for field trip scheduling information.</p>																	
<b>Prerequisites (or NONE):</b>	One of the following: GEOG 101, GEOG 102, GEOG 103, or GEOG 116.																
<b>Corequisites (if applicable, or NONE):</b>	None																
<b>Pre/corequisites (if applicable, or NONE):</b>	None																
<b>Equivalent Courses (cannot be taken for additional credit)</b> Former course code/number: Cross-listed with: Equivalent course(s): <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i>	<b>Transfer Credit</b> Transfer credit already exists: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Transfer credit requested (OReg to submit to BCCAT): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No To find out how this course transfers, see <a href="http://bctransferguide.ca">bctransferguide.ca</a> .																
<b>Total Hours: 90</b> <b>Typical structure of instructional hours:</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td>Lecture hours</td><td style="text-align: right;">45</td></tr> <tr><td>Seminars/tutorials/workshops</td><td></td></tr> <tr><td>Laboratory hours</td><td style="text-align: right;">45</td></tr> <tr><td>Field experience hours</td><td></td></tr> <tr><td>Experiential (practicum, internship, etc.)</td><td></td></tr> <tr><td>Online learning activities</td><td></td></tr> <tr><td>Other contact hours:</td><td></td></tr> <tr><td style="text-align: right;"><b>Total</b></td><td style="text-align: right;"><b>90</b></td></tr> </table>	Lecture hours	45	Seminars/tutorials/workshops		Laboratory hours	45	Field experience hours		Experiential (practicum, internship, etc.)		Online learning activities		Other contact hours:		<b>Total</b>	<b>90</b>	<b>Special Topics</b> Will the course be offered with different topics? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, different lettered courses may be taken for credit: <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit <i>Note: The specific topic will be recorded when offered.</i>
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<b>Total</b>	<b>90</b>																
<b>Department / Program Head or Director:</b> Steven Marsh																	
<b>Date approved:</b> December 2016																	
<b>Faculty Council approval</b>																	
<b>Date approved:</b> January 2017																	
<b>Campus-Wide Consultation (CWC)</b>																	
<b>Date of posting:</b> March 17, 2017																	
<b>Dean/Associate VP:</b> Jacqueline Nolte																	
<b>Date approved:</b> January 2017																	
<b>Undergraduate Education Committee (UEC) approval</b>																	
<b>Date of meeting:</b> March 24, 2017																	

**Learning Outcomes**

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

1. Explain radiation transfer in the Earth system utilizing radiation laws.
2. Apply the energy budget concept to explain the Earth's weather and climate and human thermal comfort.
3. Describe the interaction of humans with climate.
4. Critically reflect upon challenges and responses of people to everyday weather events.
5. Evaluate the methods utilized by humans to cope with extreme climates
6. Explain the application of atmospheric radiation theory to meteorological phenomena such as: thermodynamics, atmospheric moisture, precipitation processes, atmospheric motion, frontal theory, air pollution meteorology, severe weather, and climate change and variation.
7. Conduct quantitative analysis of climatological and meteorological data.
8. Utilize approved protocols to collect field weather data.
9. Complete formal field data reports.
10. Demonstrate written, oral and numerical competency in the science of climatology.
11. Critically reflect upon your learning from in-class discussions, field work, and related research.
12. Create a piece of research on a self-selected topic and communicate the results in oral, visual, and written formats.

**Prior Learning Assessment and Recognition (PLAR)**

Yes     No, PLAR cannot be awarded for this course because

**Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)**

The course format may include lectures, field data collection, laboratory exercises, discussion groups, oral presentations, field trips and guest speakers.

**Grading system:** Letter Grades:  Credit/No Credit:  Labs to be scheduled independent of lecture hours: Yes  No

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)**

	Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.	Aquado, Edward and James E. Burt	Understanding Weather and Climate, 7 <sup>th</sup> edition Upper Saddle River, NJ	<input checked="" type="checkbox"/>	Pearson	2015
2.	Ross, Sheila L.	Weather and Climate: An Introduction	<input checked="" type="checkbox"/>	Oxford University Press	2013
3.	Ahrens, C.D., P. Jackson & C. Jackson	Meteorology Today: An Introduction to Weather, Climate and the Environment	<input type="checkbox"/>	Brooks Cole	2016
4.			<input type="checkbox"/>		
5.			<input type="checkbox"/>		

**Required Additional Supplies and Materials (software, hardware, tools, specialized clothing, etc.)**

none

**Typical Evaluation Methods and Weighting**

Exams:	25%	Assignments:	15%	Midterm exam:	%	Practicum:	%
Quizzes/tests:	%	Lab work:	%	Field experience:	%	Shop work:	%
Research Poster	20%	Field Reports:	25%	Reflections:	15%	Total:	100%

**Details (if necessary):****Typical Course Content and Topics**

1. Introduction to the science of climatology.
2. Radiation theory and radiation laws.
3. Energy balance of the Earth and temperature, human comfort in extreme climates.
4. Humidity and moisture in the atmosphere.
5. Cloud and precipitation formation.
6. Atmospheric circulation, importance of local breezes for people.
7. Global circulation.
8. Frontal theory and storms of the extratropics.
9. Severe weather – thunderstorms and coping strategies by communities.
10. Severe weather – tropical cyclones and safety in coastal communities.
11. Global climate change – adaptation and mitigation in the face of a changing climate.
12. Air quality – health implications.