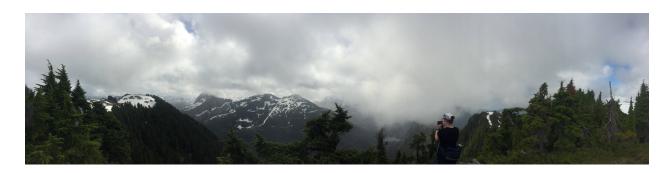


# **GEOGRAPHY 391 A03**

UNIVERSITY OF VICTORIA
Spring Term 2019
Dr. Shannon Fargey

# COURSE OUTLINE Mountain Meteorology Field School



This course has been designed to provide students with an immersive opportunity to understand the physical processes of meteorological phenomena in mountain environments. Measuring and monitoring of snowpack, extreme weather, and climate in coastal mountain ranges will be prominent course themes, along with challenges associated with alpine tourism operations due to weather and climate extremes and hazards. **Field Course dates**: Feb 18<sup>th</sup> to Feb 24<sup>th</sup>, 2019 – Mount Washington, BC.

# **INSTRUCTOR INFORMATION**

**Dr. Shannon Fargey**, Department of Geography, **DTB B308**, <a href="mailto:fargey@uvic.ca">fargey@uvic.ca</a> or 250-721-7342. When emailing me please include 'Mountain - your name - brief subject' in the subject line, this helps me sort through emails and makes it easier to respond to your message.

**Profile**: I am an Assistant Teaching Professor in the Geography Department. My role in the Department is primarily on program delivery, supporting student learning and discovery in Physical Geography and Geomatics. I am passionate about hydrometeorological topics and field based learning, but I would like to point out that my favourite topic in the world is mountain meteorology, so you are in luck! To learn more about me, please visit my website <a href="mailto:shannonfargey.com">shannonfargey.com</a> and follow me on Twitter @fargetmenot

## **KEY LEARNING OBJECTIVES**

At the conclusion of the course, you should be able to:

- Understand and explain principal mountain meteorological processes such as circulation and precipitation at variety of spatial scales;
- Use common types meteorological and snow surveying instrumentation to accomplish research objectives;
- Use primary and secondary data products to analyze meteorological phenomena and terrain features.
- Be able to confidently assess avalanche risk and understand the role of weather on this hazard.

# **REQUIRED TEXT**

Students will have access to reference textbooks and paper for background information at the field station as well as online. The majority of readings will be available for download on CourseSpaces prior to the field portion of the course. In addition, a usb drive will course learning resources will be available at the field station.

## **EVALUATION**

[1] Discovery in Mountain Meteorology (individual)	10%
[2] Field Notebook/Daily Weather Obs (individual)	20%
[3] Avalanche Risk (individual)	10%
[4] Human Radiosondes Activity (group)	20%
[5] Final Research Project (group)	40%

All evaluation components will be completed by 11:55 pm Feb 24<sup>th</sup>. Individual due dates/times for the assigned will be further communicated in the schedule.

# **GRADING SYSTEM**

As per the Academic Calendar:

Grade	Grade point value	Grade scale	Description		
A+ A A-	9 8 7	90-100% 85-89% 80-84%	<b>Exceptional, outstanding</b> and <b>excellent</b> performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.		
B+ B B-	6 5 4	77-79% 73-76% 70-72%	Very good, good and solid performance. Normally achieved by th largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.		
C+ C	3 2	65-69% 60-64%	<b>Satisfactory</b> , or <b>minimally satisfactory</b> . These grades indicate a satisfactory performance and knowledge of the subject matter.		
D	1	50-59%	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.		
F	0	0-49%	Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental.		
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.		

#### COURSE COMMUNICATION

During the field course we will have an open line of communication. All handouts, learning resources and relevant information available on a USB drive and Field School main computer. Further information will be communicated directly during our course meetings. Feel free to knock on my door anytime if you want to discuss meteorological things and beyond!

Outside of the field course time CourseSpaces learning management systems (LMS) will serve as the main avenue of communication in this course (<a href="http://coursespaces.uvic.ca">http://coursespaces.uvic.ca</a>). This is where I will put a back-up of important resources that I think will help you along including course information, topic handouts, important dates, announcements, etc.. If you are having difficulty logging in or password problems, contact the Computer Help Desk Email: helpdesk@uvic.ca, Tel: 250-721-7687

# **GEOGRAPHY DEPARTMENT INFORMATION**

Geography Department website: <a href="http://geog.uvic.ca">http://geog.uvic.ca</a>

Undergraduate Advisor: Phil Wakefield <a href="mailto:geogadvisor@uvic.ca">geogadvisor@uvic.ca</a>
Department Chair: Dr. Johannes Feddema <a href="mailto:geogadvisor@uvic.ca">geogchair@uvic.ca</a>

#### **IMPORTANT COURSE POLICIES**

Students are expected to attend course activities, take notes and be punctual. A high level of student cooperation and participation, involving asking and answering questions is expected.

As an Instructor, I can refuse a student admission to a lecture, laboratory, learning activity or exam because of lateness, misconduct, inattention or failure to meet the responsibilities of the course. Students who neglect their academic work may be assigned a final grade of 'N' (which equals a Grade Point Value of 0) or debarred from final examinations. Please refer to the UVic academic calendar in the section on student academic conduct for further information.

Students must complete all evaluation components to obtain credit. Failure to complete an any evaluation component without permission from the instructor, will result in an 'N' grade, which equals a Grade Point Value of 0.

Late assignments will be penalized 20% per day (including weekends and holidays). Exceptions will only be granted for documented medical or compassionate reasons. Please inform the instructor of your situation promptly and present written proof within five working days. *Only the course instructor can grant exceptions*.

Cell phones must be turned off or silenced during lectures and course activities and ONLY be used during field activities if pertinent to do so.

Conflicts with holidays or travel plans are not considered an acceptable reason to apply for a deferred or assignment extension.

Unless otherwise stated students are expected to complete assignments independently.

Students are responsible for reviewing the current University of Victoria's academic calendar. There are a number of regulations on conduct and expectations that you are bound by. As such you should make yourself familiar with them.

#### **PLAGIARISM**

Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Victoria. *The responsibility of the institution:* Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects. *The responsibility of the student:* Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations, for referencing your sources, or unauthorized use of an editor, please familiarize yourself with the University policy on academic integrity found in the Undergraduate Calendar at the following website <a href="http://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html">http://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html</a>. Please contact me if you have any questions.

Infractions will be dealt with in accordance with University policy. Commonly, the penalty for any form of cheating/plagiarism is a grade of F on the tests or laboratory assignments, or a final grade of F in the course. However, depending on the severity of the case other penalties may include a record on the student's transcript or expulsion.

## **ACCESSIBILITY**

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability/health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL) as soon as possible. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations http://www.uvic.ca/services/cal/. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

### **POSITIVITY AND SAFETY**

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members. To ensure that all class members feel welcomed and equally able to contribute to class discussions, we will all endeavour to be respectful in our language, our examples, and the manner in which we conduct our discussions and group work. If you have any concerns about the climate of the class, please contact me.

#### SEXUALIZED VIOLENCE PREVENTION AND RESPONSE AT UVIC

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting <a href="https://www.uvic.ca/svp">www.uvic.ca/svp</a>. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

Where: Sexualized violence resource office in EQHR, Sedgewick C119

Phone: 250.721.8021

Email: svpcoordinator@uvic.ca

Web: www.uvic.ca/svp

# **COURSE EXPERIENCE SURVEY (CES)**

We value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

# **University of Victoria Important Dates**

Jan 19<sup>th</sup> - Last day for adding courses that begin in the first term.

Feb 28<sup>th</sup> – Last day for withdrawing from the first term courses without penalty of failure.

Additional important dates can be accessed through the link below.

http://web.uvic.ca/calendar/general/dates.html

# **COURSE INFORMATION AND ANTICIPATED SCHEDULE**

We will be having a mandatory pre-departure day in the classroom to cover a few learning topics in early February. I will send out a doodle poll early in the New Year.

Mon	Tues	Wed	Thu	Fri	Sat	Sun
Feb 18	19	20	21	22	23	24
10:00 am meet at Raven's Lodge  Mountain explore and weather observations  Snowshoeing  7:00 pm Special Guest Presenter – Armel Castellan (Warning and Preparedness Meteorologist, ECCC)	10:00 am meet at Ski Patrol/First Aid Hut  Mount Washington Operations  Special Guest Presenter - Jesse Percival (Patrol Director/Avalanche Forecaster – Mt. Washington)  12:00 – 3:00 pm Mountain explore and weather observations  Snowshoeing  7:00 pm Special Guest Presenter – Joe Shea (UNBC) Challenges of monitoring snow in alpine environments	Plan for some warm up runs in the morning  11:00 am – 12:00 pm Meet at the top of the Whiskey Jack Chair lift  Meteorological Observations on Mount Washington  Special Guest Presenter – Ben Paquette-Strugger  Afternoon/early evening activity on the slopes - Human radiosondes	All day  Avalanche Awareness Module  Submit [3] end of day  8:00 -9:00 pm (ish) Movie night! Everest: the Death Zone	Morning /Afternoon  10:00 am Meeting (if required) to schedule instrumentation  Plan and Start Data Collection for Research Projects  Submit [4] Human Radiosonde activity  Submit [1] Part B*	Research Project Data Collection  Submit [3] end of day	Evaluation component [5] due 11:55 pm (submit via email)

Adjustments to dates, times and activities on a given day are subject to change. Last updated Dec 30<sup>th</sup>, 2018

<sup>\*</sup>Assignment 1 [Part B] can be submitted anytime from Feb 22<sup>nd</sup> to Mar 1<sup>st</sup>