



COURSE OUTLINE
Karst Geomorphology Field School



Noah Guengerich, UVCC

Karst refers to the landscapes and underground systems that form due to dissolution of soluble rocks via chemical weathering. This course has been designed to introduce students to the abundant karst landscapes on Vancouver Island. We will examine how karst forms, and the geomorphology, hydrology, geology, and biogeography of two specific karst landscapes in differing geologic units to compare formation processes. We will also examine karst conservation topics, with the final deliverable being an environmental management plan for a local karst unit.

This class will be supported by members of the UVIC Caving Club (UVCC).

Field Course Dates: Monday, August 30th - Sunday, September 5th, 2021 – Southern Vancouver Island, BC
Final Paper/Presentation due date: November 19th, 2021

Instructor: Jill Krezoski

Office Location: DTB B302 or via Zoom

Contact: gkrezoski@uvic.ca or (250) 472-4269 (office phone)

KEY THEMES:

1. Recognise and describe common karst landscape features.
2. Understand and explain the physical principles of common geomorphic and hydrologic processes, and the functioning of the water and weathering on karst formations.
3. Obtain a holistic awareness of the interrelationship of the geosphere, biosphere, hydrosphere, and atmosphere in the formation of karst landscapes, and how changes in each can impact karst ecosystems.
4. Understand cave conservation and karst management from a natural resource perspective.

COURSE TEXTBOOK:

Students will be provided with a field guide. Additional required and optional readings will be posted on Brightspace (bright.uvic.ca).

EVALUATION

Grade Breakdown

| | |
|---|------|
| Pre-reading activity (<i>Individual</i>) | 5 % |
| Gordon River Cave Presentation (<i>Deliverable 1 - Group</i>) | 15 % |
| Field Deliverable (<i>Deliverable 2 - Individual</i>) | 10 % |
| Field Notes (<i>Individual</i>) | 10 % |
| Additional term deliverables* (<i>individual</i>) | 20 % |
| Final Paper + Evaluation (<i>Group</i>) | 30 % |
| Final Presentation (<i>Group</i>) | 10 % |

Final paper due date: Week of November 15-19 (by 11:59 on November 19th)

Final group presentations: 3-5pm Friday, November 19th. Location TBD.

*Will be announced during the course.

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% | Exceptional, outstanding and excellent 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 the 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% | Satisfactory, or minimally satisfactory. 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. |

GEOGRAPHY DEPARTMENT INFO:

- Geography Department website: uvic.ca/socialsciences/geography/
- Undergraduate Advising: geogadvising@uvic.ca

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. For safety, cell phones should only be used during non-course time except in case of emergency.

As an Instructor, I can refuse a student admission to learning activities 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 project work. Please refer to the UVIC academic calendar in the section on student academic conduct for further information.

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 work independently.

POLICY ON LATE ASSIGNMENTS

Late work receives a 20% reduction in points for each day late (weekends count as one day). Any extensions must be approved by your course instructor. Requests will be granted for legitimate reasons with appropriate documentation as necessary.

ACADEMIC INTEGRITY

It is every student's responsibility to be aware of the university's policies on academic integrity, including policies on **cheating, plagiarism, unauthorized use of an editor, multiple submission, and aiding others to cheat.**

Policy on Academic Integrity:

<https://www.uvic.ca/calendar/undergrad/index.php#/policies?group=Undergraduate%20Academic%20Regulations>

If you have any questions or doubts, ask. For more information, see uvic.ca/learningandteaching/cac/index.php.

ACCESSIBILITY

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

DISCLAIMER

The below schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.

Anticipated Schedule (important academic term dates can be found [here](#))

- **First Day of Class:** Monday, August 30, 2021: IN PERSON – you must be able to be on campus August 30th to start the course.
- **Term seminar sessions:** Throughout the term there will be 2-3 evening seminars with invited guest speakers. Students are expected to attend and complete associated assignments.
- **Final (group) paper:** Due the week of November 13-19, final due date Friday, November 19th (11:59 pm)
- **Final (group) presentations:** 3-5pm on Friday, November 19th. Location to be announced.

Prior to the first day of class, students will be completing a pre-reading activity on their own. The assignment will be sent out at least two weeks in advance of August 30th. The pre-reading assignment will be due at the beginning of class on August 30th.

| | Monday, August 30 | Tuesday, August 31 | Wednesday, September 1st | Thursday, September 2nd | Friday, September 3rd | Saturday, September 4th | Sunday, September 5th |
|-------|---|---|---|--|--|---|---|
| | Classroom/ travel | A/B | C/D Class day | B/A | D/C | A/B Class day | C+D |
| 8:30 | 8:30-11:30 Introduction to class and Karst | Group orientation to Horne Lake region caves and equipment demos - Leave by 10. | Pack up camp, travel to Caycuse Campsite (<i>no wifi, no showers, generator for electricity</i>) | Up and at 'em! 08:30. | To caves 08:30 | Cave Conservati on topics, other subjects | Pack up camp, head to Looper Canyon |
| 9:30 | | | | | | | |
| 10:30 | | | | | | | |
| 11:30 | Break for Lunch | Break for Lunch | Break for Lunch | | | Break for Lunch | |
| 12:30 | Investigation into Karst in BC and intro to cave conservation | Horne Lake karst orientation and adjacent caves (supported by UVCC) | Free time, work on presentations (<i>Deliverable 1</i>) | Group 1 - Cave Set 1 Group 2 - Cave set 2 (supported by UVCC) | Group 1 - Cave Set 2 Group 2 - Cave set 1 (supported by UVCC) | Free time, work on <i>Deliverable 2</i> | Looper Canyon (supported by UVCC) |
| 1:30 | | | | | | | |
| 2:30 | Equipment/ safety training. Check out gear and head to Horne Lake (4:30) | Picnic Snack; exploration of Horne Lake Visitor Centre | | | | | |
| 3:30 | | | | | | | |
| 4:30 | | | | | | | |
| 5:30 | | | | Free time | Free time | | |
| 6:30 | Dinner on road | Booked: 16:30 | | | | | |
| 7:30 | Set up camp + explore site | Multi-cave experience at Horne Lakes (3 hours) Late dinner (8pm) | <i>Deliverable 1:</i> Presentations (Study Site Orientation) | Invited talk: TBD | Movie: Cave of Forgotten Dreams (Werner Herzog, 2010) | <i>Deliverable 2 Due before EOD</i> | Dinner at Cowichan Lake A&W. Head back to Victoria* |

A/B/C/D Breakfast/Dinner pod help schedule (TBD)

**Deliverable 3: Individual imaged/scanned Field Notes due via Brightspace before 11:59 pm on Wednesday, September 8th.*