Minutes of 2021 Earth Science Articulation Meeting

Hosted by University of British Columbia, May 20th, 2021

Meeting called to order at 9:00 am (on Zoom), adjourned at 10:50, and reconvened at 1 pm until 3 pm.

Chair: Brett Gilley

Attendance: Wei Zang (Okanagan), Deirdre Hopkins (Selkirk), Gordon Weary (Coast Mtn.), Nancy van Wagoner (TRU), Joel Cubley (Yukon College), Brett Gilley (UBC-V), Craig Nichol (UBC-O), Katie Burles (COTR), Kevin Cameron (SFU), Jerome Lesemann (VIU), John Martin (KPU), Mark Smith (Langara), Terry Neufeldt (TWU), Derek Turner (Douglas), Duncan Johannessen (U. Vic.), Steve Earle (TRU-OL), Leanne Pyle (Camosun), Tim Stokes (VIU), Michelle Patterson (VIU Geography), Katrina Erdos (Langara), Anna Tikina (BCCAT)



(Contact information for attendees is provided at the bottom of the document)

1) Approval of the agenda: carried

2) Approval of the minutes from 2020 meeting: carried

3) Institution reports

Most institution reports were submitted prior to the meeting. Brief highlights from those reports are as follows:

a) **Thompson Rivers U. Open Learning** (Steve E.) There have been very few changes to the way we do things as a result of COVID, except that exams are invigilated on-line through Proctor-U. Student numbers in 2020 are up about 10% from 2019, and in 2021 are up over the same period in 2020.

- b) Yukon U. (Joel C.) The new 2 year Earth Science diploma program starts in September.
- c) **UBC Okanagan** (Craig N.) There have been some retirements and more are coming and there have been new hires.
- d) **Selkirk College** (Deirdre H.) They have been doing inventory on the specimen collection and have some extras that are available to others. Includes some fossils such as graptolites.
- e) **Douglas College** (Derek T.) The Geology resource program is running now with 8 to 10 graduates this summer. Some institutions don't give credit for mining-related courses.
- f) **U. Victoria** (Duncan J.) David Nelles retired in January. Some parts of EOS, e.g., oceanography, are intensifying their focus (and leaving out some Earth Science material). There is a new Climate Science degree.
- g) **Coast Mountain College** (Gord W.) The external review has been completed (with special thanks to Joel at Y.U.) Numbers were small this year, and they have now been told that most teaching will be on-line in 2021/22.
- h) **Vancouver Island U.** (Jerome L.) The university is shifting its economic model so that funding is tied to student numbers. Jerome wants to have a discussion with other institutions about sharing courses.
- i) **College of the Rockies** (Katie B.) Numbers have been good. Labs were face-to-face. 14 faculty and 11 students have collaborated to create a Physical Geology lab manual that should be ready this summer.
- j) Langara College (Mark S.) The first-year geology course is being re-numbered (GEOL-1110 will become GEOL-1107) and this will require re-articulation, even though nothing is changing. They are looking for a full-time lab instructor.
- k) **Simon Fraser U.** (Kevin C.) Earth Science had the highest number of courses at SFU with at least some face-to-face instruction, although those courses had lower registration numbers than all-on-line courses.
- I) **Camosun College** (Leanne P.) Numbers are down about 20%. They did get students into the field and had a lab course with students using a rock/mineral kit borrowed from the library.
- n) **Thompson Rivers U.** (Nancy V.) Now have a new SEM lab and are sharing an ICP MS with chemistry. They are trying out a course that is live in Kamloops and remote in Williams Lake. (Could be a model for courser sharing)
- n) **BCIT** (Russell H.) Numbers are down a little. Did a lower mainland field school with students arriving by transit or in their own vehicles. They used the geological field guide to Stanley Park. The core facility is complete and they are looking for interesting core from all over.

- o) **Trinity Western U.** (Terry N.) Continuing 1st year geology classes with good numbers (not face-to-face).
- p) **Okanagan College** (Wei Z.) Wei is the only geologist at OC. Is looking forward to face-to-face classes next year.
- q) **Vancouver Island U geography** (Michelle P.) Geography is getting a new Canada Research Chair on forest fires coming from Australia.
- r) **UBC Vancouver** (Brett G.) Enrolment is at 102%. The department is about to make a decision on filling a new research position in Earth Science Education.
- s) **Kwantlen Polytechnic U.** (John M.) Numbers are down from last year, but up over the summer. They have a new lab technician. They want to add a field course.

6) Data and message boards

BCCAT will host a Moodle Page for the articulation committee.

Motion (Brett/John) that we move all of our information from Google Groups to Moodle. Carried Duncan offered to start work on that.

7) Report from BCCAT (Anna T.)

- a) Anna pointed out the Articulation Committee page to us. There are 66 articulation committees. The Joint Annual Meeting was on-line last year and sessions are posted on the BCCAT Youtube channel.
- b) The Spring Update is on the website: https://bccat.ca/Media/NEWBCCAT/pubs/Resources/ACUpdate202104.pdf It includes a reminder to committees that articulation agreements that haven't been reviewed within 10 years should be updated. Same applies to block transfers.
- c) BC Transfer Guide now includes courses from over 30 countries.
- d) They have expanded the section on Adult Basic Education.
- e) COVID should not impact the maintenance of transfer information.
- f) Several new publications are available at: https://www.bccat.ca/Search/Publications

8) Chair rotation

Brett is going on sabbatical and so Duncan will take over as chair. Jerome volunteered to become vice-chair. He will be given the "strange behaviour" Xenolith Award for volunteering, if we can find out where it is.

9) Environmental Geology open text (Steve)

This new text is now at the peer-review stage and about one-half of the reviews are complete. Steve thanks all of the reviewers for their contributions. The book, which is going to be available through BCcampus by September of this year, will include a chapter on karst, which Tim is working on.

Craig asked if there will be an accompanying lab manual. There isn't, but Duncan suggested that we could create a collaborative lab manual with labs contributed by anyone willing. Derek would be happy to contribute virtual field trips to that.

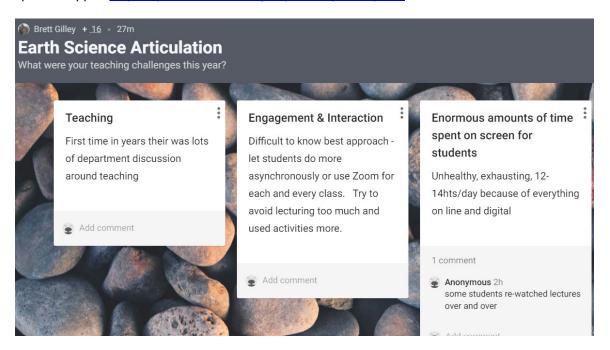
10) Indigenous perspectives

It was agreed that we should postpone the discussion on incorporating indigenous perspectives until the joint meeting with Geography next year.

Motion (John/Russell) at 10:50 to adjourn the meeting until 1 pm. Carried.

11) Discussion

The afternoon was devoted to a discussion about some of the ways that teaching changed due to the pandemic in 2020/21. The following is a summary of some of those comments extracted from the "padlet" app at https://padlet.com/brettgilley/817aujdwaoiyldha:



Teaching

First time in years their was lots of department discussion around teaching

Engagement & Interaction

Difficult to know best approach - let students do more asynchronously or use Zoom for each and every class. Try to avoid lecturing too much and used activities more.

Enormous amounts of time spent on screen for students

Unhealthy, exhausting, 12-14hts/day because of everything on line and digital

some students re-watched lectures over and over

Motivation as an instructor is more difficult when one is not surrounded by their peers.

Yes, very lonely year in many ways

getting the family to realize that even though I was home I was actually working

converting the labs to the on-line format.

it was like redoing all the labs from scratch almost

I sat in front of a screen, much more than usual - terrible for my physical health

Yes, back, neck and shoulder issues

Yes. It was nice to be home though. I got more exercise staged out of my house.

yep--sitting at my desk allI day

Bought full size powered stand up desk

Students not responding to requests, ignoring contact

Cheating seemed to become accepted by students ... and administration

Yes!

Yes. Misconduct cases increased. Severity too - cheating on paper affects one exam at one place. Posting to Chegg ruins questions for all instructors on Earth for all time.

Our Academic Integrity office got swamped but did try to deal with it all.

Unclear direction from administration on important issues like how to run exams and if we can record lectures with/without needing a privacy waiver.

Interactions and mental health issues

... soooo much time spent managing anxiety (sensu lato)

Student retention of information was poor, and seemed to inhibit normal forward progress through a course.

This is where quizzes can help, but students get quizzed to death if everyone does it

Huge amount of time to prepare materials

Yes and no release or compensation for this time.

To communicate with students, not sure they are actually learning, especially labs

communications volume

announcements, reminders, communications, e-mails

Developing new resources that would work online.

A TON of work.

A LOT more work than I thought

yes--way more work

Breakout Groups

Normally in a classroom, you can get students to break to groups and work. In seconds, you can scan the groups, see who is in each, see if they are talking ,see their faces and which are confused, and determine which groups need help. Video breakout rooms were a black box and moving room to room is too slow from classroom quick breakouts.

Totally agree, much harder to manage

Student social emotional challenges and student services being online.

I think this is really big - and is similar to my comment on exams.

Teaching to a sea of blank screens.

I agree, it felt so weird. Hard to tell when they're engaged or not, confused, etc

Keeping students engaged.

All the prep!!!

It felt like the first year of teaching all over again!

I agree--the prep and the editing the videos after.

We did all exams on line through Proctor U and some students found that very anxiety-provoking - making their already significant exam anxiety even worse.

Our college ended up saying not to use any proctoring software We didn't have access to proctor U. We had to adjust all our assessments.

Minutes by S. Earle

2021 Earth Sciences Articulation attendees

Institution	Name	e-mail
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