### <u>Articulation meeting – Environmental Studies:</u>

## May 7 and 8, 2025

#### **Attendance:**

Online— Peter Jackson (UNBC), Olga Petrov (BCIT), Stefania Pizzirani (University of Fraser Valley), Maxwell Ofosuhene (Trinity Western University), Lorelei Hanson (Athabasca University), Elinor Hughes Mathison (Douglas College), Jill Fellows (Douglas College), Kala Hunt (Native Education College), Matt Dodd (Royal Roads University), Barb Ramovs (Okanagan College), Caroline Dingle (Capilano University), Tara Stehelin (Yukon University), Craig Nichol (UBC Okanagan).

In person - Rob McCrae (Selkirk – Emeritus), Tara Ivanochko (UBC), Anna Tikina (BCCAT), Jacqueline Sorensen (Thompson Rivers University), Johanne Penafiel (Langara College), and Stefanie Zaklan Duff (Vancouver Island University).

Environmental Articulation Chair: Stefanie Zaklan Duff (VIU)

Minutes: Johanne Penafiel (Langara College) and Stefanie Zaklan Duff (VIU)

#### May 7, 2025 @ 12.30:

- Introduction of everyone, University Affiliation and specialization.
- Anna Tikina, BCCAT:
  - o Each articulation meeting has a Moodle on BCCAT: we can share all documents.
  - You need to self-enroll in Moodle to get access all the information.
  - ACTION: Set up moodle site for the environmental articulation group and upload reports.
- Presentation of Institutional Reports: 10 minutes each

#### 1- Douglas College – Elinor Hughes Mathison –

activities: Institutive for urban ecology. Fall 2025 – New director of institute of urban ecology. Expansion of curriculum – to French curriculum HS

- Garden in the Coquitlam campus planting expended
- Five courses ENVS related: Associate degree in ENVS Science.
- intro to envs science 35 students per course in Fall and Spring.
- Day long field trip ecosystem (Forest) studied by plants Weekly labs scientific writing: only one bio and the rest geologist

Aim at a summer course

### 2- BCIT – Olga Petrov

- Ppt presentation: challenges after pandemics adapt hands-on classes.
- Third review: 2019 77 credits Topics covered: air, energy, mining, water, ground water.
- First course in sustainability within BC. EENG 7000 Intro to Climate Change, Ecology and Systems Thinking science-based course for non non-scientists.
- Enrollment: 25 students: 20 DOM and 5 INT. very low changes in the program Marketing, online options. Think of changes in the location of the program within the institution.
- Need of collaboration with other institutions.
- 5 programs: MSc ecological restoration is back running.

### 3 – Anna Tikina presentation: BCCAT – request for research demand about students' outcome, demand,

- · Spring update:
- TCS modernized.
- Micro credentials: working with TRU credit bank to expand TCS to house micro credentials pathways.
- Research: Letters of permission in BC TS
- Canadian language benchmark
- BC transfer students' profile and performance report
- JAM 2025: Nov 6 online, Nov 7 hybrid
- Registration free
- BCCAT YouTube channel
- SLP: System Liaison Person, non-voting person, that would connect with external committee. Kara Lefevre from TRU volunteered.
- Jill: Using AI for transfer environmental impact/ footprint of using AI? Energy and water usage
- Ana: It has not been considered.
- Tara: UBC is developing a white paper about envs impact of AI use. A living document evolving as the data changes. Outline the big pictures issues.
- Discussion of decrease in numbers of transfer students. Reasons might be:
  - the mobility of students going to different institutions and lower number of international students.

# 4 - Capilano University: Caroline Dingle,

- new degree program Bachelor of environment and society
  - 4 years degree: Envs studies and envs science
- Diploma in environmental studies and in Environmental science.
- One is more social science based and the other is more natural science based.

- New course: Seminar style course partner with Cambie island conservancy. They are in the field with data collection.
- Request for transfer in the third year
- 65 applicants
- ENVS studies will work at Squamish campus. Partnership with Howe sound.
- BSc general with concentration in ENVS

#### 5-UNBC: Peter Jackson:

- UNBC in Prince George in the faculty of ENVS in department of Geography, Earth and Environmental Sciences.
- 40 majors students in total:
- All required to do internship and WIL. 120 credits: 40 courses of 3 to 4 credits 2 to 6 credits 75 hours of effort. Volunteer or paid Co op term.
- New courses:
- course in watershed science and management.
- Course ENVS instrumental analyses (ENSC 400/600)
- Course 0 credit course on Climate Emergency required in all Faculty of Environmental.
- Olga: question about environmental modelling Stella software package. Simulation of environmental systems.
- Stefanie: question about 0-credit Johanne: 0 credit course mandatory to all students- Lecture series.

#### 6 - University of Fraser Valley; Stefania Pizzirani:

- Bachelor of environmental studies: 45 -50 students
- Bachelor of environmental studies natural studies 20-25 students→ Bachelor of conservation science and management
- ES minor : few students
- Professional designations: RPBio, etc..
- New courses: ENVS 212 ENVS field and Lab techniques (soil and water), ENVS 310 leadership, ENVS 321 science of waste management, ENVS 330 sustainable fashion, ENVS 345 invasive species management, ENVS 410 envs seminar
- New Bachelor of Regional and Community planning degree
- Associate Certificate in applied GIS
- Indigenization: collaborations with First Nation communities, infusion of language and case study, etc...
- Focus on job ready skills.
- Investment in environmental planning
- Jobs examples: firefighters, government job,

- Ana: Associate certificate not needed to go through approval 1.5 years 3 to 4 course 15 credits
- Certificate: 30 credits
- Movement of 2 + 2 transfers.

16:05 meeting adjourned.

Thu May 8, 2025 @ 9:10 am:

Introduction of attendees

### 7 - Vancouver Island University - Stefanie Zaklan Duff:

- In fisheries and aquaculture. Admin in VIU has changed very quickly (acting President, acting Provost, acting Registrar, etc..)
- 9 department Science and Technology has added Geography. It seems the goal is to combine everyone together: Concern about losing identity of fisheries and aquaculture under Biology.
- New hire: 2 sessional instructors. Prof Tim Green and one technician retires. Only one technician left.
- International students down No CIP code associated with aquaculture. Institution does not prepare international students.
- Enrollment is up New website. Full cohort. Also sending e-mails registered to program.
- Start of courses at Deep Bay marine station. Minor in aquaculture. Thinking about a Marine Bio minor and a fisheries minor.
- VIU: 15 programs will be cut. Including Horticulture.
- Articulations issues: math skills are going down. But issues talking about math department about how to approach and teach maths. English issues as well.
- Interest in movement of students and universities.
- Students have prob with excel mathematical skills modified our Applied skills to incorporate these skills as they are not being worked through in the math department.
- Tara UBC: Collaboration with Maths and climate scientists to develop examples related to climate change. They have a resource publicly available. <a href="https://github.com/UBCMath/ClimateMath">https://github.com/UBCMath/ClimateMath</a>
- Maxwell: Question about master on community planning is cut at VIU as TWU is sending students to VIU for this course.

#### 8 - Douglas College - Jill Fellows:

- Associate of Arts in ENVS in Faculty of Arts. 60 credits interdisciplinary.
- Enroll: fairly steady. Deep in social sciences Douglas always had a cap of 30% International students
- New course: GEO Climate action in winter 2025. Core course in the program.
- Block transfer with University of Fraser valley they enter to 3 year at the uni. Fall 2024

- Faculty of humanity and social science: Bachelor degree in sustainability, social change and ...
- Craig: how do block transfer appear in BC CAT? Ana: search "Block Transfer" on the website. BC
  Cat notice that the institutions that have block transfers don't tell BC cat and there is no record in
  the website. Prob.: Registrars of receiving institutions do not have records of that agreements and
  transfer does not happen.
- Matt: Royals Roads has a block transfer with Douglas College in the Faculty of Science.
- Jill: block transfers easier for students and for institutions.
- Ana BCCAT: Transfer pathways development work done in Engineering and also Nursing.
- Barbara Okanagan College: Vernon Salmon Arm and
- AA in human geography and environmental studies.
- Diploma in ENVS: 3 specializations (Management, Science and )
- Block transfers with Royal roads and....
- Not a good way to track students. Lost 2 positions (one is Barbara going on Sabbatical), one retiree.
- Cut of faculty positions throughout the institution. Offer of early retirement
- Program review for the diploma with the 3 specializations.
- Changes in enrollment: fairly steady but it does not reflect the program health as students come from different programs.
- Second-year courses full with waitlists but it is a consequence of cutting options of course offerings.
- Admin EdCo forms about the % of grading before the last 5 days of the semester.
- OC has being on the news because of budget deficit OC faculty union has filed a grievance.

### 9 - Athabasca University - Lorelei Hanson:

- Open online university anyone older than 16 years old can take a course there. 35000 students enrolled at the AU across 10 provinces. Average age: 32.
- Students can register each month.
- 4 years program in Bachelor in ENVS (BES) to start this Fall. In Faculty of social science and humanities, interdisciplinary studies.
- There is an ENGL requirement and two indigenous courses mandatory.
- Each student is asked to develop a e-PortFolio.
- Importance of collaboration within institutions because students can transfer from other institutions.
- Yes, the campus has lab space. However, a professor in chem that has developed at-home labs.
- Alberta government pushes for WIL (giving funding for it).
- Jill from Douglas: question about AI impact on online courses. Faculty members have encouraged to integrate it into courses. Use for assignments Statements in course outlines.
- Stef: ask students to use AI for writing a cover letter for a job posting.
- Barb: Students have used AI to write their reference letters

- Max: Royal Roads also have many online courses. They have a link on their website about how to use AI in their courses. It often does not give good results.
- Jill: Use AI uses a lot of resources (Energy and water)
- Barbara: scaffolding of the assignment and indicate a specific resource. Also ask for self-reflection.

#### 10 -Trinity Western University - Maxwell Ofosuhene

- Review on faculty changes 2024: new hire in phys science climate research forest fire research. Hope to have courses in hydrology. Retirees
- Program is between social science and natural science.
- Healthy undergraduate program. Growth in the master program.
- New program; working with school of education: Minor in envs and sustainability. Going to ministry for approval this new academic year.
- Certificate in planetary health and sustainability issues multidisciplinary- anyone on campus can consider it. → maybe create a Master. → building an institute. (Strategic plan).
- Indigenous event happen throughout the campus and work on new courses.
- Outreach: Science in the valley program grade 3 to 7 students in the lower mainland. Summer in the valley: grade 3 to 4.
- News: program review ongoing.
- New president previous provost. Looking for a new provost.
- Unionization of the faculty.

### 11-UBC Okanagan - Craig Nichols

- Earth and ENVS Sc.: 50% for professional geoscience license, professional 25% agrology
- Freshwater SC
- Bachelor of Sustainability
- Physical geography no longer in Earth and ENVS in Sept. 2026. Going to the Faculty of Arts.
- Lowering of enrollment unclear data Effects of WD students.
- Articulation issues: EESC 101 lack of labs so no lab science credits
- ESC 112
- Change of second year courses: mandatory EESC/GEOG 205, EESC 212/GEOG 200.
- Uncertainty of the consequences of separation of GEO and ENVS.
- Tara UBC: Is Geo going to offer BSc even in Faculty of Arts? Not clear
- Tara says that there is tension between the two departments. Craig: Maybe become human geo.
- Peter: Combination of GEO and ENVS. → efficiency
- Stefanie: Geology and ENVS living together? What you want to do is different from how you want to do. Fundamental interdisciplinary within the Earth Sciences. How to enter ENVS content in the fundamentals sciences?
- Olga: Scientists should stay in sciences not political fear. Take responsible actions.

### 12 -Yukon University – Tara Stehelin:

- Earth Sc funded by mining companies dilemma about training and funding.
- Science programs: Northern ENVS Conservation SC diploma and degree, Bio Sc Diploma, Renewable Resources Management, Earth SC diploma, Science certificate, ENVS monitoring certificate.
- 1 Whitehorse and 12 satellite campus all in indigenous territory.
- Sc programs has slowly declined since 2021. In the North, there is a lot of work so they don't finish degree.
- Program changes: Renewable Resources Management diploma developed for first Nation managers and leadership. Under program review. Admin decided to suspend it without consultation but it gave a bad image so decrease in enrollment so good time for program review.
- Yukon follows BC High School curriculum.
- Decolonization: Any staff, faculty and students have to take an indigenous course (core competency) before graduating or working at the institution.
- Field course to Peru from multiple institutions and programs (ENVS, earth Sc and trades). Work on installation of solar panel. Collaboration with NAIT and SAIT.
- Block transfer to VIU.
- ENVS monitoring certificate 2 years all in the field. Only to Northern First Nation students.
- New and revised course: Revised climate and the polar circle course.
- Other course about pollutants in living organisms.
- Stefanie: question about indigenous course: non-credit course, online or in-person 2 full day workshop. Question about program review external committee? Maybe this group can help.

#### 13 - Okanagan College – Sydney Acton :

- STEM is seeing decline in enrollment but no lay-offs. In the water department: two cohort of 20 people. As of today, only 12. Usually 20% international this time only one person. Not in the post graduation institute federal list will affect the enrollment.
- Math skills decrease new students have to take a non-credit.
- Focus on local HS students enrollments: Gateway to ENGIN program grade 10 to 12 with evening and weekend class and they get HS credits for it.
- Craig: Incoming students struggling about math skills? Can post-secondary articulation
  committee can feed down to high schools? Ana: some rep from HS can get to these meeting.
  Official letter to Education and Childcare. BCCAT can facilitate to ministry. Tara UBC: school
  boards are doing things differently throughout the province and it is now semester based and no
  math class for a year before going to post-secondary institutions.

#### 14 – Thompson Rivers University – Jacqueline Sorensen

- BSc max of 50 students and 35 to 40 students graduate. 10% students are transfer students.
- Since 2022: Program review push to get an indigenous scholar in the department.

- Wildfire TRU Collaboration between post-secondary institutions and governments = new hub and research chairs. Campus wide department combining social and science aspects.
- New degree. New Certificate of wildfire science 15 credits with 5 courses with new courses launching Sept 2025. Research chairs (3).
- New president.

# 15 - Langara College – Johanne Penafiel:

- The program is located in the interdisciplinary department in the Faculty of Arts. All ENVS course are team-taught.
- The associate of Science degree is requesting to get SCIE 1114, Science Literacy, as an ENGL requirement since UBC-V has made SCIE 113 (transfer from SCIE 1114) a required course for the Bachelor of Science.
- The field course is currently ran in the Spring within Vancouver (study of urban watersheds) and Johanne was asking if there is interest of collaboration for field courses.

#### 16 - UBC - Tara Ivanochko

- New president Dean of Sc and department head.
- New climate related activity: center for climate and business solutions; center for climate justice, climate solution research collective.
- Hire assistant prof
- ENVS embedded in Faculty in Arts, Faculty of applied science, Faculty of Forestry, Faculty of Science.
- Sustainability Hub: maybe envs articulation of all faculties throughout the campus.
- ENVS Sc: curriculum review within the last two years. Faculty of Sc committed to hire one person.
- Update is recognizing the reality of the students' career options.
- Area of concentrations: Environmental analytics for example not on their transcript.
- Even if it does not articulate one to one, UBC will accept other first year classes
- ENVS Students won't need to take any English courses but if other institutions have eng courses it can be articulated.
- ENVS problem solving: applied problem solving not traditional math.
- New Ethics course in ENVS.
- ENVS policies and law third year.
- New courses: 205 305
- Students will build a portfolio
- Complimentary studies: 9 credits specific to ENVS. Other institutions can check for transfer credits.
- Jackie TRU: ClimateCollab at TRU. Similar to Sustainability hub. sustain@ubc.ca

Meeting adjourned at 12.25

## Meeting starting at 13.17:

#### 17 - Discussion on next year articulation meeting location and time:

- Second week of May (4 to 10 May 2026).
- Location: UBC Vancouver.

#### 18 - Chair succession plan:

- Now Stefanie Zaklan Duff is the chair and she will do for the new 3 to 4 years and Matt is the cochair and will take over.
- Email Annabella from BCCAT. Matt will organize Moodle

### 19 – Craig Nicols: presentation on Professional license for environmental certification

- Jackie: TRU students can get their RPBIO and EP designation.
- Matt: discussion on the importance of students getting as many licenses as possible.
- Craig: suggestion to add dedicate a professional advisor, academic liaison for Geoscience.
- BCCAT is asking to highlight professional advisors
- Bring the regulators and have a workshop. Stefanie suggested to bring the regulators to the articulation meeting.
- Relationship to students-advisors is important.
- Craig has created a canvas course unique to geoscience and they can contact them without going through the admin.
- Stefanie: SLP Kara Lefevre from TRU. Jackie will connect BCCAT and Kara.

### 20 - Topics for Fall chat:

- Who is the group? UVIC, SFU, Camosun, North Island College, Prince Rupert Coast Mountain College, NVIT?
   UVIC has ENVS science and ENVS studies.
- Maths and English requirements. Reach out to the maths SLP. Ask BCCAT to reach out to them to talk to us.
- Field schools' collaborations Tara: Bio articulation committee has come up with a grid to field schools collaboration.
- Transfer pathways

Meeting adjourned at 2.27