

Biology Articulation Committee

DRAFT Meeting Minutes

BRITISH COLUMBIA COUNCIL on ADMISSIONS AND TRANSFERS (BCCAT)

University of British Columbia Kelowna, May 9/10, 2023

Present:

Committee Member Name	Institution Name	Email/contact
Mitra Panahi	Alexander College (ALEX)	m.panahi@alexandercollege.ca
Ryan Suleman	Camosun College (CAMO)	suleman@camosun.bc.ca
Thomas Flower	Capilano University (CAPU)	thomasflower@capilanou.ca
Jessica Card	College of New Caledonia (CNC)	cardj@cnc.bc.ca
Andrena Heigh	College of the Rockies (COTR)	aheigh@cotr.bc.ca
Michael Chua	Columbia College (COLU)	mchua@columbiacollege.ca
Mike Silvergieter	Douglas College (DOUG)	silvergieterm@douglascollege.ca
James Gifford Martin Lopez Cordova	Fairleigh Dickinson University (FDU)	gifford@fdu.edu ma_cor_7@fdu.edu
Monica DeBoer	Kwantlen Polytechnic University (KPU)	monica.deboer@kpu.ca
Melissa Hamilton	Langara College (LANG)	mhamilton@langara.ca
Aisling Brady	North Island College (NIC)	aisling.brady@nic.bc.ca
Cindy Broberg	Northern Lights College (NLC)	cbroberg@nlc.bc.ca
Bruce Campbell Morgan Martin	Okanagan College (OKAN)	bcampbell@okanagan.bc.ca mmartin@okanagan.bc.ca
Stephen Seaborn	Selkirk College (SC)	sseaborn@selkirk.ca
Erin Barley Emelia Kirkwood	Simon Fraser University (SFU)	ebarley@sfu.ca ekirkwoo@sfu.ca
Natasha Ramroop Singh	Thompson Rivers University (TRU)	nramroopsingh@tru.ca
Matt Nelson	UBC-Okanagan (UBC-O)	matthew.nelson@ubc.ca
Brett Couch Gigi Lau	UBC-Vancouver (UBC-V)	brett.couch@botany.ubc.ca gigi.lau@ubc.ca
Mitra Panahi	University Canada West (UCW)	mitra.panahi@myucwest.ca
Gregory Schmaltz	University of the Fraser Valley (UFV)	biology.departmenthead@ufv.ca
Jenia Blair	University of Northern BC (UNBC)	Jenia.Blair@unbc.ca
Barbara Ehltling	University of Victoria (UVIC)	behltling@uvic.ca
Maria Morlin	Vancouver Community College (VCC)	mmorlin@vcc.ca
Kate Chatfield-Reed	Yukon University (YUKO)	kchatfieldreed@yukonu.ca
Guest Name	Institution	Email/contact
Robert Fleming	BCCAT	rfleming@bccat.ca
Barbara Moon	Alexander College	Barbara.moon@alexandercollege.ca

Regrets:

Raymond Wang – Coquitlam College (RWang@coquitlamcollege.com)

Kirk Hart – Coast Mountain College (khart@coastmountaincollege.ca)

Caroline Josefsson – Vancouver Island University (caroline.josefsson@viu.ca)

Recorder: Maria Morlin – Vancouver Community College

- BAC Meeting Called to Order at 8:30 a.m, May 9 2023**
Chair – Aisling Brady (NIC), Associate Chair – Maria Morlin (VCC)
- Introductions/welcome**

- Aisling Brady – BAC chair (NIC) called the meeting to order and welcomed members of the group, both in person individuals and those joining online.
- Matt Nelson (UBCO) acknowledged the meeting was being held on the traditional and unceded lands of the Syilx people of the Okanagan Nation.

3. Approval of Agenda and Any Additional Items

Motion: to adopt the agenda without additions

Moved: Jessica Card (CNC) Seconded: Brett Couch (UBC-V) (Carried unanimously)

4. Approval of minutes of the Articulation Committee meeting of May9/10 2023

- No amendments

Motion: to accept the Minutes as presented/with amendments as noted:

Moved: Aisling Brady (NIC) Seconded: Tom Flower (CAPU) Carried unanimously

5. Round table introductions from all members present.

6. No business arising from previous minutes.

7. Presentation of Institutional Reports

- Mitra Panahi – Alexander College – Enrolment increasing. Focussing on diversification of international students. Many students want degrees in health sciences.
- Ryan Suleman – Camosun College – Losing upgrading courses to access. Offering dual credit courses.
- Thomas Flower – Capilano University – Increasing international student enrolment, domestic held stable. Introducing specialty A&P course, Bachelor of Env. & Society, adding field courses. Life Sciences shut down, possibly due to saturation in B.C.
- Kirk Hart (regrets) – Coast Mountain College – read by Aisling Brady (NIC) (see institutional report)
- Jessica Card – College of New Caledonia – second year courses enrolment increased. Students enrol in non-lab courses but are not prepared. Transitioning to hybrid to include rural communities.
- Michael Chua – Columbia College – Enrolments steady, increasing students from countries other than India. Trying to get more open-resource textbooks.
- Raymond Wang (regrets) – Coquitlam College – read by Aisling Brady (NIC) (see institutional report)
- Andrena Heigh – College of the Rockies – Increased international students, particularly in humanities. Attrition before second year, likely due to marketing issues. Satellite campuses should be recruiting.
- Michael Silvergieter – Douglas College – Enrolments down first year biology. DC has its own open-source A&P text. Proposing 4-year bachelor's degree of Applied Research Technology and Communications, and micro credentials toward biotech, chem, and environmental consulting.
- Monica De Boer – Kwantlen Polytechnic University – Lucky to have applied genomics directed by Paul Adams. Grants from the agriculture sector. Employ students for research.
- Melissa Hamilton – Langara College – Strong int'l enrolment, domestic down. Likely backlog from Covid. College moving to three semesters of equal sections. Students struggle in labs. (lab discussion added to agenda item)
- Cindy Broberg – Northern Lights College – International students from 1/3 Philippines, 1/3 India, rest other areas. Developing a new sustainable agriculture program. Microbiology labs on campus containment level 2 status. Since students can't bring lab manuals, reading in advance helps students.
- Bruce Campbell – Okanagan College – Lost BScN program due to government funding cuts. Micro-credential courses will be offered. Increase first year bio to 4 hours/week since students seem quite unprepared.
- Stephen Seaborn – Selkirk College – ABE being replaced by academic upgrading. Int'l students unprepared due to lack of math/chem. A former employee donated so ecology course can run. First year majors average is down 10% - students appear unprepared. Considering ethnobotany.
- Erin Barley and Emilia Kirkwood – Simon Fraser University – Enrolment peak during covid due to online classes. Lower division course requirements changing from two math and two physics to one each. Expecting a wave of retirements. New medical school for indigenous and rural communities opening in a couple of years. Statistics more important than calculus.
- Natasha Ramroop Singh – Thompson Rivers University – Reduction in domestic enrolment. Requirement change from 18 to 12 credits for minors to increase accessibility. May be removing majors but retaining concentrations to provide more flexibility and variety to students.
- Brett Couch – University of British Columbia (Vancouver) – Raven textbook recommended but not required. Incorporating Workday platform, increasing workload of department heads.
- Matt Nelson – University of British Columbia (Okanagan) - New courses including science writing. Grades becoming lower possibly due to the switch to F2F classes. Students struggle to take notes in class.

- Mitra Panahi – University Canada West – Growth in enrolments, 120 nationalities represented. Focus on business and MBA program. Two biology courses required for non-majors (no lab).
 - Gregory Schmaltz – University of the Fraser Valley – Enrolment increased. Failure rate of 2nd year quite high, averages lower due to chem. Attrition due to low preparedness. One course entirely online, others hybrid or F2F.
 - Jenia Blair – University of Northern British Columbia – First year enrolments down. Many looming retirements. Restructured to five faculties – biology under the Faculty of Environment.
 - Barbara Ehltng – University of Victoria – Increase (50%) of students needed accommodations (now do not ask for doctor's notes). Third party online platforms may need approvals due to privacy issues. 10% grade drop.
 - Maria Morlin – Vancouver Community College – Delay in 2nd year offering due partly to lack of space for organic chem labs. Enrolments in first year biology low, A&P enrolments high, due to many health sciences offerings.
 - Caroline Josefsson (regrets), read by Aisling Brady.
 - Kate Chatfield-Reed – Yukon University – Getting a new science building. Second year not filling up. Added two new courses, which will help with enrolment.
8. **BCCAT Report** – Robert Fleming (see report on Moodle)
- Introducing an articulation reciprocity tool.
 - Widgets available to institutions for their websites.
 - Expanding pan-Canadian listings. Richer information for students. Global transfer guide to B.C.
 - Introducing a pathway function so students can explore options.
 - A study showed transfer students do as well as direct students.
9. **SLP Report** – Barbara Moon (full report available on Moodle)
- Check the statement of integrity at your institution.
 - Students often choosing to stay online, but complain of lack of connection.
 - PD can be ambiguous in collective agreements.
10. **JAM Report** – Aisling Brady (full report on Moodle), including:
- Organization of BCCAT and contact information
 - Transfer credit system and articulation committees, sustainability of transfer system
 - Stranded credits (fees not paid). Suggestion: BCCAT could hold the debt.
 - Digital services and how to handle workload of transfer requests.
 - Data collection policies being development.
11. **DISCUSSION: Micro credentials**
- Institutions mostly not making them a priority currently.
 - Some showing interest.
 - Advantages are - students put them on resumes, also fill skill gaps such as electro-fishing, and irrigation technology.
12. **DISCUSSION: labs**
- Student preparation for labs is generally lacking – particularly problem-solving skills.
 - Pressure from institutions to move non-majors online or observational labs. This has to do with cost, not pedagogy.
 - This committee has the power to ensure in-person labs remain an integral part of majors and non-majors courses.
 - Online labs are not labs; therefore, transfer would be denied, course would not count toward an associate degree.
 - A CCUBC survey across the country shows much variation: labs, no labs, and online labs.
 - Cannot develop technical skills online, or grasp interactions, the scientific method, body plans and internal structures, or get field experience, and many intangibles.
 - Assessment was discussed. Most have lab exams for majors. Assessment styles differ and should reflect experience gained in the lab. Post lab assessments given before students leave lab. Grade on completion, then give feedback.
 - Lab preparation was discussed. Styles to encourage preparation include jeopardy, prelab quizzes, handouts in first week (e.g., microscope skills).
 - Teach drawing (instead of taking photos – not observational skill).
 - Note-taking in preparation and in summarization of topics (James sent templates)

Motion: to approve statement on in-person labs: “The biology articulation committee has discussed at length the benefits of in person labs in first and second year level courses. Beyond emergency measures, the Biology Articulation Committee expects biology lab courses to be in person and hands on for transferability purposes.”
 Moved: Stephen Seaborn (Selkirk) Seconded: Bruce Campbell (Okanagan College) Carried (unanimous)

13. DISCUSSION: Indigenous knowledge

- Discussion occurring at all institutions for Indigenous inclusion. Some instructors implementing their own process.
- Brett: organism of the day traditional uses, significance of cedar, module: cultural burning. (Will share materials)
- Andrena: “Dialogues with Indigenous people” – elders coming to classroom. Activity: “becoming story-ready,” a reflective activity and reciprocity tea: what did students learn?
- San’yas Indigenous Cultural Safety Training: see www.phsa.ca site.
- Writing guide for Indigenous content: see gov.bc.ca.
- BC Campus has good resources.
- Non-land courses such as biochemistry can incorporate Indigenous medicinal uses.
- Instead of content, give examples of Indigenous ways of teaching, modes of delivery and assessment.

14. DISCUSSION: mental health accommodations

- More demand for accommodations now, some facilities not keeping up.
- Students should be made aware of accommodations. List on course outlines.
- Some tools in-class may be memory aids, ‘cheat sheets,’ grace period or extension requests for assignments, open labs before lab exams, study tips such as how to avoid burnout. Address the stigma of mental health issues.
- Make expectations high, but exhibit flexibility to ease students from high school (less strict) into post-secondary.
- Give students strategies to deal with anxiety. Deadlines should be weekdays (less stress on weekends).
- Instructors not aware of student issues (privacy), include a section of student information sheets stating ‘what else you would like the instructor to know about you.’

15. ChatGPT with Dr Celeste Leander

- Dr. Leander gave insights into using ChatGPT. <https://blogs.ubc.ca/celesteleander/2023/03/14/embracing-ai-a-prologue-to-chatgpt/>
- She showed the many uses of the program, including writing problems, doing statistics, answering questions.
- A lengthy and animated discussion ensued (please see extended notes if you wish).
- It is important to note that ChatGPT uses internet correct and incorrect information sources. The usefulness of it seems to be having students analyze what it produces. Also, if asked for resources, it produces incorrect ones.

16. DISCUSSION: evaluation of K-12 curriculum and preparedness

- Given the variety in what teachers cover in biology 11 and 12, could they even be used as prerequisites?
- We need to be vocal about the consequences of the new curriculum.
- New curriculum geared toward trades and not post-secondary education.
- Action: Maria to draft a letter to ministry and possibly high school teachers with concerns.
- Project: research into the effects of the new high school curriculum.

17. DISCUSSION: independent research projects

- Some instructors are compensated for directed studies, research projects, often per credit. Varies among institutions.

18. DISCUSSION: environmental anxiety

- News of environmental issues such as climate change promotes anxiety (doom and gloom). Instructors can help to alleviate by assuring students it is not students’ issues to solve alone, there are many positive projects underway, not meeting set deadlines is not the end, have students research mitigation projects.

19. DISCUSSION: open-source textbooks

- Several instructors use open source. Advantage is cost and accessibility. Disadvantages include low quality and dearth of images (usually cannot use). Options: text subscriptions, e-texts, texts in libraries.

20. DISCUSSION: Field course project

- No change from last year. Complicated endeavor, but perhaps just jump in and see what happens.

21. Mail list coordinator 2023/2024 – Andrena Height

22. Election of chair and associate chair: Aisling Brady (NIC) will continue as chair and Maria Morlin (VCC) as associate chair.

23. Next meeting:

Location: Vancouver Island

Date: May 1 (BC Bio) and May 2, 3 Articulation

Meeting adjourned at 3:30 p.m.