

Minutes of the 2023 Chemistry Articulation Meeting

College of the Rockies, Cranbrook Campus, 2023-05-05

Attendance (either in-person or via Zoom)

Chair – Todd Stuckless	Langara College – Patricia Aroca-Ouellette
System Liaison Person – Margaret Heldman	North Island College – Sherrie Wang
BCCAT Representative – Robert Fleming	Northern Lights College – Cindy Broberg
Alexander College – Miriam Grob	Okanagan College – Jasmine Korčok
BC Institute of Technology – Jimmy Lowe	Selkirk College – Allyson Perrott
Camosun College – Neil Meanwell	Simon Fraser University – Evon Khor
Capilano University – Urmila Deo Jangra	Thompson Rivers University – Bruno Cinel
Coast Mountain College – Reto Riesen	Trinity Western University – Shane Durbach
College of New Caledonia – Mahi Aravind	University of BC - Okanagan – Kevin Smith
College of the Rockies – David Dick	University of BC - Vancouver – Jay Wickenden
Columbia College – Taraneh Lajevardi	University of Northern BC – Todd Whitcombe
Coquitlam College – Sheenam Girdhar	Douglas College – Paul O'Connor
Fraser International College – James Zhou	Vancouver Community College – Diem-Ly Van
Kwantlen Polytechnic University – Patrick Duffy	Vancouver Island University – Jessie Key
Yukon University – Ernie Prokopchuk	

Regrets

University. of the Fraser Valley

University of Victoria

1. **9:00 am, Call to Order** - Chair calls the meeting to order.
2. **Welcome, Territorial Acknowledgement and Opening Remarks** –
Stephanie Wells, Dean of Business and University Arts & Sciences, College of the Rockies.
3. **System Liaison Person** – Margaret Heldman

BC Future Ready Action Plan. \$480 million for post-secondary education.

Question - How is the money being spent? Answer - It's going to support training for jobs. Future Skills grant, available to students for in-demand jobs training

Micro-credentials. The Committee should give thought as to what a micro-credential in chemistry would look like and how industries could be partners.

Question - Are micro-credentials taught by unionized faculty? Answer - At Langara, the collective agreement is used. Question - Are micro-credentials offered with approval of senates or are they offered through continuing education offices? Answer - Most are offered through senates. Comment - BCIT offers micro-credentials through Flexible Learning.

Academic Integrity. We need to adapt to the presence of ChatGPT.

4. BCCAT Update – Robert Fleming

Special Projects Funding Program <https://www.bccat.ca/articulation/projects>

2022-23 BCCAT Research Plan

<https://www.bccat.ca/Media/NEWBCCAT/pubs/Resources/ResearchPlan2022.pdf>

Call for Proposals: Indigenize and Decolonize BCCAT’s Approach to Research

<https://www.bccat.ca/pubs/Resources/CFP2022IndigenizingResearch.pdf>

Digital Learning Strategy

<https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/digital-learning-strategy#:~:text=The%20Digital%20Learning%20Strategy%20outlines,of%20Post%2DSecondary%20Education%20>

Future Ready Action Plan

<https://news.gov.bc.ca/releases/2023PSFS0023-000637#:~:text=The%20StrongerBC%3A%20Future%20Ready%20Action,skills%20gap%20employers%20are%20facing.&text=People%20seeking%20post%2Dsecondary%20skills,in%20B.C.'s%20changing%20economy>

<https://news.gov.bc.ca/files/Future-Ready-May2023.pdf>

Micro-credentials

<https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/micro-credentials>

StrongerBC Jobs and Training <https://strongerbc.gov.bc.ca/jobs-and-training/>

List of Micro-credentials <https://www.educationplannerbc.ca/search/microcredentials>

Profile and Performance of 2013-2018 Transfer Students

<https://www.bccat.ca/pubs/Reports/BCTransferStudents2020.pdf>

2019 Survey of Mobility <https://www.bccat.ca/pubs/Reports/SMSDemographics2023Info.pdf> and

<https://www.bccat.ca/pubs/Reports/SMSMobility2023Info.pdf> and

<https://www.bccat.ca/pubs/Reports/SMSMotivations2023Info.pdf>

High-school. Data on the number of students taking Chem12 over the past few years will be compiled.

Reciprocity Tool. Software that scans a data base for other relevant transfer agreements. The Transfer Cred System now identifies opportunities to create reciprocal agreements when a course transfers directly to another. <https://www.bccat.ca/pubs/Resources/ACUUpdate202304.pdf>

Dashboard. This tracks transfer requests. The TCS Dashboard introduces key performance indicators allowing for easier tracking of articulation activities across their institution. Additionally, the TCS now tracks articulation activity by department, providing visibility for faculty evaluators into requests for subjects within their department area.

Transfer Guide Widget – schools can link with the transfer guide database. The BCTG widget enables institutions to create their own transfer guide search directly on their website.

<https://www.bccat.ca/pubs/Resources/ACUUpdate202304.pdf>

TCS Suite – BCCAT continues to work with institutions to import their internal transfer tables of Canadian & international equivalencies for publication in the BC Transfer Guide. Over 80,000 equivalencies added to date.

Digital Services Hub - Students can see how their courses map onto programs and pathways. BC's Economic Plan identifies the need for a "digital services hub so British Columbians can more easily access education and training for in-demand jobs."

Question -Do we track, using PENs, the movement of students between their undergraduate studies and graduate studies? Answer - Yes.

Question - Are any articulation meetings held in a face-to-face-only format? Answer - BCCAT supports the use of hybrid articulation meetings.

Research Plan- institutions can recommend research projects to BCCAT.

Survey of Mobile Students – BCCAT asks students where they're going and why.

BCCAT Education Planner – A guide to the collection and use of student data on race, ethnicity and ancestry, <https://www.bccat.ca/pubs/reports/REASStudentData2023.pdf>

Funding Available - for articulation committees to work on projects of use to the articulation committee.

Digital Learning Strategies – there is support for online-learning projects and committee reps should discuss these opportunities with our institutions to address learning modalities.

Microcredentials – A discussion of micro-credentials <https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/micro-credentials> .

5. Approval of the minutes of the 2022 Chemistry Articulation Meeting

(<https://www.bccat.ca/pubs/Minutes/2022Chemistry.pdf>)

Motion to approve the minutes made by Todd Stuckless, seconded by Patrick Duffy. Approved.

6. C3 and CSC meetings, local CIC chapters – Jimmy Lowe.

The 49th College Chemistry Canada conference takes place in Winnipeg, May 27-29.

<http://collegechemistrycanada.ca/conferences/23conf/conf2023E.html>

The Canadian Chemistry Conference and Exhibition (CSC 2023) takes place in Vancouver, June 4-8.

<https://www.cheminst.ca/conference/canadian-chemistry-conference-and-exhibition-2023/> with a plenary lecture by Carolyn Bertozzi. Jimmy encourages us to be more involved with our local CIC chapters.

7. Island Pre-health Program at North Island College – Sherrie Wang

Sherrie provided an overview on their new Island Pre-health Program. The three-year program prepares students for studies in health areas such as medicine, dentistry and pharmacy. Details are included in her institutional report.

8. **Indigenization Strategies-** Miriam Grob and Diem Ly

Members shared resources for Indigenizing the curriculum. Mentioned resources included: recorded BCCampus workshops, The Dawn of Canadian History: A Chronicle of Aboriginal Canada, and Institute for Integrative Science & Health, Two-eyed Seeing, <http://www.integrativescience.ca/Principles/TwoEyedSeeing/>

9. **Institutional Reports from Receiving Institutions**

(a) Evon Khor, SFU. Developing a medical school at the Surrey campus. Second- and third-year experiential research courses are being introduced to expose students to lab research. Additional details are in the institutional report.

(b) Kevin Smith, UBC-O. They have developed a Bachelors of Sustainability program and a Metabolomics micro-credential. (<https://cpe.ok.ubc.ca/courses/metabolomics/>) Additional details are in the institutional report.

(c) Jay Wickenden, UBC-V. CHEM 141 is being introduced with an updated lab experience for Faculty of Science students. Additional details are in the institutional report.

(d) Todd Whitcombe, UNBC. A review of the Chemistry program will occur. A discussion of student attrition and ideas to mitigate it took place.

10. **Round-table Discussion**

The committee discussed offering science courses without a lab component for non-major students taking these courses.

Discussion around sharing lab manuals between schools.

Discussion around sharing exams between schools, and especially with the RIU, so that colleges have an accurate sense of the level of assessment and the weighting of curriculum topics.

Drawing software for Chemistry. Recommendations for ChemDraw (<https://chemdrawdirect.perkinelmer.cloud/js/sample/index.html#>), ChemSketch (ACD), ChemDoodle, Biovia Draw

Action: Todd Whitcombe has asked for our syllabi so that he can establish a concordance of curriculum topics.

Langara has acquired a Q-TOF HPLC/MS system, to aid in research.

The Committee recognized the passing of Kathy Nemis (BCIT).

Discussion around a requirement for face-to-face exams as part of articulation

Format of future chemistry articulation meetings - face-to-face participation is encouraged with an option for online participation.

Recommended Resources from Committee Members - <https://chemed.uoguelph.ca/> (ChemEd 2023 conference at University of Guelph) -Also, “The Coddling of the American Mind” by Greg Lukianoff and Jonathan Haidt

Next year’s meeting. Friday, May 3, 2024 at Douglas College