

MINUTES OF THE CHEMISTRY 2024 ARTICULATION MEETING
BRITISH COLUMBIA COUNCIL ON ADMISSIONS AND TRANSFER

Douglas College, New Westminster, BC

May 3, 2024

Attendance (either in-person or via Zoom)

Jason Mirzaei	Alexander	Patrick Duffy	KPU
Anabella Chun	BCCAT	Michael Adams	KPU
Jimmy Lowe	BCIT	Todd Stuckless	Langara
Neil Meanwell	Camosun	Sherrie Wang	NIC
Urmila Jangra	Capilano	Jasmine Korčok	Okanagan
Mahi Aravind	CNC	Allyson Perrott	Selkirk
Reto Riesen	Coast Mountain	Evon Khor	SFU
Taraneh Lajevardi	Colombia	Bruno Cinel	TRU
Joanna De Witt	Colombia	Shane Durbach	TWU
Hema Giesbrecht	Colombia	Greg Dake	UBC-V
Sheenam Girdhar	Coquitlum	David Fenske	UFV
Jianxiong (Joe) Yang	Corpus Christi College	Todd Whitcombe	UNBC
Dave Dick	COTR	Violeta Iosub	UVic
Paul O'Connor	Douglas	Judith Wallace	VCC
James Zhou	Douglas	Tamara Freeman	UBC-O
Brian Chapell	Douglas	Heather Wiebe	VIU
Calvin Wong	FIC	Ernie Prokopchuk	Yukon

Regrets: Cindy Broberg (Northern Lights)

Chair: Todd Stuckless (Langara)

Recording: Paul O'Connor (Douglas College)

Call to order

Todd Stuckless called the Chemistry Articulation meeting to order at 9:01.

Welcome & Land Acknowledgement by Dean of Science and Technology: Brian Chapell

Introductions: Brian Chapell (Dean Science and Technology, Douglas College) will be the new system liaison for chemistry articulation. Our BCCAT representative will be Anabella Chun.

BCCAT Update: (Anabella Chun)

Anabella noted that Angus Graeme is the new council co-chair.

There is a new Articulation Committee Guide and a How To Articulate Handbook.
<https://www.bccat.ca/resources/ArticulationCommitteeGuide2023.pdf>
<https://www.bccat.ca/publication/howtoarticulate/>

JAM 2024 will be Nov 7-8. Anabella highlighted the new BCCAT publications and calls for proposals – the deadline is May 15. BCCAT is updating the TCS platform and other technology.

There was discussion of articulation of courses from institutions outside Canada. Greg Dake noted that UBC-V has a large internal database of articulated courses that in principle could be built upon. It is open to the public on the UBC-V website.
<https://students.ubc.ca/enrolment/registration/transfer-credits/search-tool>

There is a section of the BC transfer guide that has existing international transfer agreements.

1. Approval of the Minutes of the 2023 Chemistry Articulation Meeting

Motion to approve – Todd Stuckless
Seconded – Todd Whitcombe
MOTION APPROVED BY CONSENSUS.

2. Approval of the Agenda

Motion to approve, with minor addition – Todd Stuckless
Seconded – Todd Whitcombe
MOTION APPROVED BY CONSENSUS.

3. Discussion of the upcoming C3 and the CSC conferences: (Jimmy Lowe)

2024 C3 conference May 24-26 at Trent University

<http://collegechemistrycanada.ca/conferences/24conf/conf2024E.html>

2024 CSC conference June 2-6 in Winnipeg

2025 CSC conference June 15-19 Ottawa

2027 CSC and World IUPAC conference Montreal

CIC local sections – students can have a free membership. C3 membership allows for a lower registration fee at the CSC conference. Jimmy reviewed who the local chairs are in BC and suggested the chairs meet after the Articulation to coordinate activities. Jimmy encouraged people to renew their C3 and CIC memberships. Money trickles back to local sections and students.

CIC Local Sections <https://www.cheminst.ca/communities/sections/>

2023-24 CIC academic award has been funded for the lower mainland section. Emails to follow.

4. Separation of lecture and labs in General Chem 1 (Todd Whitcombe)

At Langara, lecture and lab sections are strictly coupled and this allows instructors to meet with their students.

At UNBC labs are separate 1 credit courses. This separates the costs of lecture and labs. Some programs only require the lecture. It allows students to carry on with the lab even if they are unsuccessful in the lecture.

UVic has coupled lecture and labs at the 100 level, but generally second year courses are separate lecture and lab courses.

At NIC they are coupled, but instructors may teach different lectures and lab sections.

At VIU, they have just decoupled lectures and labs and will try it in September in hopes that it will make scheduling easier for students. Faculty have NSERC grants that reduce their teaching workload and allow TAs to be hired to teach labs.

The UNBC degree is 128 credits with 8 credits being lab courses. When questioned by Administration about the extra credits in the degree, pointing out the revenue from the additional credits has resolved any concerns.

SFU has coupled lecture and labs General Chem 1 and Organic. SFU offers lab exemptions for students with approximately 70% in the lab.

UBC-O students have to pass the lecture (including assessments) and lab and this may prevent high lab marks allowing a student to pass the course.

Decoupling has been discussed at UFV.

At UBC the labs are coupled. This ensures that students complete all the prerequisites in first year and so you don't have 4th year students hoping to graduate without the first-year lab.

Capilano has moved to coupling lectures and labs to better integrate content.

A possible future discussion would be what changes that were made during COVID were adopted and what items were reverted to pre-COVID practices.

5. General Chem 1 & 2 topics: (Todd Stuckless)

Todd suggested that we set up a sub-committee to review concordance on topics for General Chem 1+2. Some Langara instructors are interested in omitting equilibrium. The relative importance of this and other topics were discussed.

The articulation committee has not historically insisted that particular topics be taught in first year.

UBC-V has reviewed its first-year curriculum at the request of other stakeholders, such as forest science, for example, and so does teach aqueous equilibria even though chemistry faculty members might choose to do it differently or not at all.

Motion: A sub-committee will be established identify topics covered by different institutions for general chem 1+2 lectures and labs and to report back at the 2025 Articulation meeting.

Members: Ernie Prokopchuk, Todd Stuckless., Jason Mirzaei, Taraneh Lajevardi, David Dick

Motion to approve – Todd Stuckless

Seconded – Ernie Prokopchuk

MOTION APPROVED BY CONSENSUS.

6. Immigration policy and its potential impacts on international student enrollment: (Todd Stuckless)

UBC-V foresees possible enrollment changes due to visa issues and a tarnished Canadian reputation internationally. A possible decline from certain countries, such as China and India, has led to recruiting from other countries.

Capilano has 60-70% international students in Science and faculty have been told by

administration to expect status quo as there is pent up demand from students who applied before the rule changes.

UNBC doesn't expect an impact. The uncertainty is in how many students offered letters of attestation will use them. This is a concern shared by other institutions.

Colombia expects status quo.

Most of the impact may be felt by Ontario institutions with public-private partnerships and institutions with large increases in international students in the past few years.

7. Chemistry Moodle: (Todd Stuckless)

The Moodle is currently set up for one-way communication from the chair. The merits of opening it up for other discussions was discussed.

The way it is keeps the signal to noise ratio high.

On the other hand, opening it, allows for more discussions, questions and job postings which could be useful.

There is a way to unsubscribe from announcements, for those who prefer fewer notifications.

Motion:

If technically feasible and permitted by BCCAT, Todd Stuckless will add people to the forum and then people can unsubscribe if they wish. This will be reviewed in year to see if it is working as intended.

In addition, Paul O'Connor will send a list of names and email addresses of 2024 Articulation Representatives to Todd Stuckless to be posted on the Moodle.

Motion to approve – Bruno Cinel

Seconded – Todd Whitcombe

MOTION APPROVED BY CONSENSUS.

9. Next Meeting: (Todd Stuckless)

Todd Whitcombe graciously offered to host the 2025 meeting in Prince George. It was agreed that forever and always moving forward the previous host would take minutes. The meeting will be May 8-9 with regular business on Friday and a PD activity Thursday afternoon.

Approved by consensus.

10. Institutional Updates

Note that only items not covered in the submitted reports were recorded in this section.

Alexander

New space has been acquired in downtown in Vancouver, which should open up lab space.

Interested was expressed in sharing ways to use AI to teach chemistry, perhaps through a Moodle forum.

BCIT

New buildings are under construction.

Camosun

Enrollment continues to be soft, but second year enrollments are good.

Capilano

Have acquired a Squamish campus, but not the residences.

Now offering a BSc and first group is graduating.

The value of a chemistry minor was discussed.

CNC

Enrollment continues to be an issue. The process of program reviews was discussed.

Coast Mountain

Will be posting for an instructor in Terrace.

Colombia

Will be offering additional second year courses.

Corpus Christi College

Offering first year courses similar to UBCs lecture content.

Coquitlum

Moved to a new campus in Vancouver.

COTR

-see report

Douglas

-see report

KPU

A part time opening is coming in the fall. Work is ongoing on a minor.

Langara

A big turnover in administration has occurred. Outreach has occurred.

NIC

A new residence is opening and the chem labs are to be renovated over the summer. Island pre-health program has started.

Okanagan

A new fitness facility will be built in Kelowna.

Selkirk

-see report

SFU:

Medical School is hoping for Fall 2026 intake.

Budget deficit has led a hiring freeze.

Chem 111 will have online lectures and an in-person tutorial. There are 6 labs.

The requirement for students coming from high school into 121 has changed, but this does not impact college students.

TRU

-see report

TWU

Enrollment stable, but attendance is problematic.

Use of QR codes for taking attendance was discussed. Some institutions do not permit mark deductions for classroom attendance. Other institutions have platforms designed to record attendance and are required to take attendance.

UBC-O

First year program – gone to single 121/123 stream and made use of flipped classroom. Eliminated other streams. Thus, Chem 12 is recommended, but not required. Indigenized term two course with study of pit cooking roots. Slides were posted in the chat.

A new students registration system is coming. UBC_V and UBC_O will be used to denote which campus a course is located on.

Summer courses were cancelled for budget reasons.

Ed is retiring, an Organic research position will be posted shortly.

UBC-V

In term one, there are several pathways for students:

100 – for students with little science, and no lab

111- for students with chem 11

121- for students with chem 12, the largest offering, 6 dry labs and 6 wet labs

New course 141- lecture is same as 121, but the lab is enhanced. 160 students

Sending institutions should articulate to 121 not 141

Most go into 123 in term two.

154 – for engineers, does not count for 121/123, all virtual labs

Important email addresses:

Bccat@chem.ubc.ca – BC institutions usually

Articulate@chem.ubc.ca – students use & general inquiries

UFV

A CFI grant has allowed for purchase of equipment for high pressure research.

An increase in the number of students doing poorly was noted by several institutions.

UNBC

Enrollments haven't recovered to pre-COVID levels.

Buying a 400 MHz NMR, time may be available on the instrument.

Working on a PhD program.

UVic

Budget cuts and hiring freeze have been challenging. A teaching professor position was approved. A senior lab instructor was hired.

Up to 20% of students may need extra time and a distraction reduced environment has resulted in Admin pushing to have online tests and exams. Invigilating exams has been challenging. Student accommodations could be a topic for future discussion.

VCC

- see report

VIU

Budget issues forced labs to go to every other week. Upper year courses will run every other year.

Yukon U

It was noted that students are collaborating less in person.

11. Additional Items & Adjournment

a) High school connection

Having someone from the high school attend was discussed. Todd Whitcombe will try to have someone attend next year.

b) Adjournment

Todd Stuckless adjourned the meeting at 3:10 pm.