

Alberta Council on Admissions and Transfer
Biological Sciences Articulation committee
Minutes of meeting Tuesday May 2, 2017

In attendance (in person or via teleconference):

Sean Irwin, GPRC; Vern Peters, King's; Kevin Friesen, GMU; Heather Addy, UCalgary; Shun Li, Portage; Blaine Legaree, Keyano; Jocelyn Hall, UAlberta; Lisa Stein, UAlberta; Joseph Finnis, RDC; Joanne Reynolds, MHC; Randall Barley, ULethbridge; Dezene Huber, BCCAT; Caroline Nixon, Alberta Education; Clare Ard, ACAT Secretariat

1. Minutes of 2016 Meeting:

Page 3, Item 3 (Institutional Updates), UAlberta, Evolution and Environmental Sciences was previously Ecology, and Integrative Physiology was previously Physiology and Developmental Biology.

Page 4, Item 6 (Biological Sciences Chart Review) UCalgary Biology 371 is an in-person course with online tutorials.

2. BCCAT Reports, Dezene Huber

Field school coordinator – there exists an ad hoc list of field schools with uncertain distribution. BCCAT contracted Stephen Earle from VIU to coordinate a field school project which would include items such as waivers

BC high school curriculum changes: there has been lots of input into the process and it is now moving towards implementation. Points: inequitable delivery of some modules; the Grades 11 and 12 topics will stay similar but there is lots of modularization; these may not always be presented in the best order; FNMI issues (such as religious ideas) are impacting e.g., evolutionary biology

They had a guest from the College of Applied Biology – wanting to integrate biology degrees with the professional college so students can become professional biologists (UNBC does this with some degrees)

Using Learning Outcomes as articulation tools – may be hard to identify how novel courses interact with courses from different PSIs – LOs can help articulation agreements.

Looking at overlapping Chair positions for Articulation committees: have an Associate Chair to take Chair every two years – reduce workload and increase continuity

3. Alberta Education, Caroline Nixon

Consultation process for new curriculum – Survey to public; emphasis on francophone and FNMI perspectives; post-secondary involvement, ATA, parents, etc. 32K responses to survey – see results on Alberta Region Professional Development consortium (ARPDC) website

3 phases: shaping (literature review); development (where they are now); implementing (no schedule yet)

From the Guiding Framework, curriculum working groups are developing Scope and Sequence, e.g., the big pieces that shape the curriculum guiding questions from K-12. For each grade, identify possible concepts and procedural knowledge.

Focus on concepts not just facts.

Science working group – has geographic and demographic diversity; addressing concepts broadly and will chunk them later. Early May 2017 there will be a survey on the website re: scope and sequence and Spring 2017 ARPDC will be holding engagement sessions. Focus groups are teachers and post-secondary professionals.

Q: Checks and balances that the curriculum is being covered? A: Check for discrepancies between school and diploma marks but still seeing inequalities across the province

4. Institutional Updates

Keyano is attached

Keyano

- 1st year programming is good; 2nd year is on demand so e.g., Biochemistry is every second year OChem and Ecology every year.
- Focus on Environmental Sciences as there is a BSc program with MRU. It brokers the BSc for MRU via Keyano: Keyano offers an environmental technologist diploma and these courses will be used as credit towards the BSc. Some courses are in house and some are online. Hoping for a cohort of ten students; might accept fewer. Average environmental technician cohort is 15.

UAlberta

- Program changes were approved as of April 20-17. In September 2017 will be suspending enrollment in 4 programs, and other names will change via the Calendar; there are three programs left which are newly named, very broad and flexible. All information is being updated.
- Boom year for BioSci admissions; faculty manages all admissions. May start at an e.g., 88% admission average and lower as necessary throughout the admissions cycle.
- Period of growth in faculty with 3 new faculty and 3 more being hired, and potentially more in 2018 – but this comes after 10 years of attrition.
- There are many program reviews going on (7 departments next year).

RDC

- BioSci independent research course is being moved into Chemistry; the admission average may be changing; mature admission category is disappearing; and there were new instructors hired last year.

Portage

- Significant increase in student numbers; from 4-5 in 2014 to 18 this year.
- Block transfer agreements with Lakeland and Lethbridge colleges for the resource technician program; Portage students can transfer courses there.
- \$1.1M from Advanced Education for restructuring plan. Multiple instructional modes (F2F, videoconferencing, Blackboard Collaborate) distributed over various campuses.

MacEwan

- Bottleneck in Ecology and Diversity stream vs the Molecular and Cell Biology Stream. E.g., Zoology 250 Invertebrate and Zoology 224 Vertebrate Evolution and Adaptation are offered once per year and are required for the 400 level program requirements.
- Might create more 400 level courses to give more options; and then move existing 400 level courses to 300 level.
- Shell course for local field courses (Biology 410) – restructuring the master course syllabus.
- Moved to competitive major declaration – hope will ease overfilling of courses
- Honours program – 6 applied, aimed for 5-10.
- Q: Do all graduates get the same degree although they may not meet the same learning outcomes? A: The two streams are parchmented, but students can also mix and match streams.

UCalgary

- The Ecology program has renewed its curriculum and strengthened Evolution.
- UCalgary will give credit for Biology 241/Biology 243 if student complete BOTH first year courses (e.g., Biology 107 and Biology 108); if student only take one of the first year courses then they must take both 241/243 at UCalgary but can take the three transfer credits earned as junior Science options. 243 is only offered Winter/Spring.
- The program is completely full; students enter as BioSci majors based on high school grades; then chose a speciality major based on GPA.
- Program has hired new faculty member for Zoology and field courses.
- Biology 377 no longer exists at UCalgary

ULethbridge

- New flagship research program; Y1 has Intro to Research, moving to an independent study.
- New for non majors: Biology and Society
- Completed internal review this year e.g., no cell biology in 2nd year, only Biology and Genetics; external review next year.
- Dropped admissions requirement ofr Physics 30 so just Bio 30, Chem 30, Math 30-1.
- Departments had two non-replaced retirements with more retirements coming up in the next 3-5 years. Did get new faculty (research chairs os reduced teaching load).
- ULethbridge has three Biological Sciences streams (Cell/Molecular, Ecological, and Organismal) which are not parchmented

GPRC

- Transfers Y1 and Y2 to UAlberta; 2 years ago there was a retirement that was not replaced; lost two Y2 Zoology courses.
- Added a Paleontology course, which transfers to UAlberta, UCalgary, UNBC. It's in partnership with Philip J Currie Dinosaur Museum, an evening course mostly taken by Education Students.

King's

- Expanded course offerings; Research Methods in Biology is a standard Y3 course, replacing the independent project course; gives students more strengths to work with faculty in Y4.
- Y2 Human Anatomy with lab; Y3 Human Physiology with lab are new.
- Concerns re: level of preparation for university and advising in high schools, e.g, students who do not have Chemistry 30 must upgrade in summer school.
- Hired new faculty in 2015 (quantitative biologist); will have two more retirements and one replacement.

MHC:

- Not looking at new courses; revising existing Zoology courses to make them University Transfer; there is an internal curriculum mapping exercise being done with UT classes;
- Admissions are up this year and there are no new lab spaces.

5. Discussion re first year labs

Hypothetical question: What would happen if a PSI stopped offering first year labs?

E.g. if due to cuts, a PSI replaced them with tutorials, and employed grad students to teach them

Concerns re: transfer BUT courses are accepted from Western and they have no first year labs, only tutorials; UAlberta Biochemistry 1 has no lab while UCalgary same course has a lab

Y1 students learn so much from labs; soft skills like group work so there might be transfer issues for schools where labs are required.

Would it depend on the tutorials? – it would be a case by case basis; would have to talk to course coordinators and lab coordinators; most schools just felt such courses would not be accepted.

Many schools noted first year labs have already been rejigged (sometimes cut back in number)

One school noted cutting Y1 labs and the subsequent lab writing skills would impact skills all the way up to Y4.

6. Transfer best practices

It was noted that transfer can be a challenge – it is laborious and not always in PSIs best interest.

It can feel punitive – schools must think of student success and make sure all students will do well in courses, so each course must be assessed too see if the learning outcomes are appropriate – it would be great to have these on a website; it's easier to assess these than a list of topics.

Learning outcomes vs learning objectives: the latter are the instructor perspective. But many syllabi do not have LOs at the course level, and even where course level Los are mandated as part of the course syllabi, there are varying degrees of compliance.

7. ACAT issues

Membership – there is no limit on PSI membership, and the roles of whoever wants to come are totally open e.g., faculty, advisors, administrators.

Chair – Carol from Ambrose willing to be Chair of a two year term; so we need an Associate Chair – revisit this in 2018.

Most students do not do block transfer. Should we place the block transfer chart on the Transfer Alberta website? Or on the ACAT website under the BioSci Articulation Committee page?

8. Next meeting

Will be before AIBA the host institution will be the same for both (UCalgary).