

Determining the Extent of Indigenization of Science Courses within the BC Post-Secondary System: Examining institutional processes and procedures for the Indigenization of biology courses at BC Colleges and Universities and how transfer may be impacted

Andrena Heigh, MSc.* and Lynnette Kuervers, PhD.

University Arts and Sciences, College of the Rockies, Cranbrook, BC, Canada

Abstract

This research project set out to determine the extent of Indigenization of science courses within the BC Post-Secondary system and to look at transferability among these science courses. A survey to identify Indigenized courses was conducted using a small sample of post-secondary institutions. Science courses that have undergone an Indigenization process, as identified by their institution, were checked for transferability pre- and post-Indigenization. Although the sample size was small, there was no effect on transferability of these Indigenized Science courses. A goal of the second part of the project was to determine the relative percentage of Biology and Chemistry courses that have been Indigenized as compared to the other Sciences. This revealed a large gap in the scientific disciplines of having gone through an Indigenization process. The field of Geology and Geography had the highest percentage of identified indigenized courses across the surveyed institutions at 46% while Biology and Chemistry occupied 4% and 0% respectively. Furthermore, it was discovered that courses in the main scientific disciplines represent 27.5% of identified Indigenized Science and general Arts & Humanities courses. This study demonstrates a current gap in the Indigenization process of Science courses with respect to general Arts & Humanities courses, especially within the fields of Biology and Chemistry.

^{*} Principle Investigator. University Arts and Sciences. College of the Rockies 2700 College Way, Cranbrook, BC, V1C 5L7. Phone: (250) 489 – 2751, ext. 3347 email: aheigh@cotr.bc.ca



II. Preface

The intent of this research project was to examine which institutions in BC are Indigenizing biology courses and if transferability had been affected. Unfortunately, due to the situation created by the Coronavirus pandemic, some of the data could not be successfully gathered. A broader approach was taken to examine institutional goals and initiatives related to Indigenization of courses and programs. Identification of the resources and services available to students, faculty and staff to support these and other initiatives are also reported. The science courses identified on institutional websites to have Indigenous content and/or perspectives were assessed for changes in transfer agreements as well as discipline-specific differences in frequency of Indigenization.

Institutional Indigenization plans and strategic initiatives were studied to gain an understanding of the overarching vision and goals that BC post-secondary institutions have established to reflect their commitment to decolonization and reconciliation. These plans and initiatives have been developed in response to strategic goals established by the Ministry of Advanced Education, Skills and Training, the findings of the Truth and Reconciliation Commission of Canada and the United Nations Declaration on the Rights of Indigenous Peoples. The relevant sections of these documents are summarized as part of this to establish context.

This research project is composed of three sections: 1) transferability of indigenized science course; 2) Indigenization of courses among Scientific disciplines as compared to general Arts & Humanities; and 3) General overview of Indigenization practices and procedures at select Colleges and Universities in BC. The project is meant to be informative, not suggestive. It is meant only as an overview and analysis of processes of Indigenization at post-secondary institutions across British Columbia.

III. Background

One of the most damaging impacts of colonialism stems from the omission of the experiences, worldview and histories of Indigenous peoples and misrepresentation of Indigenous perspectives in our education systems1..It is widely recognized that reconciliation, decolonization and Indigenization of our education system in Canada is necessary. In response to the education related Calls to Action of the Truth and Reconciliation Commission, government ministries and institutions across the country are working to create a system that is accessible to Indigenous students and that includes Indigenous knowledge and perspectives both at an institutional level as well as in programs and courses across all disciplines. Indigenization of the BC College and University system is currently underway across BC with institutions at various stages in the process, ranging from development of Indigenization plans and strategies to implementation of projects that include changes in curriculum, hiring indigenous faculty, and the creation of new learning spaces.

A. Transferability

Credit transfer is critically important for student access to post-secondary. Thirty-nine institutions belong to the BC Council on Admissions and Transfer (BCCAT) that manages the transfer system. Credit transfer increases



access to post-secondary education while also, supporting quality and facilitating student mobility between these institutions. Formal transfer credits agreements are based on articulation processes that assesses course equivalence based on criteria such as learning outcomes, scope and level of content, assessment strategies and hours of instruction among others.

As a primarily sending institution, the College of the Rockies is particularly concerned with the ability of our students to be able to efficiently move to another institution after one or two years at the College without having to repeat credits. As such, a great deal of consideration is put into development and changes to course outlines that may result in loss of transfer credit.

Curriculum development and review of epistemology and pedagogical processes and practices is one aspect of the Indigenization process. Faculty are revising courses to include curriculum and pedagogical processes that incorporate Indigenous knowledge and perspectives; an endeavor that could mean changes to course outlines such as addition of new learning outcomes, rewording of existing ones and potential elimination of others. The BC articulation process requires substantial equivalence for transfer credit, based on learning outcomes, scope and level of content as well as assessment strategies. As institutions and faculty move forward in Indigenizing courses, it is important to understand how changes made to Indigenize courses and programs might affect course transferability and student mobility, in a positive or negative manner, within the BC College and University system.

Approaches to Indigenization of courses may be different across Institutions and disciplines; some courses may include Indigenous curriculum, for other courses, Indigenization might be reflected in a shift in pedagogy and/or epistemology such as learning opportunities with community partners, and/or within community-based settings. Availability of resources, faculty education and training, Indigenous faculty, experts and knowledge holders are all essential to ensure that faculty are aware of and avoid patterns in colonial thinking and that Indigenous knowledge, history and current conditions are accurately represented. Indigenization of courses at different institutions could, therefore, vary dramatically.

As a small rural sending institution, College of the Rockies, course transferability is a primary consideration when developing or revising course outlines. I am particularly interested in the impacts of course and program Indigenization on articulation and transfer of first- and second – year biology courses. Because institutions are at different stages of Indigenization, two issues arise (for sending institutions). Firstly, will Indigenizing courses affect transferability of courses? (Indigenized or not), and secondly, will transferability of non – Indigenized courses be affected when considered by institutions that have already Indigenized those courses?

Determining where institutions are in the process of Indigenization and what processes, procedures and criteria they are using and considering when Indigenizing courses may be helpful, particularly for sending institutions such as College of the Rockies. In addition, determining if and how Indigenized courses are identified and tracked will be critical in determining any past and future effect on transferability.



The following report will summarize institutional level Indigenization plans and initiatives and will look specifically at practices related to Indigenization at the program and course level. Data was gathered from publicly available reports, institutional Indigenous, strategic and academic plans, institutional resources for students and faculty, government publications and resources as well as information provided by science faculty from institutions across the province. Institutions are at various stages of Indigenization and are taking different approaches when it comes to program and course level criteria. Currently there is no formal identification of Indigenized courses at the provincial level. Some institutions provide lists of courses that have Indigenous content and/or ways of knowing on their websites, but this practise appears to be voluntary.

To this end, a search of twenty-two institutional websites was conducted to find courses identified as having gone through a process of Indigenization specifically these courses were identified to include Indigenous content. These institutions include: Camosun College, Capilano University, Coast Mountain College, College of New Caledonia, Douglas College, Kwantlen Polytechnic University, Langara College, North Island College, Northern Lights College, Selkirk College, Simon Fraser University, Trinity Western University, University of the Fraser Valley, University of Northern BC, Thompson Rivers University, University of British Columbia Vancouver, University of British Columbia Okanagan, University of Victoria, Vancouver Island University, and Yukon University. In order to analyze transferability only those institutions that have easily identified courses on their website were used in the analysis. It is worth noting that all courses from Yukon University go through an Indigenization process. The sheer number of courses that would need to be analyzed for transferability from Yukon College was too high to be chosen for this study. Furthermore, courses from UBCV were omitted from the transferability analysis because the number of identified courses exceeded the amount that could be analyzed in the time frame given. Of the remaining institutions, nine had identified among them a total of twenty-six science or nature-based courses as having gone through an indigenization process: Camosun College, Coast Mountain College, Langara College, Northern Lights College, Simon Fraser University, Thompson Rivers University, UBC Okanagan, and the University of Victoria. The rest of the institutions did not have an easily discoverable process of identified Indigenized courses on their website. Although a survey was created to be sent out to articulation groups, the arrival of the pandemic did not warrant sending out the survey during this very difficult time for education institutions. A full list of courses at all twenty-two institutions can be found in Appendix A.

Of the twenty-six identified Indigenized science or nature-based courses, twenty-one of them have existing transfer agreements. The transferability of these courses was unaffected. Four of the five femaining courses that did not have existing transfer agreements from SFU and UBCO were part of their First Nations or Indigenous Studies programs. (see Appendix A)



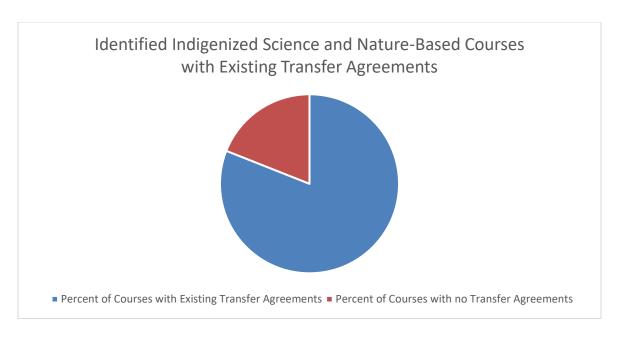


Figure 1: The percentage of science or nature-based courses without existing transfer agreements are specific to First Nations or Indigenous Studies programs. The remaining courses are part of typical University Studies Science programs, such as Earth & Environmental Sciences.

Conclusion: Science courses that had been identified as going through an Indigenization process were evaluated for changes in transfer agreements (Appendix A). Some of the courses listed are relatively new, and likely included Indigenous content from the beginning but others have transfer agreements that date back to 2000 with no changes noted in that time. Of the twenty-six courses that were evaluated, none of them had a decrease or increase in transferability among institutions. Although the sample size is small, this suggests that Indigenization of science courses may not affect their transferability among institutions. Those courses that have no existing transfer agreements are primarily within an Indigenous Studies or First Nations program area.

B. A Closer Examination of Scientific Disciplines

During the analysis of transferability, it became apparent that not all scientific disciplines were equal with respect to the Indigenization process. Almost all of the Institutions used in the analysis had a disproportionately higher number of Indigenized General Arts & Humanities Courses as compared to Science courses (Figure 2). A course was listed as a General Arts & Humanities course based on the following criteria: 1) it did not have a First Nations or Indigenous Studies course identifier; 2) it did not have key terms in the course title such as Indigenous, Aboriginal, First Nations, Metis, Native People, or was specific to a local Indigenous population; and 3) it contained a course identifier within an Arts & Humanities University Studies program such as HIST, ENGL, ARCH, SOCI, PSYC, ANTH, CRIM, WMST, SOWK, POLI, GNDR among others. On average, scientific disciplines represent 27.5% of identified Indigenized Science and General Arts & Humanities courses. Northern Lights College appeared to be the exception with four Science courses compared with three General Arts & Humanities courses (Appendix B).



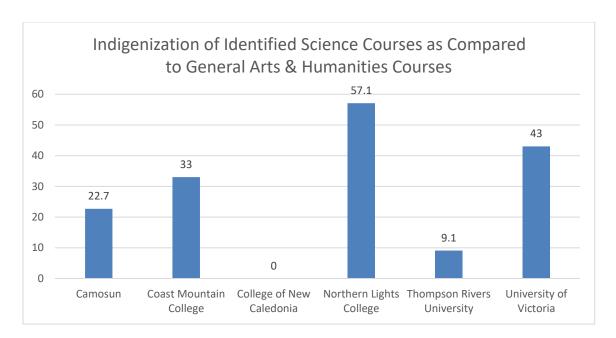


Figure 2: The percentage of Indigenized Science courses as compared to General Arts & Humanities courses is shown. The College of New Caledonia has four listed General Arts & Humanities courses but no listed Science courses.

Analysis of the comparison between the Science and Arts & Humanities courses revealed that the number of Indigenized Science courses was greatly skewed towards those of the Earth Sciences, Geology and Geography, with Environmental focused disciplines coming at a close second (Figure 3).

The initial focus of this project was to determine whether there had been a change in transferability of Indigenized Biology courses. Of the institutions analyzed, there was only one within the scientific discipline of Biology. This course, Botany Basics, is offered at Northern Lights College (Appendix A). In contrast, the Earth Sciences courses were identified at multiple institutions and include first- and second- year courses.



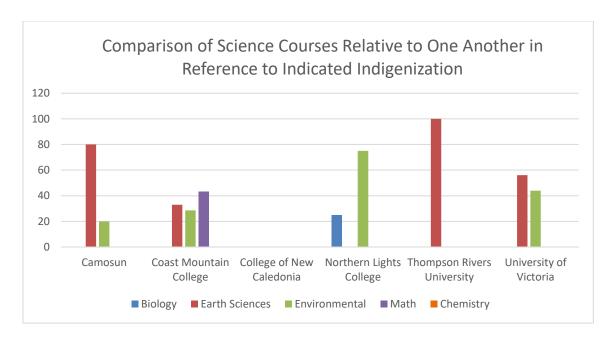


Figure 3: The percentage of Indigenized science courses as compared with one another at select institutions was determined. Of particular note, is the absence of Chemistry from all selected institutions and only a single Biology course. The three Math courses identified at Coast Mountain College are all Fundamental Math courses.

The relative percentage of identified Indigenized courses among the main scientific disciplines demonstrates a distinct gap between the Earth Sciences and Environmental areas as compared to Biology, Math, and Chemistry, in particular (Figure 4).



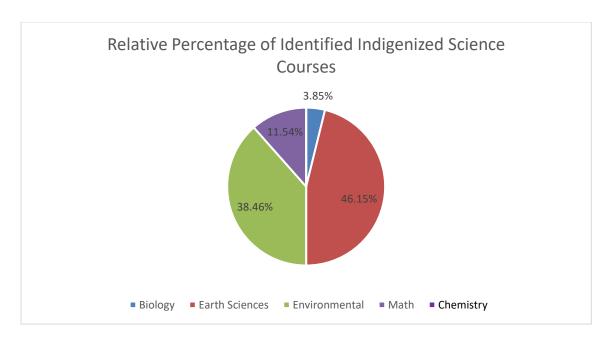


Figure 4: A comparison among scientific disciplines of Indigenized courses at select institutions. Of particular note, is the absence of Chemistry from all selected institutions and only a single Biology course. The three Math courses identified at Coast Mountain College are all Fundamental Math courses.

Conclusion: There is a clear discrepancy between the Indigenization of Arts & Humanities courses as compared to Science courses across post-secondary institutions across BC. Furthermore, there is a large gap among the Scientific disciplines of Biology and Chemistry among Indigenized courses.

C. A Survey of Institutional Strategies, Policies, Plans, and Procedures Surrounding Indigenization Initiatives as well as Program and Course Indigenization.

Indigenizing Curriculum in Science Courses

Indigenization of curriculum does not simply involve adding Indigenous content. Course design should also include Indigenous ways of thinking, being, and learning1.

Academic disciplines, cultures, and religions all have their own ways of knowing. Sociologists, historians and theologians know things in different ways than scientists, just as cultural knowledge and beliefs belong to a different epistemology. Scientific inquiry represents one epistemological approach to knowledge; in biology, the scientific method is used to study the natural world to build an evidence-based understanding of it. Science relies on the Uniformity of Nature Principle which states that the laws of nature are constant and apply to all matter and is based on a history of human experiences with nature and is supported by observation and evidence26 and is one way of knowing that should be protected in science education.

Indigenous knowledge is based on different epistemologies, described in the Pulling Together series of Indigenization guides 27. Key Indigenous epistemologies, relationality, the interconnection between sacred and



secular and holism are explained in the guide for curriculum developers1. Relationality is described as the view that we are related to each other, to the natural environment and the spiritual world and that there are interdependencies among these relationships. This can be applied in course development by emphasizing learning in relationships with other students, teachers, members of the community and the local lands. Sacred and Secular are inseparable in Indigenous ontologies because the world exists as one entity whereas in Western education, spirituality is most often avoided. Holism is about engaging the emotional, spiritual, cognitive and physical knowledge domains in all aspects of learning – holistic learning.

Because science uses an evidence-based approach to understanding the natural world, it cannot answer certain questions, including those concerning the spiritual world. This may be viewed as a barrier to interweaving Indigenous epistemologies with scientific ones particularly if the view is that science is the only way to understand the natural world; an assessment that is not only incorrect but would almost certainly alienate students whose knowledge of the natural world includes different epistemologies. Acknowledgement that there are different ways of knowing, that no one way is necessarily right or wrong, that science is one way of knowing and that there are similarities and common ground with the ways that Indigenous people know the natural world, would promote a more inclusive environment. In addition, employing different perspectives to understand the natural world may lead to a more whole understanding, to look at things through a different lens often leads to new learning. It is certainly conceivable that learners could benefit from exploring how an understanding of the natural world through relationality and holism compares to, and or relates to, understanding based on a scientific way of knowing (SFU HSCI 100 see Appendix E) or that more land-based learning could be taught in some science courses.

Depending on the course, interweaving epistemologies may not always be the right method. Another approach would be to teach different epistemologies in different courses, allowing learners to learn different perspectives of knowing and understanding the natural world from experts in those different epistemologies. Several institutions offer courses through Environmental Studies or Indigenous Studies that teach Indigenous ways of knowing and understanding the natural world (Appendix A and B); Ethnobiology (UVic), Ethnoecology (UVic, SFU), Ethnobotany (SFU) Ethnozoology, Traditional Ecological Knowledge (UBCO). If learners took one or more of these courses as part of a science program, they would learn different perspectives but not necessarily in the same course. Indigenization in science courses where interweaving of epistemologies might not work as well could focus more on place-based learning, using local examples and employing Indigenous pedagogies.

Another aspect of Indigenizing curriculum is the inclusion of Indigenous pedagogies that have been excluded from our educational systems. Some of these, especially experiential learning and place-based learning are very amenable to pedagogical practices already used in science courses. Science courses typically include labs, field trips, and/or field work which provide many opportunities for hands-on and place-based learning. Elders and knowledge holders can also be a valuable resource when studying the local environment giving students the opportunity to learn about the local knowledge and history of the land, how it has changed through time and how different human practices have changed the landscape. This requires relationship building with Indigenous people and communities. There are also opportunities for more holistic approaches to assessment, including



oral assessments, group work, and co-op programs among others. It is hard to conceive that inclusion of Indigenous pedagogies would not be beneficial to all learners. As educators, working to create a learning environment where all students feel welcome and respected is important. Part of that is acknowledging the people whose land on which we work and learn, using local examples whenever possible and providing as many opportunities for experiential learning as possible.

Indigenization in science courses will look different in different courses and at different institutions (Appendix F). From personal communication, the experiences of instructors have been very positive at institutions like Yukon University and Camosun College where course Indigenization is mandated. Instructors noted a clear emphasis on encouragement for thought and consideration towards Indigenous epistemologies and pedagogies in course design. None of the institutions where course outlines must be approved by an Indigenization committee prior to Academic Council approval have specific criteria that must be met, but it must be evident that the developer has considered and thought about if and when integration of Indigenous content and ways of knowing and doing can be done in a relevant and respected way. Changing subject matter may not always work, but thinking about what is taught, considering use of local examples where applicable, taking advantage of place-based educational opportunities and continuing to support and create experiential learning opportunities can work well in many science courses. These practices support learning for all students.

Understanding and then integrating Indigenous epistemologies and pedagogies in our courses will require ongoing learning and ongoing work. It requires that we become aware of personal biases and patterns of colonial thinking, critically evaluating our own understanding of Indigenous worldviews, histories, cultures and ways of knowing in relation to our roles as educators and realizing the role that each of us can play in Indigenization and reconciliation. It will require building relationships with Indigenous people, patience and time. The BC Campus guide for curriculum developers offers the following list of considerations in course development:

- Goals: Does the course goal include holistic development of the learner? If applicable, does the course benefit Indigenous people or communities?
- Learning outcomes: Do the learning outcomes emphasize cognitive, emotional, physical, and spiritual development? Is there room for personalization, group and individual learning goals, and self-development?
- Learning activities: Have you included learning activities that are land-based, narrative, intergenerational, relational, experiential, and/or multimodal (rely on auditory, visual, physical, or tactile modes of learning)?
- Assessment: Is the assessment holistic in nature? Are there opportunities for self-assessment that allow students to reflect on their own development?
- Relationships: Are there opportunities for learning in community, intergenerational learning, and learning in relationship to the land?



Format: Does the course include learning beyond the classroom "walls"?

The notable absence of Indigenized Science courses coupled with the possibility that Indigenization does not decrease transferability is encouraging for science faculty interested in Indigenizing courses. Although this study did not look deeply into the Indigenization plans surrounding Science courses, specifically, it does provide a comprehensive overview of Indigenization plans in BC Colleges and Universities. Although Appendix C provides a general overview of these initiatives, a brief data analysis of the findings that includes available resources and positions or roles is presented.

General Overview of Indigenization Plans at BC Colleges and Universities

Institutions were scanned for available resources related to Indigenous plans. The three most common resources at institutions include an Indigenous Student Services, Involvement of Elders, and Indigenous Advisors (Figure 5).



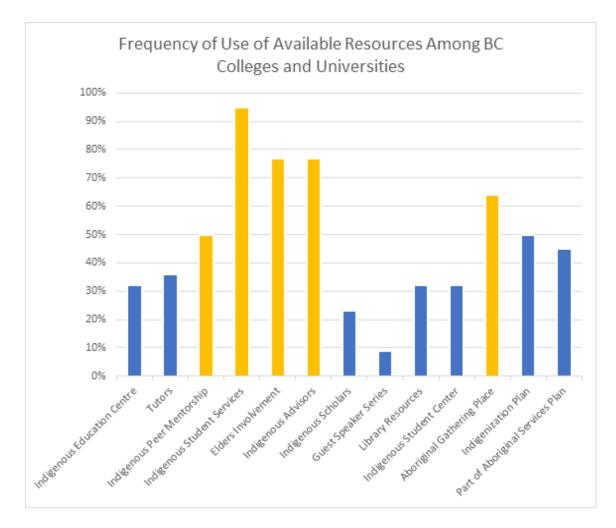


Figure 5: The percentage of institutions that have the identified available resource among the twenty-two chosen for the analysis is shown. The available resources identified in yellow are those present at the College of the Rockies as of June 2020. It is interesting to note that UBC Vancouver and Yukon College have 92% and 75% of the available resources respectively.

Institutions were also scanned for roles or positions related to Indigenous plans. The three most common roles at institutions include an Indigenous Education Advisor, an Indigenous Advisory Committee, and a Community Engagement Facilitator (Figure 6).



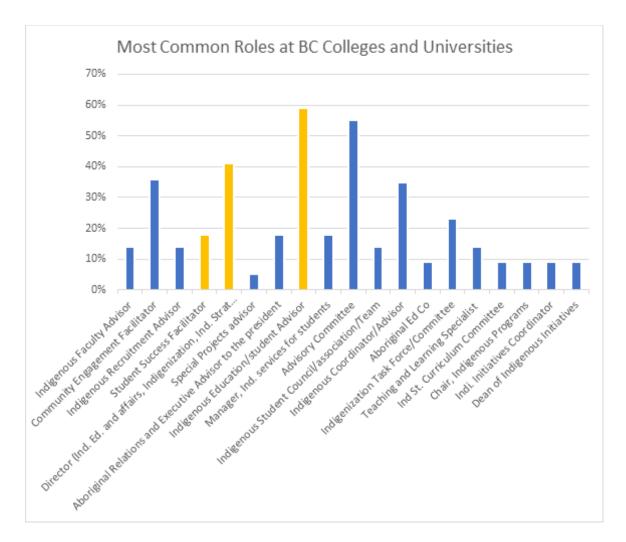


Figure 6: The percentage of institutions that have the identified role among the twenty-two chosen for the analysis is shown. The roles identified in yellow are those present at the College of the Rockies as of June 2020. The three most common roles at institutions include an Indigenous Education Advisor, an Indigenous Advisory Committee, and a Community Engagement Facilitator. It is of interest to note, that the University of Victoria has nine of the nineteen identified roles.

Conclusions

The task of dismantling systems of oppression and shifting the narrative to create transformative change is enormous but not impossible. Indigenization in post-secondary institutions should ultimately serve to remove stigma and get rid of prejudice. It should serve to create more inclusive learning environments where Indigenous students feel welcome and respected. At an institutional level, efforts can be made to ensure that students learn about the people and land where they live and learn.



The science courses assessed for change in transfer agreement showed no changes in those agreements since inception of the courses (Appendix A). Although some courses are quite new, there are many that have had transfer agreements in place for many years with no apparent changes. Without knowing when these courses were Indigenized and if course content changed substantially enough to appear in the course outlines it is impossible to make any conclusions about how Indigenizing the course might have affected transfer agreements. In addition, the sample size is far too small to make any conclusive statements. As more science courses get Indigenized, it would be useful to compare course outlines before and after Indigenization and then evaluate changes in transfer agreements if changes are reflected in course outlines.

Although a common goal among all institutions is the Indigenization of courses and curriculum, there are a few action items that may apply to science courses in the University Sciences Department at the College of the Rockies. These examples are not meant to be comprehensive and do not suggest that they are specific to sciences nor are they intended to suggest implementation within the University Sciences Department. A few of these action items are mentioned as examples.

- 1. UBC has at least one course in every program that will include substantial Indigenous content and address how the field of study interconnects with Indigenous issues.12
- 2. SFU has an action item to develop distributed learning and/or blended delivery courses and programs, as well as, distance education courseware, modules, and materials that can be used in Aboriginal communities and for other community-based delivery programs.13
- 3. A module has been included in a First-year Breadth Science Course at SFU called Decolonizing the Scientific Method.
- 4. Camosun College identifies courses that include Indigenous content so students can easily determine if they can expect to experience Indigenous content and/or pedagogy within the course.16
- 5. TRU has a plan to increase Aboriginal student participation in study abroad through cohort models, in the contexts of Aboriginal field schools, and research, particularly in the context of international Aboriginal partnerships.18
- 6. Coast Mountain College, SFU, and UVic all offer courses with an Ethnoscience focus such as, Ethnoecology from Uvic, Ethnobotany from SFU, and Ethnogeography of Northwest BC from Coast Mountain College.

The goal of Indigenization should be to help students and educators understand and appreciate two different knowledge systems, not to replace one with another or try to merge two systems. Indigenization of curriculum will take time and it will require educators to be open, to take risks and to be vulnerable. It will also for most educators mean overcoming resistance to change and accepting that they will make mistakes. The Guide for



Curriculum Developers speaks to this issue, acknowledging that this process makes people feel uncomfortable and worried about making mistakes; people do not want to appear disrespectful or racist. As educators we can acknowledge that we will make mistakes and that we can learn from those mistakes. In fact, because learning from mistakes involves experiential learning and self-development, it is a common aspect of Indigenous pedagogy1. Focussing on how the learning experiences that Indigenous knowledge and partners bring can benefit our students and may make taking these risks easier. Taking no action only perpetuates the exclusion and disregard for Indigenous knowledge.

Acknowledgement

This project was funded by the College of the Rockies Research Office.



References

1 Antoine, A., Mason, R., Mason, R., Palahicky, S. & Rodriguez de France, C. (2018). Pulling Together: A Guide for Curriculum Developers. Victoria, BC: BCcampus. Retrieved from https://opentextbc.ca/indigenizationcurriculumdevelopers/

2 United Nations. (2011). United Nations Declaration on the Rights of Indigenous Peoples. Retrieved from https://undocs.org/A/RES/61/295

3 Indigenous Peoples at the United Nations (Department of Economic and Social Affairs/Indigenous Peoples, n.d.) https://www.un.org/development/desa/indigenouspeoples/about-us.html

4 Truth and Reconciliation Commission of Canada. (2015). Final report of the Truth and Reconciliation Commission of Canada: Summary: honouring the truth, reconciling for the future. Winnipeg: Truth and Reconciliation Commission of Canada. Retrieved from http://nctr.ca/assets/reports/Final%20Reports/Executive Summary English Web.pdf

5 Truth and Reconciliation Commission of Canada. (2015). Final report of the Truth and Reconciliation Commission of Canada: Calls to Action. Winnipeg: Truth and Reconciliation Commission of Canada. Retrieved from http://nctr.ca/assets/reports/Calls_to_Action_English2.pdf

6 Ministry of Advanced Education, Skills and Aboriginal Post-Secondary Education and Training (2007). Aboriginal Post-Secondary Education Strategy and Action Plan. Retrieved from https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/aboriginal-education-training/strategy.pdf

7 The First Nations Summit (2005). The New Relationship. Retrieved from http://fns.bc.ca/wp-content/uploads/2005/08/New_Relationship.pdf

8 The First Nations Summit (2005). The Transformative Change Accord (2005) Retrieved from https://www.fnha.ca/Documents/transformative_change_accord.pdf

9 Ministry of Advanced Education, Skills and Aboriginal Post-Secondary Education and Training (2012) Policy Framework and Action Plan 2020 Vision for the Future Retrieved from https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/aboriginal-education-training/aboriginal_action_plan.pdf

10 Ministry of Advanced Education, Skills and Aboriginal Post-Secondary Education and Training (2018) Aboriginal Learners in British Columbia's Public Post-Secondary System. Retrieved from https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/aboriginal-education-training/aboriginallearnerdatareport-june2018.pdf



11 Colleges and Institutes of Canada. Indigenous Education. https://www.collegesinstitutes.ca/policyfocus/indigenous-learners/

12 University of British Columbia (2018) UBC Indigenous Strategic Plan 2020 (DRAFT). Retrieved from https://aboriginal-2018.sites.olt.ubc.ca/files/2020/05/UBC.ISP_C2V10.2_Spreads-DRAFT.pdf

13 Simon Fraser University, Office for Aboriginal Peoples (2013). Aboriginal Strategic Plan 2013-2018 Retrieved from https://www.sfu.ca/content/dam/sfu/aboriginalpeoples/127303--Office_for_Aborigin-Jan27-Singlepages-V2.pdf

14 Simon Fraser University (2017) Walk This Path with Us. Retrieved from https://www.sfu.ca/content/dam/sfu/reconciliation/SFU-ARC%20Walk%20This%20Path%20With%20Us Full%20Report Sept5.pdf

15 Simon Fraser University (2019) Reconciliation at SFU 2018-2019 Retrieved from https://www.sfu.ca/content/dam/sfu/reconciliation/SFU%20Reconciliation%20Report%202018%202019.pdf

16 Camosun College (2013) Inspiring Relationships Indigenization Plan. Retrieved from http://camosun.ca/learn/school/indigenous-education-community-connections/about/publications/indigenization-plan13.pdf

17 Selkirk College (2019). Our Journey Together: Land, Life, Learning Indigenization Plan 2019 – 2024. Retrieved from https://selkirk.ca/sites/default/files/Indigenous%20Services/SC-Indigenization-StratPlan-Brochure-Spreads-compressed.pdf

18 Thompson Rivers University. Indigenous TRU The Coyote Project https://www.tru.ca/indigenous/coyote.html

19 University of Victoria (2015) Indigenous Plan 2017-2022. Retrieved From https://www.uvic.ca/assets2012/docs/indigenous-plan.pdf

20 Douglas College (2019) Douglas College Indigenization Strategy (DRAFT). Retrieved from https://www.douglascollege.ca/about-douglas/indigenization

21 Kwantlen Polytechnic University, Office of the Provost & Vice President, Academic. https://www.kpu.ca/vp-academic/academic-plan-2023/indigenous-participation

22 Okanagan College

https://www.okanagan.bc.ca/Campus_and_Community/employees/publicaffairs/Okanagan_College_Indigenization.html

23 Coast Mountain College. The Aboriginal, Course, Program Articulation Committee (ACPAC)

https://www.coastmountaincollege.ca/about-cmtn/education-council/acpac



24 North Island College (2017). Aboriginal Education Aboriginal Services Plan 2017/18 – 2019/20. Retrieved from https://www.nic.bc.ca/pdf/aboriginal-service-plan-2017-18.pdf

25 University College of the Fraser Valley (2007). Indigenizing Our Academy: Strategic Planning Indigenous Post-Secondary Education at UFV. Retrieved from https://www.ufv.ca/media/assets/indigenous-affairs-office/Indigenizing-our-academy.pdf

26 University College of the Fraser Valley (2019) Lálém ye mestíyexw: Re-envisioning a Structure for Indigenization University of the Fraser Valley. Retrieved from https://www.ufv.ca/media/assets/indigenous-affairs-office/Lalem-ye-mestyexw-Consultation-Feb-2019.pdf

27 Vancouver Community College (2018) Aboriginal Services Plan (ASP) 2018/19-2020/21. Retrieved from https://www.vcc.ca/media/vancouver-community-college/content-assets/documents/reports-publications/VCC-ASP-2018-2021_09February2018FINALTP2-updated.pdf

28 Yukon University. Core Competency. https://www.yukonu.ca/yukon-first-nations-core-competency

29 Wenning, CJ. (2009) Scientific epistemology: How scientists know what they know. Journal of Physics Teacher Online. 5(2): 3-15.

30 BC Campus Indigenization Project Indigenization Guides Retrieved from https://bccampus.ca/projects/indigenization/indigenization-guides/

Faculty Resources to Support Curriculum Indigenization

Antoine, A., Mason, R., Mason, R., Palahicky, S. & Rodriguez de France, C. (2018). Pulling Together: A Guide for Curriculum Developers. Victoria, BC: BC campus. Retrieved from https://opentextbc.ca/indigenizationcurriculumdevelopers/

BC Campus Indigenization Project Indigenization Guides Retrieved from https://bccampus.ca/projects/indigenization/indigenization-guides/

BC Campus Indigenization Project http://solr.bccampus.ca:8001/bcc/file/10adda4b-9d4a-4625-b583-aacb36b732d8/1/BCcampusIndigenizationSummary.pdf

Selkirk College.

https://my.selkirk.ca/media/myselkirkca/myselkirkforstaff/departments/aboriginalservicesthegatheringplace/Recommended-Resources-for-Specific-Schools.pdf



Appendix A – Indigenized Science Courses

Courses in Biology and related disciplines that have been identified to have Indigenous content. Remarkably there are very few courses in these disciplines that have been identified by the 22 institutions examined. Transfer agreements have not been affected in any of the courses listed below.

Table 1: Biology or related courses are shown in blue print. Other science courses are shown in green print and Arts course that cover topics in the study of the natural world using Indigenous epistemologies are shown in purple print.

Institution	Indigenized Courses With No Changes in Transfer Agreements
Camosun	GEOG 102 Human Geography
	GEOG 104 Geography of Canada
	GEOG 105 Geography of British Columbia
	GEOG 232 Cultural Geography
CMC	ACE 134 Fishes of the Pacific Northwest Rearing
	GEOG 222 Economic Geography
	GEOG 227 Ethnogeography of Northwest BC
	Rainforests and Coastal communities (field course)
Langara	ABST 1207 Aboriginal Traditional Knowledge and Contemporary Science
NLC	BIOL127_Botany Basics
	WATR 250 - Introduction to Freshwater Resources
	LAND 227 - Wildlife Habitat Conservation
	FRST 225 - Forest Ecology
TRU	GEOG 2230 The Regional Geography of British Columbia and Yukon
Uvic	ES 200: Introduction to Environmental Studies
	GEOG 101A: Environment, Society and Sustainability
	ES 321: Ethnoecology
	ES 421: Ethnobotany: Plants and Human Cultures
	ES 423: Traditional Systems of Land and Resource Management
	GEOG 353: Coastal and Marine Resources
	GEOG 355: Costal Communities
TOTAL COURSES	21

Table 2: Biology or related courses are shown in blue print. Other science courses are shown in green print and Arts course that cover topics in the study of the natural world using Indigenous epistemologies are shown in purple print. Note that most courses without existing transfer agreements are within the disciplines of Indigenous Studies or First Nations Studies.

Institution	Indigenized Courses Without Existing Transfer Agreements
SFU	INDG 232 - Introduction to Ethnoecology in Indigenous Studies
	INDG 332 - Ethnobotany of British Columbia First Nations
	INDG 333 - Ethnozoology of British Columbia First Nations
UBCO	INDG 307 (3) Traditional Ecological Knowledge
UVIC	GEOG 304: Coastal Conservation
TOTAL COURSES	5



Appendix B – List of Courses Identified by Twenty-Two BC Institutions to Include Indigenous Content

Table 3. Programs and courses promoted on institutional websites to have Indigenous content. This is not a complete list. Some institutions only publish a list of sample courses, and some institutions do not list courses specific courses. Institutions in orange print have Aboriginal Services Plans (Appendix D). Courses in blue print are biology (or related) courses. In green print are non-biology science courses, general Arts & Humanities courses are shown in orange text, and Arts courses that cover the study of the natural world using Indigenous epistemologies are shown in purple text.

Institution	Programs	Courses
Camosun	Designed especially for indigenous	Anthropology
College	learners	ANTH 104 Introduction to Anthropology
	Archaeological field assistant	ANTH 140 Prehistory of Pacific Cultures
	(certificate),	ANTH 220 Cultural & Social Anthropology
	Health Care Assistant – Indigenous	ANTH 232 Language/Culture/Communication
	(Certificate) Indigenous Family	ANTH 240 Archaeological Method & Theory
	Support (Certificate)	ANTH 241 Prehistory of British Columbia
	 Indigenous Studies (Diploma) 	Art
	Indigenous Academic Upgrading	ART 106 Indigenous Studio Arts
	Indigenous College Prep or	ART 150 Cultural Uses of Photography
	Indigenous Human Services Career	ART 190 Independent Studies
	Access (Certificate)	Criminal Justice
	Access (certificate)	CRIM 188 Issues in Criminal Justice
		CRIM 236 Indigenous People and Justice
		English
		English 091 Indigenous Prov English Composition & Literature 1
		English 093 Indigenous Prov English Composition & Literature 2
		ENGL 096 Provincial Indigenous Literature
		ENGL 164 Indigenous Literature
		Environmental Technology
		ENVR 290 Independent Studies
		Geography
		GEOG 102 Human Geography
		GEOG 104 Geography of Canada
		GEOG 105 Geography of British Columbia
		GEOG 232 Cultural Geography
		History
		HIST 110 Canada Before Confederation
		HIST 112 Canada After Confederation
		HIST 214 BC History
		HIST 230 United States History to 1865
		HIST 250 History of Human Rights
		Health
		HLTH 111 Indigenous Peoples' Health
		Indigenous Studies
		HLTH 111 Indigenous Peoples' Health
		IST 104 Indigenous Ways Knowing
		IST 116 Indigenous Studies in Canada 1
		IST 117 Indigenous Studies in Canada 2
		IST 120 Introduction to Indigenous Peoples
		IST 136 Indigenous Justice & Law
		IST 142 Land & Stewardship
		IST 205 Indigenous Introduction to Social Work
		IST 206 Indigenous Social Welfare
		IST 220 Indigenous Art Studies
		IST 230 Community Engagement & Action
		131 230 Community Engagement & Action



	IST 234 Language and Land
	IST 241 Gender & Identity
	IST 243 Comparative Indigenous Issues
	IST 250 QĆÁSET Indigenous Cultural Camp
	Political Science
	PSC 208 Local Government and Politics
	PSC 220 Comparative Politics
	Psychology
	PSYC 203 Social Psychology
	PSYC 257 Intercultural Communication
	PSYC 288 Cultural Psychology
	PSYC 290 Independent Studies
	Sociology
	SOC 104 Indigenous People and Canada 1
	SOC 106 Indigenous People and Canada 2
	SOC 110 Women in Canadian Society
	SOC 112 Minority Relations in Canada
	SOC 160 Family and Community
	SOC 210 Class, Status, and Power
	SOC 230 Indigenous Research Methodology
	Social Work
	IST 205 Indigenous Introduction to Social Work
	IST 206 Indigenous Social Welfare
- "	SOCW 212 Social Welfare in Canada
Capilano	Indigenous Independent Digital Aboriginal Studies
University	Filmmaking Diploma ABST 098 Foundations in Quantitative Reasoning
	• Lil'wat Nation Language & Culture ABST 099 Foundations in Critical Reflection Title Nation ABST 099 Foundations in Critical Reflection
	Certificate First Nation
	Sechelt Nation Language and Culture FNST 100 The Squamish People and Language FNST 101 Squamish People and Language FNST 101 Squamish People and Language
	Certificate FNST 101 Squamish People and Language II
	Squamish Nation Language and Culture Certificate FNST 102 Lil'wat People and Language I FNST 103 Lil'wat People and Language I
	FAICT 404 The Cookell Decole and Learning
	ENICT 10F The Cook of Persons and Learning 1
	Learners (college prep certificate) First Nation Language First Nation Language
	FNLG 100 The Squamish Language I
	FNLG 101 The Squamish Language II (Skwxwu7mesh Snichim II)
	FNLG 102 The Lil'wat Language I (Ucwalmícwts I)
	FNLG 103 The Lil'wat Language II (Ucwalmicwts II)
	FNLG 104 The Lil'wat Language III (Ucwalmicwts III)
	FNLG 105 The Lil'wat Language IV (Ucwalmícwts IV)
	FNLG 106 The Squamish Language III (Skwxwu7mesh Snichim III)
	FNLG 107 The Squamish Language IV (Skwxwu7mesh Snichim IV)
	FNLG 108 The Sechelt Language I (Sháshíshálhem I)
	FNLG 109 The Sechelt Language II (Sháshíshálhem II)
	FNLG 110 The Sechelt Language III (Sháshíshálhem III)
	FNLG 111 The Sechelt Language IV (Sháshíshálhem IV)
	Indigenous Digital Film Making
	IDF 103 Production Design I
	IDF 109 Production Planning
	IDF 110 Production Project #1
	IDF 119 Professional Development I
	IDF 120 Indigenous Cinema Studies
	IDF 126 Introduction to Screenwriting
	IDF 127 Introductory Documentary
	IDF 128 Production Management
	IDF 136 Production/Post Production
	IDF 137 Narrative Production
	IDF 139 Technical Foundations
	IDF 142 Technical Directing
	IDF 207 Technical Motion Picture Arts
	IDF 208 Line Producting and Production Management



	IDF 209 Advanced Digital Editing
	IDF 213 Production Design II
	IDF 217 Sound Design for Film and Video
	IDF 233 Screenwriting
	IDF 235 Indigenous World Cinema
	IDF 239 Advanced Technical Foundations
	IDF 240 Advanced Technical Directing
	IDF 243 Production Development
	IDF 250 Advanced Production Project
	Indigenous Studies
	IDST 110 Aboriginal Culture, the Lands and Personal Connection
	IDST 120 Aboriginal Land and Resource Stewardship
	Interdisciplinary Studies
	INTS 345 Reconciliation in Action
Coast Mountain	Freda Diesing School of Northwest Applied Coastal Ecology
College	Coast Art - First Nations Fine Arts
	Certificate, Diploma and Advanced Anthropology
	Diploma ANTH 102 Intro Social and Cultural Anthropology
	ANTILI 111 First Notions of Conada
	This Nations Specialization - Associate
	ANTH 202 Indigenous Cultures in Transition
	Early Childhood Care & Education ANTH 202 Northern Nations of the Northwest Coast
	(FCCF)Dinloma
	ANTH 205 Atchaeology of Northern British Columbia
	ANTH 208 The Indigenous Arts of North America, Oceania and Africa
	ANTH 209 The Art of North American First Nations
	ANTH 212 Cultural Resource Management
	ANTH 215 Archaeology of the Americas
	ANTH 270 Traditional Knowledge in Practice
	Art History
	ARTH 101 First Nations Art Pacific NWI
	ARTH 108 First Nations Art Pacific II
	ARTH 201 Contemporary First Nations Art of the Northwest Coast
	ARTH 210 Northwest Coast Art Museum and Gallery Studies
	Criminology
	CRIM 213 Women and Crime (covers the issue of missing and
	murdered Indigenous women and girls)
	Early Childhood Care & Education
	All ECCE courses are experiential in design. They include work with
	Indigenous children and families, provide relationship building
	opportunities between Indigenous and non-Indigenous students and
	include visits with Elders from local communities.
	English
	ENGL 207 Introduction to First Nations' Literature in Canada
	Ethics
	ETHC 150 Business Ethics
	First Nations Studies
	FNST 050 Provincial First Nations Studies
	FNST 101 Introduction to First Nations Studies
	FNST 110 Ethnobotany: Plants & First People
	FNST 120 Aboriginal Languages: Preservation and Revitalization
	FNST 200 Aboriginal Community Research
	FNST 210 Aboriginal Health: Community Wellness and Healing
	Geography
	GEOG 222 Economic Geography
	GEOG 227 Ethnogeography of Northwest BC
	History
	HIST 105 Canada to the Mid-19th Century
	HIST 106 Canada Since Mid-19th Century
	HIST 209 A History of Native People of Canada
	HIST 210 History of Western Canada
	Marketing
	MARK 250 Social Media Marketing



		Math	
		MATH 023 Fundamental Math 023	
		MATH 024 Fundamental Math 024	
		MATH 026 Fundamental Math 026	
		Management	
		MGMT - Management	
		MGMT 257 Recruitment and Selection	
		MGMT 258 Organizational Training and Development	
		Nursing	
		NURS 205 Intro to First Nations Health	
		Public Administration	
		PADM 200 Local Government Administration in BC	
		· ·	
		Special Education Assistant	
		SEA 115 Understanding Family Dynamics	
		Social Science	
		SOSC 040 Social Science - Advanced	
		Women's Studies	
		WMST 101 History of Women in Canada	
		WMST 102 Introduction to Women's Studies	
		WMST 203 Women's Health Issues in Canada	
		Field courses with Indigenous Focus	
		Relationships and Language: Truth and Reconciliation in North Western BC	
		Haida Gwaii: First Nations Culture and Language	
		People of the Skeena	
		Sense of Place: Gitga'at Territory Seaweed Camp	
		Stewart/Telegraph Creek	
		Rainforests and Coastal communities	
College of New	 Associate of Arts – Aboriginal Studies 	Aboriginal Studies	
Caledonia	Concentration	ABST 100 Yinka Dene Worldview	
	Aboriginal Studies – Certificate	ABST 101 Aboriginal Peoples of Canada	
	Aboriginal Studies	ABST 110 Metis Studies	
	Access Programs	ABST 111 Metis Study II -Artt Mat & Cult	
	7.65655 7.587.4.115	ABST 150 Conversational Carrier	
		ABST 202 History of Ab Ed in North BC	
		Anthropology	
		ANTH 101 Intro to Socio-Cultural Anthro	
		ANTH 102 Physical Anthro & Archaeology	
		English	
		-	
		ENGL 103 Composition & Style	
		ENGL 107 Aboriginal Literature	
		History	
		HIST 103 – History of Canada to 1867	
		This is instally of canada to ison	
		That 103 Thatory of Canada to 1007	
Douglas College	None Identified	None Identified	
Douglas College Kwantlen	None Identified Indigenous Community Justice		
		None Identified	
Kwantlen Polytechnic		None Identified	
Kwantlen Polytechnic University	Indigenous Community Justice	None Identified None specifically identified	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program	None Identified None specifically identified Aboriginal Studies	
Kwantlen Polytechnic	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I ABST 1106 Aboriginal Studies Seminar II	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I ABST 1106 Aboriginal Studies Seminar II	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I ABST 1106 Aboriginal Studies Seminar II ABST 1107 Aboriginal Studies Seminar III	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I ABST 1106 Aboriginal Studies Seminar II ABST 1107 Aboriginal Studies Seminar III ABST 1108 Aboriginal Studies Seminar IV	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I ABST 1106 Aboriginal Studies Seminar II ABST 1107 Aboriginal Studies Seminar III ABST 1108 Aboriginal Studies Seminar IV ABST 1115 Aboriginal Contemporary Issues ABST 1116 Aboriginal Women in Canada	
Kwantlen Polytechnic University	Indigenous Community Justice Indigenous Upgrading Program Aboriginal Studies	None Identified None specifically identified Aboriginal Studies ABST 1100 Canadian Aboriginal Experience ABST 1102 Aboriginal Culture, Identity and Community ABST 1104 Canadian Aboriginal Policy ABST 1105 Aboriginal Studies Seminar I ABST 1106 Aboriginal Studies Seminar II ABST 1107 Aboriginal Studies Seminar III ABST 1108 Aboriginal Studies Seminar IV ABST 1115 Aboriginal Contemporary Issues	



		ABST 1207 Aboriginal Traditional Knowledge and	
		Contemporary Science	
		ABST 2100 Aboriginal Community - Applied Research	
		ABST 2101 Aboriginal Community - Directed Readings	
		ABST 2120 Canadian Aboriginal Law	
		ABST 2202 Haida Gwaii: Land, People, and Culture	
		· ·	
		ABST 2230 Aboriginal Community Development	
		ABST 2240 Urban Aboriginal Strategies	
North Island	Aboriginal Leadership certificate	First Nations Studies	
College	 Human Services Certificate, 	Kwak'wala	
	Educational Assistant community	Nuu-chah-nulth	
	support – Indigenous Focus	Essay writing & indigenous perspectives	
	BSN	Indigenous Literatures in Canada	
	Metal jewellery design certificate		
	Aboriginal Scholars		
	Extensive research program		
Nauthaus Liabta		HIGH/101 later direction to Historia Compiler Words	
Northern Lights	Aboriginal Early Care and Leaning	IHSW101 Introduction to Human Service Work	
College	Certificate	IHSW102The Indigenous Family and Parenting	
	Indigenous Human Service Worker	IHSW103 Indigenous Wellness and Healthy Practices	
	Certificate	IHSW104 Social and Health Issues in Indigenous Communities	
		IHSW105 Community Helping Project	
		HIST220 History of Childhood in Canada: Indigenous and Settler	
		Children, Then and Now	
		BIOL127_Botany Basics	
		WATR 250 - Introduction to Freshwater Resources	
		LAND 227 - Wildlife Habitat Conservation	
		FRST 225 - Forest Ecology	
		ARCH 200 - Introduction to Archaeology and World Prehistory	
		ANTH 202 - Ethnography of Canada's First Nations Peoples	
		ANTH 202 - Ethnography of Canada's First Nation's Peoples ANTH 203 - Contemporary Canadian Native Peoples	
		· · ·	
		PNUR 112 - Health Promotion 1	
		FRPC 302 - Understanding Family Diversity	
		PNUR 114 - Pharmacology 1	
		PNUR 124 - Pharmacology 2	
		PNUR 230 - Professional Communication 3	
		HSCI 100 Introduction to Health Sciences	
		SOWK 200 - Introduction to Social Work Practice	
		SSWD 120 - Ethics and Practice	
Okanagan	Indigenous Studies	INDG 100 Introduction to Indigenous Studies	
College	Early Childhood Education	INDG 201 Okanagan Indigenous Peoples' History	
	Culinary Arts Certificate Program	INDG 202 Okanagan Concepts and Frameworks	
	Culliary Arts Certificate Program	INDG 203 Indigenous Historical Perspectives	
		INDG 204 Indigenous Concepts and Frameworks	
Calleigh Callaga	Carial Carrian Ward an	-	
Selkirk College	Social Service Worker	Indigenous 100	
		CWRT 100 Creative Writing 100	
Simon Fraser	Indigenous Studies certificate and diplomas	Numerous courses in:	
University	Indigenous Studies language program	Faculty of Arts and Social Sciences	
	Indigenous Studies Education Programs	The School of Criminology, Dept of English, Indigenous Studies Program	
	Executive MBA in Aboriginal Business	Depts of Gender, Sexuality and Women's Studies, Sept of History, Dept	
	and Leadership Program	of Linguistics, Dept of Political Science, Graduate School of Public Policy	
		Deps of Sociology and Anthropology, World Literature	
		Sample Courses:	
		INDG 101 - Introduction to Indigenous Studies	
		INDG 201W - Canadian Aboriginal Peoples' Perspectives on History	
		ARCH 273 - Archaeology of the New World	
		INDG 110W - International Indigenous Lifewriting	
		INDG 111 - Introduction to Participatory Indigenous Research Methods	
		INDG 186 - Coast Salish Studies	
	The state of the s	INDG 212 - Indigenous Perceptions of Landscape	
		man de alla mangement de alla management	
		INDG 222 - Selected Topics in Indigenous Studies	



		INDG 286 - Indigenous Peoples and British Columbia: An Introduction
		INDG 301 - Issues in Applied Indigenous Studies Research
		INDG 401 - Aboriginal Peoples and Public Policy
		INDG 402W - The Discourse of Aboriginal Peoples
		INDG 403 - Indigenous Knowledge in the Modern World
		EDUC 311 - Foundations in Aboriginal Education, Language, and Culture
		ENGL 453W - Aboriginal Literatures
		INDG 322 - Special Topics in Indigenous Studies
		INDG 325 - History of Aboriginal Peoples of North America to 1850
		HIST 325 - History of Aboriginal Peoples of North America to 1850
		INDG 326 - History of Aboriginal Peoples of North America Since 1850
		HIST 326 - History of Aboriginal Peoples of North America Since 1850
		INDG 327 - Aboriginal Women in Canada GSWS 327 - Aboriginal Women in Canada
		INDG 329 - Sexuality and Gender: Indigenous Perspectives
		INDG 332 - Ethnobotany of British Columbia First Nations
		INDG 333 - Ethnozoology of British Columbia First Nations
		INDG 353W - First Nations Heritage Stewardship
		INDG 360 - Popular Writing by Indigenous Authors
		ENGL 360 - Popular Writing by Indigenous Authors
		INDG 363 - Indigenous Poetry, Poetics, Printmaking
		INDG 376 - Indigenous Weaving Technologies: Community of Beings
		INDG 383 - Indigenous Technology: Art and Sustainability
		INDG 419 - Aboriginal/Indigenous Justice
		CRIM 419 - Aboriginal/Indigenous Justice
		INDG 429 - Indigenous Peoples and International Law
		CRIM 429 - Indigenous Peoples and International Law
		INDG 433 - Indigenous Environmental Justice and Activism
		INDG 442 - Directed Readings in Indigenous Studies
		INDG 443W - Aboriginal Peoples, History and the Law
		HIST 443W - Aboriginal Peoples, History and the Law
		INDG 447 - Directed Studies in Indigenous Studies
		INDG 462 - Indigenous Oral Testimony: Theory, Practice, Purpose,
		Community
		SA 388 - Comparative Studies of Minority Indigenous Peoples
		Faculty of Business – Beedie School of Business
		Faculty of Communication, Art and Technology Faculty of Education - Courses through
		Office of Indigenous Education
		Med Indigenous Education
		Faculty of Environment
		REM 207 Indigenous Peoples and Resource Management
		Faculty of Health Sciences
		HSCI 406 Global Perspectives in Indigenous Health
		HSCI 842 Indigenous Health in Canada
		Faculty of Science
		Lifelong Learning
		Community Education Programs, Aboriginal Pre-University Bridge
		Program, Community Education Program, Certificate in Dialogue and
		Civic Engagement
Thompson	Nursing (BSN)	ARCH 1190 Introduction to Archaeology
Rivers University	Business	ANTH 1210 Introduction to Cultural Anthropology
	Certificate Programs	ANTH 2140 Canadian Native Peoples
	Aboriginal Studies Certificate	ARCH 2190 Ancient North Americans
	First Nation Taxation Administration	ARCH 2230 Native Peoples and Cultures of British Columbia
	First Nations Applied Economics	ENGL 2410 Native Canadian Literature
	First Nations Applied Land Management	GEOG 2230 The Regional Geography of British Columbia and Yukon
		HIST 2020 History of the Native Peoples of Canada
		POLI 1110 The Government and Politics of Canada
		L COCLODAD Developed File de Delettere
		SOCI 2010 Race and Ethnic Relations
		TMGT 1020 Cultural Heritage and Nature Interpretation ARCH 3060 Summer Field Training in Archaeology



Trinity Western University University of British Columbia (O)	Institute of Indigenous Issues and Perspectives (Canada/Australia/New Zealand) – Research Institute Indigenous Studies	ANTH 3270 First Nations Natural Resource Management ANTH 4010 Native Peoples of North America ANTH 4040 Peoples and Cultures of the North American Arctic ANTH 4050 Canadian Status/Treaty Indian Reserve Communities ARCH 4060 Cultural Resource Management ARCH 4110 Prehistory of a Special Area in the New World ARCH 4200 Archaeology of British Columbia EDUC 442 Pedagogy of First Nations Education ENGL 4460 Studies in Commonwealth/Postcolonial Literature ENGL 4470 Studies in Aboriginal Literature (North American) POLI 4060 Topics in Latin American Politics SOCW 3540 An Introduction to First Nations Issues and Human Services None Listed INDG 100 (3) Introduction to Decolonization: Indigenous Studies INDG 101 (3) Okanagan Indigenous Peoples' Historical Perspectives INDG 202 (3) Okanagan Concepts and Frameworks
		INDG 203 (3) Indigenous Peoples' Historical Perspectives INDG 210 (3) Indigenous Peoples of the Americas INDG 295 (3/6) d Indigenous Studies: Special Topics INDG 301 (3) Examining an Indigenous Methodology: En'owkinwixw INDG 302 (3) Indigenous Governance INDG 303 (3) Indigenous Studies Theory and Methodology INDG 304 (3) Indigenous Studies Field Methods INDG 305 (3) Indigenous Justice INDG 306 (3) Indigenous Land Rights INDG 307 (3) Traditional Ecological Knowledge NDG 308 (3) Indigenous Culture, Heritage, and Intellectual Property INDG 309 (3) Indigenous Perspectives on Health INDG 310 (3) Indigenous Women's Perspectives: Gender, Nation, State, Resistance INDG 401 (3) Research Applications INDG 404 (3) Indigenous Peoples United Nations and Global Issues INDG 405 (3) Indigenous Education: History and Revitalization INDG 420 (3) Indigenous Perspectives on Food, Place, Identity, and Biodiversity INDG 440 (3) Residential Schools and Reconciliation INDG 450 (3) Indigenous Women, Activisms, Feminisms INDG 481 (3) Directed Studies: Readings in Indigenous Studies INDG 495 (3/12) d Advanced Topics in Indigenous Studies
University of British Columbia (V)	Indigenous Units: Centre for Excellence in Indigenous Health - Aboriginal Health and Community Administration Program - Indigenous Public Health Training - Indigenous Cultural Safety CTLT Indigenous Initiatives - Centre for Teaching Learning and Technology Indian Residential School History and Dialogue Centre Indigenous Research Support Initiative Indigenization Program Institute for Critical Indigenous Studies - First Nations & Indigenous Studies	Too many to list but easily accessible through the Indigenous Portal



	- First Nations & Endangered Languages Program First Nations House of Learning xwćićasəm Health Research and Education Garden Xwi7xwa Library	
University of the Fraser Valley	Degree: BA Indigennous Studies Diploma: Aboriginal Culture and Language Support Social Services (First Nations option) Certificate: Halq'eméylem — Intermediate Proficiency certificate Indigenous Maps, Films, Rights, and Land Claims Stó:lō Studies Other: Indigenous academic success cohort	32 courses with Indigenous content (no science courses) HALQ 101 Halq'eméylem Language I HALQ 102 Halq'eméylem Language II HALQ 201 Intermediate Halq'eméylem I HALQ 202 Intermediate Halq'eméylem II IPK 100 Learn Today, Lead Tomorrow IPK 102 Introduction to Indigenous Studies IPK 202 Introduction to Indigenous Resurgence IPK 277 Indigenous Art: Stories and Protocols FNST 102 Stó:Iő Traditional Ways of Healing and Helping FNST 201 Stó:Iő Communications and World View FNST 202 Stó:Iő Social Structure IPK 344/ ANTH 344/ SOC 344 Indigenous Research Methodologies IPK 386 Indigenous Worldviews of Turtle Island IPK 403 Indigenous Studies Capstone IPK 404 Directed Studies in Indigenous Studies IPK 402 Indigenous Studies Field Work Practicum
University of Northern British Columbia	Certificate programs Aboriginal Community Resource Planning Aboriginal / Indigenous Health and Healing First Nations Language First Nations Public Administration General First Nations Studies Métis Studies Nisga'a Studies Traditional Ecological Knowledge BA, MA and PhD in First Nations studies	236 courses featuring aboriginal content – not listed
University of Victoria	Active Research Program Child & &Youth Care – Indigenous Initiatives Foundations in Indigenous Fine Arts Indigenous Communities Counselling Psychology Indigenous Community Development and Governance Indigenous Governance Indigenous Language Revitalization Indigenous Nationhood Indigenous Studies Joint Degree Program in Canadian Common Law ad Indigenous Legal Orders Social Work (Indigenous Specialization)	Core Indigenous Studies Courses: IS 101: Indigenous Foundations IS 201: Introduction to Indigenous Studies IS 301: Critical Indigenous Theory IS 310A: LE,NONET Preparation Seminar IS 310B: Indigenous Studies Preparation Seminar IS 320: LE,NONET Research Apprenticeship IS 321: LE,NONET Community Internship IS 350: Methods, Ethics, Protocols IS 391A: Topics in Arts, Literatures and Languages IS 391B: Topics in Histories, Politics, Laws and Lands IS 391C: Topics in Indigenous Education, Health and Healing IS 391D: Topics in Community and Land-Based Learning IS 400: Research Seminar in Indigenous Studies IS 450: Indigenous Studies in the Field IS 490: Directed Studies IS 491A: Seminar in Arts, Literatures and Languages IS 491B: Seminar in Education, Health and Healing IS 491C: Seminar in Education, Health and Healing IS 491D: Seminar in Community and Land-Based Learning Elective Courses: Lower Level ANTH 100: Introduction to Anthropology ECON 111: The Economy and the Environment ENGL 207: Introduction to Cultural Studies



ES 200: Introduction to Environmental Studies GEOG 101A: Environment, Society and Sustainability GDS 201: Introduction to Global Development Studies GNDR 100: Gender, Power and Difference GNDR 203: Indigenous Women in Canada HDCC 200: Introduction to Human Dimensions of Climate Change HSTR 120: History of Human Rights IS 291: Topics in Indigenous Studies LING 272: Introduction to Indigenous Languages of British Columbia PHIL 209: Philosophy and First Nations Thought PHIL 232: Moral Problems in Contemporary Society PHIL 236: Introduction to Social and Political Philosophy POLI101: Canadian Politics POLI 263: The Politics of Indigenous Peoples PSYC 192: Introduction to Positive Psychology PSYC 205: The Psychology of Diversity SJS 100: Introduction to Theories of Social Justice SJS 200: Introduction to the Practice of Social Justice Arts, Literatures and Languages AHVS 381A: Modernism and Modern Art: The Arts of the Pacific Northwest AHVS 381B: Contemporary Art: The Pacific Northwest AHVS 382A: Indigenous Arts: Arctic, Subarctic AHVS 382B: Indigenous Arts: Southwest, California, Great Basin AHVS 382C: Indigenous Arts: Plains, Plateau, Woodlands, Southeast AHVS 383: Special Topics in North American Indigenous Arts AHVS 383A: Arts and Indigenous Ways of Knowing AHVS 383B: Indigenous Arts and the Internet AHVS 384: Northwest Coast Indigenous Arts and Colonization AHVS 385A: Indigenous Fashion in the Pacific Northwest Coast AHVS 385B: Pacific Northwest Indigenous Arts and Exhibitions AHVS 480: Seminar in Contemporary North American Indigenous Arts AHVS 482: Seminar in Indigenous Arts AHVS 484: Seminar in Contemporary Art: The Pacific Northwest Coast GNDR 310: Indigenous Feminisms GNDR 340: Indigenous Cinema Decolonizing the Screen GNDR 341: Indigenous Women's Autobiographies GNDR 343: Indigenous Women Writing Resistance ENGL 476: Indigenous and Diasporic Literatures in Canada ENGL 477: Indigenous Literature in English IS 391A: Topics in Arts, Literature and Languages IS 491A: Seminar in Arts, Literature and Languages LING 372: Indigenous Languages of British Columbia LING 401: Salish LING 403: Dene (Athabaskan) LING 405: Wakashan SPAN 304: Indigenous Latin America, Social Justice, Environment Histories, Politics, Laws and Lands ANTH 336: Contemporary Aboriginal Peoples of Canada ANTH 338: Anthropology of the Indigenous Peoples of British Columbia ANTH 433: Coast Salish Culture and Contemporary Life ANTH 460: Ethnographic Mapping and Indigenous Cartographies ECON 423: Economics and Indigenous Peoples ES 321: Ethnoecology ES 421: Ethnobotany: Plants and Human Cultures ES 423: Traditional Systems of Land and Resource Management GEOG 304: Coastal Conservation GEOG 353: Coastal and Marine Resources **GEOG 355: Costal Communities** HSTR 328: Indigenous-Settler Relations in Canada HSTR 330C: Indigenous-Settler Treaties Since 1600

HSTR 427: Seminar in Indigenous History in Canada IGOV 381: Indigenous Leadership and Governance



		IGOV 382: Indigenous Resurgence IGOV 383: The Indigenous-State Relationship
		IGOV 384: Special Issues in Indigenous Governance
		IS 391B: Topics in Histories, Politics, Laws and Lands
		IS 491B: Seminar in Histories, Politics, Laws and Lands
		POLI 313C: Indigenous Politics and the U.S. Political System
		POLI 363: Indigenous Politics in Canada
		POLI 383: Global Indigenous Nationalisms
		POLI 463: U.S./Canadian Comparative Indigenous Law and Policy
		Education, Health and Healing
		CYC 330: Applied Practice inIndigenous Contexts
		CYC 360: All My Relations: Family Practice
		CYC430: Research Practice in Indigenous Contexts
		ED-D 419: Introduction to Indigenous Approaches to Healing and Helping
		HLTH 406: Indigenous Global Health
		IED 371: The History of Indigenous Education in Canada
		IED 372: Indigenous Epistemologies
		IED 374: Indigenous Pedagogies
		INGH 452: Traditional Healing in Indigenous Communities
		INGH 453: Wise Practices in Indigenous Community Health
		IS 391C: Topics in Education, Health and Healing
		IS 491C: Seminar in Education, Health and Healing
		SOCW 354: Indigenous Perspectives on Practice Issues
		SOCW 391: Indigenous Approaches to Healing and Helping
		SOCW 451: Indigenous Policy Analysis in Social Work
		SOCW 491: Integration of Indigenous Approaches to Healing and Helping
		SOCW 492: Protecting Indigenous Children
		Community and Land-Based Learning
		ANTH 380: Directed Experiential Learning in Anthropology
		ES 470: Advanced Field Study
		GEOG 453: Field Studies in Coastal and Marine Studies
		IED 473: CENENITEL TW TOLNEW: Helping Each Other to Learn
Vancouver	None Specifically listed	None Specifically Listed
Community	None specifically listed	None Specifically Listed
College		
Vancouver	Bachelor Degree	BA
Island University	•Indigenous/Xwulmuxw Studies (BA)	
isianu Omversity		INDG 101 - (Exploring Aboriginal Identities)
	Major, Minor Diploma	INDG 102 - (Exploring Aboriginal Communities)
	Child and Youth Care First Nations	INDG 203 - (Indigenous and Settler Relations)
		INDG 204 - (Indigenous Perspectives on the Environment)
	Diploma	INDG 303 - (Indigenous Families and Communities)
	Certificate	INDG 304 - (Indigenous Self-Determination)
	Professional Indigenous Lands	INDG 403 - (Project or B.A. Essay and Indigenous Research Methods)
	Management Certificate	INDG 404* - (Internship)
	Aboriginal Construction Apprenticeship	
	•Arts One - First Nations	VIU is fortunate to host a large number of Aboriginal students who are
	British Columbia First Nations Building	enrolled in a wide variety of programs and courses. As a team of
	Inspector	dedicated practitioners we work together to develop community-based
	Business Fundamentals for Aboriginal	education, support communities to increase and build capacity, create a
	Communities	sense of belonging for Aboriginal students on campus, support faculty in
	•Community Health Promotion for	bringing indigenous ways of knowing and being into their courses, and
	Aboriginal Communities	provide supports and services to Aboriginal students.
	•First Nations Housing Manager	
Vukon Hnivoroite	Institute of Indigenous Colf Determination	EN Cara Compatancy EN 101
Yukon University	Institute of Indigenous Self-Determination	FN Core Competency FN 101
	First Nations Core Competency	FN 101
	Programs that meet First Nations Core	This 1-day course is intended for anyone interested in learning more
	Competency	about Yukon First Nations and Self-Government. Develop a broader
	School of Liberal Arts	understanding and appreciation for the key moments in Yukon First
	Bachelor of Arts in Indigenous	Nations distant and recent past, in a day that includes interactive
	Governance	activities, discussions and presentations by staff in the Yukon First



•	Circumpol	ar Studies	Degree
---	-----------	------------	--------

- First Nations Governance and Public Administration Certificate
- General Studies Certificate
- Heritage and Culture Certificate
- Liberal Arts Certificate
- Liberal Arts Diploma
- Northern First Nations Studies Diploma
- Northern Justice and Criminology Diploma
- Northern Outdoor and Environmental Studies Diploma
- Northern Studies Diploma
- Women's and Gender Studies Certificate
- Women's and Gender Studies Diploma

School of Science

- Northern Environmental and Conservation Sciences Degree
- Northern Science (ENCS stream)
 Diploma
- Renewable Resource Management Diploma
- Northern Science Diploma
- Science Certificate

School of Health Education and Human Services

- Community Education and Employment Support
- Early Learning and Child Care Certificate
- Early Learning and Child Care Diploma
- Education Assistant Certificate
- Social Work degree

YNTEP Degree

Nations Initiative department at Yukon College. The instructors incorporate historical timelines, facts, personal stories, and activities for an engaging look at history and recent developments.



Appendix C - Provincial, National and International Initiatives Inform Institutional Indigenization Plans

Indigenization Plans in BC Colleges and Universities

Institutional Indigenization plans are informed by and reflect the strategic goals and initiatives of the Ministry of Advanced Education, the recommendations of Canada's Truth and Reconciliation Commission and the United Nations Declaration on the Rights of Indigenous Peoples.

United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (BC Gov signed on 2019)

The UN Declaration on the Rights of Indigenous Peoples2 is the most inclusive international instrument on the rights of Indigenous peoples, establishing a universal framework for the survival, dignity and well-being of Indigenous peoples. Canada initially voted against the Declaration when it was adopted by the General Assembly in September 2007 but has since reversed its position. The Declaration was adopted by the BC government in 2019. Comprised of forty-six articles, the Declaration addresses human rights standards and fundamental freedoms as they apply to Indigenous peoples. Article 15 of the Declaration deals with education.

Article 15

- 1. Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information.
- 2. States shall take effective measures, in consultation and cooperation with the indigenous peoples concerned, to combat prejudice and eliminate discrimination and to promote tolerance, understanding and good relations among indigenous peoples and all other segments of society.

At the most fundamental level, UNDRIP provides the ultimate framework for Indigenization, Decolonization and Reconciliation work. The Declaration is based on an acknowledgement that Indigenous peoples have unique cultures and ways of relating to people and the environment, that their cultural, social, economic and political characteristics are distinct from the dominant societies that they live in3. It is a recognition by the international community that throughout history the rights of Indigenous peoples have always been violated and that special measures are required to protect the rights of Indigenous peoples and to protect their distinctive cultures and ways of life because while cultural differences exist, Indigenous peoples are among the most disadvantaged and vulnerable groups of people in the world and face common problems related to their rights as distinctive peoples3.

Truth and Reconciliation Commission

The Truth and Reconciliation Commission of Canada was established by the Indian Residential Schools Settlement Agreement. Over the course of six years, the commission travelled across Canada to hear from more than 6000 Aboriginal people, most of whom had survived living in residential schools4. With the determination of truth, the foundation for the question of reconciliation could be addressed.



Based on the findings of the commission, 94 calls to action were made8. Several of the calls to action were specific to education, found in the sections Education (calls to action 6 through 12) and Education for Reconciliation (Calls 62 through 65):

Education

- 6. We call upon the Government of Canada to repeal Section 43 of the Criminal Code of Canada.
- 7. We call upon the federal government to develop with Aboriginal groups a joint strategy to eliminate educational and employment gaps between Aboriginal and non-Aboriginal Canadians.
- 8. We call upon the federal government to eliminate the discrepancy in federal education funding for First Nations children being educated on reserves and those First Nations children being educated off reserves.
- 9. We call upon the federal government to prepare and publish annual reports comparing funding for the education of First Nations children on and off reserves, as well as educational and income attainments of Aboriginal peoples in Canada compared with non-Aboriginal people.
- 10. We call on the federal government to draft new Aboriginal education legislation with the full participation and informed consent of Aboriginal peoples. The new legislation would include a commitment to sufficient funding and would incorporate the following principles:
- i. Providing sufficient funding to close identified educational achievement gaps within one generation.
- ii. Improving education attainment levels and success rates.
- iii. Developing culturally appropriate curricula.
- iv. Protecting the right to Aboriginal languages, including the teaching of Aboriginal languages as credit courses.
- v. Enabling parental and community responsibility, control, and accountability, similar to what parents enjoy in public school systems.
- vi. Enabling parents to fully participate in the education of their children.
- vii. Respecting and honouring Treaty relationships.
- 11. We call upon the federal government to provide adequate funding to end the backlog of First Nations students seeking a post-secondary education.
- 12. We call upon the federal, provincial, territorial, and Aboriginal governments to develop culturally appropriate early childhood education programs for Aboriginal families.
- 13. We call upon the federal, provincial, territorial, and Aboriginal governments to develop culturally appropriate early childhood education programs for Aboriginal families.



Education for Reconciliation

- 62. We call upon the federal, provincial, and territorial governments, in consultation and collaboration with Survivors, Aboriginal peoples, and educators, to:
- i. Make age-appropriate curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada a mandatory education requirement for Kindergarten to Grade Twelve students.
- ii. Provide the necessary funding to post-secondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms.
- iii. Provide the necessary funding to Aboriginal schools to utilize Indigenous knowledge and teaching methods in classrooms.
- iv. Establish senior-level positions in government at the assistant deputy minister level or higher dedicated to Aboriginal content in education.
- 63. We call upon the Council of Ministers of Education, Canada to maintain an annual commitment to Aboriginal education issues, including:
- i. Developing and implementing Kindergarten to Grade Twelve curriculum and learning resources on Aboriginal peoples in Canadian history, and the history and legacy of residential schools.
- ii. Sharing information and best practices on teaching curriculum related to residential schools and Aboriginal history.
- iii. Building student capacity for intercultural understanding, empathy, and mutual respect.
- iv. Identifying teacher-training needs relating to the above.
- 64. We call upon all levels of government that provide public funds to denominational schools to require such schools to provide an education on comparative religious studies, which must include a segment on Aboriginal spiritual beliefs and practices developed in collaboration with Aboriginal Elders.
- 65. We call upon the federal government, through the Social Sciences and Humanities Research Council, and in collaboration with Aboriginal peoples, post-secondary institutions and educators, and the National Centre for Truth and Reconciliation and its partner institutions, to establish a national research program with multi-year funding to advance understanding of reconciliation.

Ministry of Advanced Education, Skills & Training

The Ministry of Advanced Education, Skills & Training has been working on initiatives to improve Aboriginal learner success since the 1990's. In 1995, the Aboriginal Policy Framework was created to guide development of



post-secondary education training strategies to increase participation, retention and success rates for Aboriginal learners6. The Aboriginal Special Projects fund started funding projects in 2001; by 2005 twenty-six institutions across BC had at least one Aboriginal Education Coordinator to support aboriginal learners, twenty-five institutions had Aboriginal Advisory Councils that provided a link to Aboriginal communities, one-third of institutions had Aboriginal representation on institutional governance bodies, twenty-three institutions had programs designed for Aboriginal learners and twenty-one institutions had entered into partnership or affiliation agreements with Aboriginal communities6.

Building on these early initiatives and accomplishments, the Ministry of Advanced Education, Skills & Training published the first Aboriginal Post-Secondary Education Strategy and Action plan in 20076. The vision and intention consistent with the commitments made in the New Relationship document7 which provided the foundation to build a new government-to-government relationship based on reconciliation, recognition and respect, and the Transformative Change Accord8. The plan was a collaborative effort between Indigenous groups, communities and organizations, Aboriginal Post-Secondary Education and Training (MOE) Partners and public Post-secondary institutions to coordinate, develop and implement Aboriginal Services Plans and Aboriginal Special Projects initiatives that had two goals with related objectives:

- 1. Close the educational gap for Aboriginal learners
- a. Increase the access, retention, completion and transitions opportunities for Aboriginal learners
- b. Increase the receptivity and relevance of post-secondary institutions and programs for Aboriginal learners
- c. Strengthen partnerships and collaborations in Aboriginal post-secondary education
- 2. Effective and accountable programs and services implementation and delivery
- a. Ensure effective measurement and progress monitoring

Strategies to meet these goals notably include the implementation of Aboriginal Services Plan in 11 institutions, increasing services and financial support for Aboriginal students, increasing the number of Gathering Places and strengthening agreements and partnerships between institutions and Aboriginal communities and organizations6.

Following evaluation of the data collected and progress reports on the 2007 plan, the Ministry of Advanced Education published the Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan 20209 in 2012, developed like the previous version by a working group of British Columbia's Aboriginal Post-Secondary Education Partners. Improvements were noted since the previous plan, but the data suggested that a number of barriers persist, and new issues had arisen in that time9. The plan outlines ten principles and five goals with accompanying objectives:



- 1. Systemic change means that the public post-secondary education system is relevant, responsive, respectful and receptive to aboriginal learners and communities
- a. Aboriginal voice is an integral part of the public post-secondary education system
- b. Public post-secondary institutions work in partnership and collaboration with Aboriginal communities, organizations and institutes to create the systemic change needed for public post-secondary institutions to support First Nations, Metis and Inuit peoples' success
- 2. Community-based delivery of programs is supported through partnerships between public postsecondary institutions and Aboriginal institutes and communities
- a. British Columbia public post-secondary institutions and Aboriginal institutes and communities' partner in the delivery of community-based programs for Aboriginal learners
- b. Aboriginal institutes have a unique and critical role in British Columbia's post-secondary system to increase Aboriginal learner participation and completion in post-secondary education
- c. Aboriginal adult education programs enable Aboriginal learners to transition to post-secondary education and employment.
- 3. Financial barriers to accessing and completing post-secondary education and training are reduced for Aboriginal learners
- a. Financial supports to access and complete post-secondary education and training are available to Aboriginal learners who need them.
- 4. Aboriginal learners transition seamlessly from K-12 to post-secondary
- a. Teachers support Aboriginal learner success in the K–12 system
- 5. Continuous improvement is based on research, data-tracking and sharing of leading practises
- a. Sharing of leading practices creates an environment of informed leadership, effective practices and results in Aboriginal post-secondary education
- b. Governments, Aboriginal institutes and public post-secondary institutions make evidence-based decisions with respect to Aboriginal post-secondary education.

Along with the goals and objectives, actions, short- and medium-term results (2013, 2016) as well as long-term outcomes (2020) are also identified. The fifth goal, "continuous improvement is based on research, data-tracking and sharing of leading practises" identifies the need to increase the amount of accurate and reliable data relating to Aboriginal post-secondary education so that governments and institutes can improve policy decisions and determine effectiveness of actions laid out in the plan. The most recent data was published in the



Aboriginal Learners in British Columbia's Public Post-Secondary System10, June 2018. The 2011-2016 findings reported show:

- 1. K-12 completion and transitions rates increased from 57% to 64%
- 2. High school completion rates increased from 52% to 60% in males and from 62% to 65% in females
- 3. Aboriginal learners are less likely to graduate with a GPA over 75% (minimum required for admission to research-intensive universities)
- 4. More female Aboriginal learners graduate Grade 12 than males
- 5. Transition rates to post-secondary institutions increased from 42% to 63%
- a. Aboriginal students were more likely to attend colleges and teaching intensive universities than research-Intensive universities
- 6. Twenty -three percent increase in credentials awarded to aboriginal learners in 2015/16 over 2009/10 (goal for 2020 is an increase of 75%)
- 7. The number of Aboriginal learner FTE's in the post-secondary system has increased
- a. College of the Rockies had 12.5% Aboriginal FTE's as of 2015/2016, 8th highest in the province (as percentage of Domestic FTE's), 1.9% of the total Aboriginal FTE's in the post-secondary system
- 8. Aboriginal Learners are more likely to get credentials in trades, Human and Social Services and Developmental Programs and less likely to get credentials in Arts and Sciences, Business and Management and Engineering and Applied Sciences
- 9. Aboriginal learners are more likely to get developmental, certificate and diploma credentials and less likely to get bachelor, graduate and professional credentials
- 10. Aboriginal learners report high overall satisfaction with quality of education
- 11. Aboriginal graduates experience much higher unemployment rates than non-Aboriginal graduates in most areas (the difference is less pronounced for baccalaureate holders)

Analysis of the data demonstrates areas of progress, highlights areas that still need work, and areas where further research and data analysis could yield more information. These are outlined in the 2012 report and will presumably inform future Aboriginal post-secondary strategic plans.

Aboriginal Service Plan



The Aboriginal Service Plan (ASP) initiative was a major part of the Ministry of Advanced Education's 2007 Aboriginal Post-Secondary Education Strategy6, and the funding associated with it has been instrumental in progress towards Indigenization for the institutions that are in the program. The initiative was piloted by eleven BC institutions who have, since that time, been receiving additional funding on an annual basis. Indigenous communities and organizations work in partnership with post-secondary institutions to develop and implement an Aboriginal Service Plan, intended to enhance the post-secondary educational experiences and outcomes of First Nations, Metis and Inuit learners. The goals of initiative are to:

- Increase access, retention, completion and transition opportunities for Aboriginal learners
- 2. Strengthen partnerships and collaboration in Aboriginal post-secondary education
- 3. Increase the receptivity and relevance of post-secondary institutions and programs for Aboriginal learners, including providing support for initiatives that address systemic barriers

Because the plans are collaborative, post-secondary institutions are able to develop programs and services that meet the needs of learners in local Aboriginal communities. The funding is also used to leverage further resources allowing post-secondary institutions to implement innovative programs and services for Aboriginal learners. The program was evaluated in 2011 and in the more recent Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan 20209, the Ministry committed to continuing and expanding the program as funding becomes available. Although one of the objectives was to have ASPs implemented in a larger number of post-secondary institutions by 2016, there have been no additional institutions added to the program to date.

Institutions that receive the ASP funding tend to have more extensive services for indigenous students, engagement with local indigenous communities (advisory committees), more faculty and staff dedicated to Indigenous initiatives and student support, as well as more programs and courses with indigenous focus or with Indigenous content (Appendix A, B and D). These institutions have more programs and services in place to support Indigenous students and Indigenization than institutions that do not receive the additional funding. UBC and SFU would exceptions here, as these institutions appear to have the funding and resources to be very progressive in their Indigenization process without the ASP funding.

CICan

CICan is a national network of Colleges and institutes that works with government, industry and international partners to support employment-focused post-secondary education. As the "voice of Canada's colleges and institutes, at home and abroad" on skills for employment, innovation, Indigenous education, environment and climate change and international, CICan recognizes the role that colleges and institutes can play in advancing reconciliation. In response to the recommendations made by the Truth and Reconciliation Commission, recognizing that colleges and institutes work closely with local indigenous communities, CICan introduced the



Indigenous Education protocol. The seven principles support reconciliation and align with the recommendations of the Truth and Reconciliation Commission.

CICAN Indigenous Education Protocol (Signed by 65 institutions including COTR)

- 1. Make Indigenous education a priority.
- 2. Ensure governance structures recognize and respect Indigenous peoples.
- 3. Include intellectual and cultural traditions of Indigenous peoples in curriculum and learning approaches.
- 4. Increase understanding and reciprocity among Indigenous and non-Indigenous peoples.
- 5. Increase their number of Indigenous employees, including Indigenous senior administrators.
- 6. Establish Indigenous-centred holistic services and learning environments.
- 7. Build relationships and be accountable to Indigenous communities in support of self-determination.

This national effort was another important step in providing framework for institutional Indigenization plans for colleges and institutes across BC.

Indigenization Plans in BC Colleges and Universities

Indigenization initiatives are included in the institutional level plans for almost all Colleges and Universities in BC. Some institutions (University of British Columbia, Camosun College, Douglas College, Kwantlen Polytechnic University, Okanagan College, Selkirk College, Simon Fraser University, Thompson Rivers University, University of Victoria and Yukon College) have, or are currently, developing overarching Indigenization plans that provide the framework for how Indigenous ways of knowing are incorporated into the basic structures of the institution (educational, organizational, cultural and social). Most other institutions include Indigenization strategies within the broader institutional Strategic plan and/or Academic plan.

Institutional Indigenization provide the framework to guide the institution toward systemic change. The plans identify a vision or mission statement, define Indigenization and detail the principles and goals of the plan. Commitments to achieving systemic change are in the specific actions that the plan lays out. The plans often include the challenges and opportunities as well as outcomes. Systemic change is the ultimate goal of Indigenization initiatives and plans, this report however seeks to understand a small aspect of this process - how the Indigenization process of programs and courses might affect transfer credits and thereby student mobility. Relevant aspects of various Indigenization plans will be investigated to evaluate how institutions are approaching this particular aspect of indigenization. The number of experts required to provide all the hands-on education and training for students is not feasible at most institutions, so building competency and awareness of indigenous issues in teaching and research faculty is important and represents another set of related initiatives within Indigenization plans that will also be addressed.



Summary of Institutional Indigenization Initiatives

The information reported here is by no means exhaustive. There are initiatives and projects going on at many institutions that are not mentioned. This is meant to be representative information that is more relevant to smaller transfer institutions in BC such as at the College of the Rockies.

Curriculum Indigenization - Programs and Courses

UBC has one of the most comprehensive Indigenization plans whose most recent version, the 2020 UBC Indigenous Strategic Plan11, is currently in its final draft with implementation to begin in the spring of 2020. The plan continues the work of the 2009 Aboriginal strategic plan and forms UBC's response to the Truth and Reconciliation Calls to Action, the National Inquiry into Missing and Murdered Indigenous Women and Girls' Calls for Justice and the United Nations Declaration on the Rights of Indigenous Peoples, making UBC the first institution in BC to endorse the UN declaration. The vision and mission for the plan have already been adopted:

Vision: UBC as a leading university globally in implementation of Indigenous peoples' human rights.

Mission: To guide UBC's engagement with Indigenous peoples and its commitment to reconciliation, as articulated and called for by the Truth and Reconciliation Commission of Canada.

The final work on the action plan and bringing together of the enhancement of UBC Vancouver's Indigenous engagement with UBC- Okanagan's declaration of Truth and Reconciliation commitments to provide a UBC wide plan for implementation at both campuses while recognizing the unique context of each campus is taking place currently with a planned public launch for the plan for September 2020.

The UBC Indigenous Strategic plan includes eight goals accompanied by sixty-three actions to support those goals. The goals most relevant to this report are 4 and 7:

Goal 4: Indigenizing Our Curriculum: Include Indigenous ways of knowing, culture, histories, experiences and worldview in curriculum delivered across Faculties, programs and campuses.

Actions:

Undertake university-wide, Faculty-level curriculum reviews to ensure Indigenous histories, experiences, worldviews and knowledge systems are appropriately integrated and that all Faculties are fully compliant with the Truth and Reconciliation Commission's Calls to Action.

Ensure all academic programs, undergraduate and graduate, include substantive content in at least one course which explores Indigenous histories and identifies how Indigenous issues intersect with the major field of study of the Faculty.

Provide equitable and timely financial compensation to Indigenous people who support the Indigenization of curriculum.



Continue to partner with Indigenous communities locally and globally to develop accredited post-secondary Indigenous knowledge programs that can be delivered in communities and on campus.

Faculty education and training is addressed in Goal 7 along with associated actions.

Goal 7: Providing tools for success: Forge a network of Indigenous peoples' human rights resources for students, faculty, staff and communities.

Develop a research information repository and communication portal that assists students, faculty, staff, communities and researchers at large to access resources, information, publications and reports about Indigenous issues and knowledge.

Develop, communicate and keep updated a comprehensive online database of current Indigenous programs, initiatives and courses at the University.

Create a professional development program that assists faculty and staff to foster safe and inclusive classrooms and workplaces.

Develop and deliver Indigenous history and issues training for all faculty and staff to be successfully completed within the first year of employment at UBC and to be reviewed on a regular basis.

Identify Indigenous faculty and staff mentors who volunteer to be available, recognized and compensated for providing professional advisory services to their colleagues in the development and delivery of Indigenous content and tools for fostering culturally safe classrooms and workplaces.

Create easily accessible structures and mechanisms on each campus for Indigenous communities to partner with the University on initiatives that advance their unique goals and interests.

In consultation with Indigenous knowledge-experts, establish an International Indigenous Higher Education Advocacy Group to develop a global strategy for the advancement of Indigenous peoples' human rights in research and curriculum.

Tools such as the Reconciliation Through Education Massive Open Online Course (MOOC), training within the Indigenous Unit of the Centre for Teaching and Learning to assist faculty addressing and approaching contentious topics and building professional competence are already in place.

The plan is very specific and comprehensive in scope, approach and directives laid out to ensure that all UBC students are educated in Indigenous histories, experiences, worldviews and knowledge systems. At least one course in every program will include substantial Indigenous content and address how the field of study interconnects with Indigenous issues and all programs and courses will comply with the TRC Calls to Action. These initiatives are supported by the larger Indigenization plan and by the institution as a whole in their overarching institutional plans like the UBC Strategic, Academic Strategies and infrastructure (learning spaces, First



Nations House of Learning, Residential School History and Dialogue Centre, Musqueam Post, Reconciliation Pole and Looplex X Canoe).

SFU has had an Aboriginal Strategic plan in place since 2007. The newest published version 2013-2018 Aboriginal Strategic Plan12 whose vision is:

Aboriginal learners learn in a variety of fashions and in a variety of contexts, both modern and traditional. Simon Fraser University works with the Aboriginal community to enhance and engage Aboriginal learners' participation in the historic, socio-economic, educational, and cultural lives of the traditional, local, provincial, national, and global communities.

Simon Fraser University is committed to being the leading "engaged" university in Canada, defined by its dynamic integration of innovative education, cutting edge research, and far-reaching community engagement. Therefore, the university is committed to:

- 1. Engaging Aboriginal students by equipping them with the knowledge, research skills, and experiences to prepare them for life in an ever-changing and challenging world;
- 2. Engaging research to become a world leader in knowledge mobilization in the service of Aboriginal peoples;
- 3. Engaging Aboriginal communities in every way possible to contribute to their social, economic, environmental, and cultural well-being.

The plan has seven guiding principles that SFU is committed to:

- 1. Recognizing the unique educational needs and identities of Aboriginal peoples.
- As First Nation, Non-Status, Métis, and Inuit peoples acquire increased control over governance, education, health care, and other social and economic dimensions of their communities, the educational contribution of the university to these peoples should support their efforts in this process.
- 2. Full and equitable participation by Aboriginal people.
- Based on this principle, SFU will work to increase First Nations, Non-Status, Métis, and Inuit student enrolment to a proportion commensurate with that of the representation of Aboriginal people in the general population of British Columbia.
- 3. Providing a supportive academic and community environment for Aboriginal people.



- First Nations, Non-Status, Métis, and Inuit peoples enrolled at Simon Fraser University will have access to financial support programs, such as grants and fellowships, and non-financial support programs, such as mentorship and a supportive social context.
- 4. Acknowledging, respecting, and incorporating Aboriginal people's values and traditions in university programs.
- As an institution dedicated to discovering and transmitting knowledge, the university will make good use of the traditional knowledge developed over the years by First Nations, Non-Status, Métis, and Inuit peoples, and will support academic work that incorporates Aboriginal knowledge.
- 5. Addressing the higher education needs and aspirations of Aboriginal communities.
- Simon Fraser University recognizes the range of educational needs of First Nations, Non-Status, Métis, and Inuit communities as they strive to protect their ancestral cultures and languages, and as they develop new forms of governance.
- 6. Collaborating and forming partnerships to serve Aboriginal people's educational objectives.
- This principle guides Simon Fraser University to seek out alliances with First Nations, Non-Status, Métis, and Inuit peoples and with other institutions in the broader community to achieve educational objectives that benefit Aboriginal peoples.
- 7. Affirming the ongoing institutional commitment to higher education among Aboriginal people's communities.
- This principle is implemented through the Aboriginal Steering Committee and the Aboriginal Strategic Plan for Simon Fraser University.

It also includes ten pillars:

- 1. Academic Program Development
- 2. Research Development
- 3. Student Recruitment, Retention, and Support
- 4. Liaison and Engagement with the Aboriginal Community
- 5. Aboriginal Knowledge Development
- 6. International Engagement
- 7. Infrastructure and Facilities Development



- 8. Aboriginal Integration and Leadership Development
- 9. Government and NGO Relationships
- 10. Communication Strategies.

The first and fifth pillars, Academic Program Development and Aboriginal Knowledge Development are most relevant here.

Academic Program Development

Goal: Cooperate with Faculties, departments, and programmes to develop courses that contain significant content pertaining to Aboriginal people's perspectives and epistemologies.

Action items:

Develop distributed learning and/or blended delivery courses and programs, as well as, distance education courseware, modules, and materials that can be used in Aboriginal communities and for other community-based delivery programs.

Work with Lifelong Learning to support, strengthen, and expand the Aboriginal Pre-University Bridging Programs in various Faculties and program areas.

Support the ongoing development and expansion of Aboriginal academic programming in traditionally strong subject areas i.e. in the Arts and Social Sciences, Business, Education, Environment, Health Sciences, and Lifelong Learning (Continuing Studies).

Support the growth, development, and expansion of Aboriginal academic programming in non-traditional subject areas i.e. in Applied Sciences; Communication, Art & Technology; the Sciences; and Graduate Studies; and in non-academic areas such as university athletics.

Consult with Aboriginal communities to identify the needs of said communities for Graduate Studies programming and work collaboratively to initiate and support the development of these programs. For example, ongoing development and/or support of Faculty of Education graduate diploma, masters, and doctoral programming in Indigenous issues; and the development of graduate level programming in First Nations Studies.

Through academic units, strive to develop and maintain an Indigenous Visiting Scholar Series and explore the development of other such initiatives that promote Aboriginal awareness and engagement.

Work to increase numbers of Aboriginal teachers and support to in-service teacher's needs, in order to better address the specific learning needs of Aboriginal learners.

Increase the visibility and expertise of Aboriginal faculty, graduate and undergraduate students, and community members in the center of academia and educational contexts.



Maintain lists of courses and programs with "recognized" Aboriginal content in them and have such available for public perusal.

Aboriginal Knowledge and Resource Development

Goal: Engage and promulgate an understanding and respect for Aboriginal communities, cultures, epistemologies, histories, languages, and traditions among non-Aboriginal members of the university and off-campus communities.

Action items:

Advise and assist SFU cultural memory programs (Libraries, Art Galleries, Archives, Museums) as they develop collections promoting understanding of Aboriginal cultures.

Work with the Teaching and Learning Centre to establish professional development workshops for staff, faculty, students, and community regarding Aboriginal cultural, educational, and historical sensitivities.

Expand and promulgate the Honoring Feast for Aboriginal graduates.

Establish and support Speaker Series dealing with Aboriginal issues.

Utilize communication strategies to raise the profile of Aboriginal programming, research, and personnel across Simon Fraser University.

Establish and support Aboriginal cultural institutions as tools of education within the university. For example, the promulgation of cultural workshops such as First Nations drumming and singing, sweat lodge ceremonies, and other tactile learning opportunities.

Establish professional development workshops for staff, faculty, students, and community regarding Aboriginal cultural, educational, and historical sensitivities.

Work with the Bill Reid Gallery and Bill Reid Centre to establish and promote Aboriginal-specific programming therein and to promote their rich collection of artistic and historical artifacts on the campus and in the community.

The plan offers strong support for aboriginal learners promoting accessibility, programs with Indigenous focus while also committing to increasing Aboriginal academic programming in all subject areas as well as maintaining lists of courses and programs with recognized Aboriginal content and ensuring that they are visibly identified. The plan also endeavors to provide educational opportunities to faculty to increase their knowledge of Aboriginal cultural, educational and historical sensitivities.

SFU established an Aboriginal Reconciliation Council (SFU-ARC) in 2016 to respond to the recommendations of the Truth and Reconciliation Commission. The SFU-ARC's published a final report, Walk This Path with Us was in 201713. This comprehensive report provides the framework to guide SFU through its continuing process of



reconciliation. It gives a historical overview of and current vision for Indigenous education and details the funding and implementation plan for the SFU Aboriginal Strategic Initiative. Through extensive external and internal consultation information was gathered and priority areas for reconciliation were identified: Indigenization of curricula, the development of safe and culturally appropriate spaces on all campuses and cultural awareness and preparation experiences for non-Indigenous students, staff and faculty. Based on the priority areas, calls to action were developed. Funding priority calls to action for funding space initiatives, curricular initiatives and cultural awareness initiatives are outlined and funding principles are established. Calls to action and funding principles related to sustaining initiatives and system support and other projects are also laid out. In total, the plan includes thirty-three calls to action and ultimately provides the funding and implementation framework recommendations.

Indigenizing curricula is a main area of focus in this report. It endeavors to address the related recommendations of the TRC calls to action:

to develop culturally appropriate curricula (10iii, p. 2);

to integrate Indigenous knowledge and teaching methods into classrooms (62ii, p. 7); and

to build student capacity for intercultural understanding, empathy, and mutual respect (63iii, p. 7).

The consultation process yielded four goals of curricular change

- 1. Comprehensive Academic Responsibility
- a. SFU has the responsibility to include and foster development of Indigenous perspectives, knowledge, and methods throughout all disciplines
- b. Indigenous knowledge includes historical and cultural facts as well as ways to investigate and understand academic disciplines
- c. SFU as a university should provide a breadth of knowledge to foster diverse approaches to learning and research
- 2. Opportunities for Aboriginal student learning and research
- a. Aboriginal students must be supported and encouraged at all levels of study to study topics that are relevant to them and their communities and to investigate through diverse, innovative hypotheses and methodologies
- b. Students will then become part of the new generations of Aboriginal Scholars
- 3. Fundamental knowledge for non-Aboriginal students
- a. Address the lack of understanding about Aboriginal history languages and culture



- b. Provide education of fundamental knowledge for all student faculty and staff
- c. Education on issues that concern Indigenous people
- 4. Creation of a safe, respectful and inclusive campus community
- a. More work required to create a sufficiently safe community for Aboriginal students and staff many initiatives required
- b. Fundamental knowledge for non-Aboriginal students early in a program of study to show the diversity and value of Indigenous scholarship could help foster a safer more accepting campus
- c. Inclusion of Aboriginal perspectives within curriculum would demonstrate value that SFU has for Aboriginal knowledges
- d. Visible expressions and regular acknowledgements would complement other actions

Based on these findings, and following the funding principles, recommendations for funding curricular initiatives were developed. The report establishes that curricular transformation requires changing course content as well as the instructional and pedagogical processes. To that end, the report points out that strategies for teaching development must be provided so that instructors can understand and implement Indigenization of curriculum. Teaching development grants for transformation of teaching practise are available through the Institute for the Study of Teaching and Learning in the Disciplines that mandate could be expanded for faculty wishing to Indigenize curriculum. Campus wide initiatives such as conferences would provide opportunities for sharing successes and challenges and reach consensus on appropriate ways of implementing change

Based on the four goals for curricular change, three types of recommendations were included for how curricula could be Indigenized.

Option 1. Create a required first-year course for all SFU students to provide fundamental knowledge about Aboriginal issues.

This approach has been implemented at the University of Winnipeg and Lakehead University and while it directly addresses goals three and four, this approach has several drawbacks. It required resources and staffing, it can interfere with sequencing and some Aboriginal students feel that one token course is not adequate to address the diversity of approaches to learning and research.

Option 2. Create Aboriginal breadth requirement courses.

Creation of Aboriginal content course requirement to degree programs. Resource requirements would be less than for option 1. Determination and maintenance of appropriate Aboriginal content in courses would have to be determined and a review committee would need to establish criteria and review syllabi and methods on a regular basis.



Option 3. Integrate Indigenous content into existing courses and programs

It was established that many SFU courses already include substantial and appropriate indigenous content and that many faculty members are motivated to add Indigenous content and perspectives but do not know how and are unaware of the resources available. Centralizing services related to Indigenizing curriculum and creating an Indigenous Curriculum Committee would support this option.

Since the release of the report, ASI funding was approved for the SFU library to create the Indigenous Curriculum Resource Center to Indigenize physical and online resources to support development of culturally appropriate curricula and integration of Indigenous knowledge and teaching methods into classrooms. Funding has also been approved for Decolonizing Teaching: An Integrated Seminar Series. Funding has also been approved for grant programs and initiatives through the Institute for the Study of Teaching and Learning in the Disciplines designed to support Indigenous and non-Indigenous faculty with their initiatives to decolonize and Indigenize curriculum. In addition to these funded projects, several departments across the university have also begun reconciliation initiatives – programs and courses are identified in table 3.

One science focused project, Decolonizing the Scientific Method in a First-year Breadth Science Course is currently underway. A module to compare and contrast the classic scientific method and local Indigenous knowledge gathering approaches to answer the question "how do we know" will be implemented in an introductory Health Sciences course – HSCI 100 Human Biology.

Camosun College also has a well-developed Indigenization plan14 built around four Corner Posts Curriculum Development and Delivery, Services for Students, Policy and Strategic Planning, and Employee Learning and Education. The Indigenization plan undertakes to broaden capacity of the college community to recognize, respect, acknowledge and integrate indigenous worldviews; making the institution more welcoming and relevant to Aboriginal learners, preparing non-Aboriginal students, graduates, and employees to better understand and co-exist with Aboriginal peoples, setting an example of Camosun's capacity for creativity, innovation and imagination, and enhancing Camosun's goal to be Canada's college of life-changing learning. Corner post 1 addresses Indigenization of curriculum. This corner post was developed recognizing that it is important for Indigenous learners to see themselves and their communities reflected in programs and courses.

Corner Post 1: Curriculum Development and Delivery

Goal: To ensure that Aboriginal students see themselves reflected in course materials and to integrate Indigenous ways of teaching and learning into classroom processes.

Actions:

Take TELFIN TFE WILNEW (TTW) through the education approvals process so it can be offered to students as well as employees.



Align TTW with new employee learning resources geared to deepening intercultural understanding and strengthening our ability to create opportunities for life-changing learning. Interculturalization encompasses both Indigenization and Internationalization but also allows an exploration of Canadian culture incorporating a necessary lens for authentic change to occur. The Indigenization Coordinator is on the committee that is formulating the strategy and framework of Interculturalization.

Work with curriculum writers to create an Indigenized composition course.

Work with the curriculum team to develop online educational resources to assist faculty with Indigenization of curriculum.

Respond to 2012 invitations, including working with the following departments:

- Practical Nursing working with faculty to implement Indigenized provincial curriculum.
- Nursing supporting a working group seeking to further Indigenize curriculum-
- Academic & Career Foundations working to Indigenize curriculum and teaching methods.
- Nursing working to continue Indigenization of curriculum
- Dental Hygiene beginning to work on the Indigenization of department.
- Distributed Education offering Learning Skills course

Find existing Aboriginal courses that fit well with the LYNC program and implement them through the South Island District Partnership

Support Community Projects Coordinator in deepening relationships with T'Sou-ke, Scia'new, Pacheedaht, and Esquimalt Nations.

The plan shows a commitment to consultation and building relationships with Indigenous communities as it relates to Indigenization of programs and courses. A curriculum team dedicated to assisting faculty with Indigenization is a critical piece. The commitment to Indigenization of programs and courses is reflected in the large number of courses and programs that include Indigenous content. Courses are also identified with an * so that students can easily determine if they can expect to experience Indigenous content and or pedagogy within the course. The plan also recognizes that while bringing Indigenous ways of being, knowing, and doing to the learners is important, and that it is also critical to acknowledge and address that Indigenous communities continue to face social, cultural, and economic issues because of the impacts of colonization. Employee education is also central to systemic change envisioned in the Camosun Indigenization plan, understanding that the lack of knowledge and understanding about the effects of colonization affects relationships between Indigenous peoples and Canadians and that developing a rationale to indigenize requires an understanding of how the current situation fits within the historical context.



Corner Post 4: Employee Education

Goal: To provide opportunities for employee education and training from an Indigenous worldview (TELŦIN TŦE WILNEW) that will enhance services and education for all students.

Actions:

Align TELŦIN TŦE WILNEW with new employee learning resources geared to deepen intercultural understanding and to strengthen our ability to create opportunities for life-changing learning.

Deliver TELŦIN TŦE WILNEW to administration, faculty, and service providers.

Coordinate special events like the Camas Harvest & Pit Cook and contribute as appropriate to Conversations Day, Celebration of Teaching, and other opportunities to teach about Indigenization.

Provide consultation services with curriculum developers and teaching faculty seeking assistance with Indigenization of curriculum development, enhancement, and learning environment processes.

The plan identifies that the path to resolution involves learning together and to that end, piloted a new Indigenizing the Curriculum workshop for faculty in May/June 2016 to offer a variety of Indigenous programs led by Indigenous instructors, develop indigenized courses in consultation and collaboration with community focus groups, and work with instructors, curriculum designers, and the Centre for Excellence in Teaching and Learning to support instructors to indigenize courses and programs. The College also commits to providing employees the opportunity to learn about the history and culture of the Coast Salish, Straits Salish, Metis and Inuit people, the main elements of an Indigenous pedagogy and world view, and the issues faced by the Native urban population. Educational opportunities are provided and professional development time to design indigenized curriculum or Indigenize existing curriculum is supported. Indigenization of programs and courses is encouraged during the program review process by inquiring if curriculum writers have considered how to indigenize the program/course and if not, they are offered support of the Indigenous coordinator to integrate appropriate content and/or process into their proposal. Resources and support such as facilitation of community connections when required, curriculum development support through the Centre for Excellence in Teaching and Learning, workshops, and Community of Practice are in place to assist in the process. These measures are in place to foster a culture of respect and understanding so that students feel welcome and have a sense of belonging.

Selkirk College recently launched an Indigenization plan15 that provides the framework for a stronger future for students and staff by supporting truth, reconciliation, indigenization and decolonization. The plan includes five focus areas; Governance and Policy, Curricula and Programs, Supports and Services for Students, Employee Development and Tools & Facilities and Infrastructure. Again, the focus here will be on the curriculum and programs initiatives as well as faculty education.



Curricula and programs: Through reciprocal partnerships with our Nation Partners and institutional partners, the incorporation of Indigenous perspectives, first-voice, scholarship and land-based learning will deepen all students' learning experiences.

The INDG 100 course will be sustained and offered annually;

Renewed offerings of Continuing Education Introductory language courses, cultural fluency, and Reconciliation will be examined, and a plan developed; partnerships with language schools such as the En'owkin Centre or the Salish School of Spokane will be strengthened;

An Indigenous Studies diploma or Flexible Pre-Major option in Indigenous Studies with existing and new curricula will be explored; and opportunities for developing Indigenous specialties for specific existing certificates and diplomas will be explored (for example CYC);

Develop articulation agreements or credential partnerships for, in particular, students wishing to complete their studies at institutions on other sides of the Canada/US border but within their traditional territory;

Institutional partnership agreements with En'owkin Centre and NVIT will be renewed to develop joint and mutually significant programming in Restorative Justice, the Arts, Traditional Ecological Knowledge, Land and Resource Guardians, Language;

Develop pilot community-based transition to work programs for example a Career Internship initiative;

The Reconciliation Speakers series, partnered activities with organizations will be continued;

Develop a framework and strategy to conduct an audit of the existing/current Indigenization content, practices, and paradigms across programs;

Develop and implement further tools for Education Council to support Curriculum Committee in currency in curriculum development;

Explore the development and incorporation of land-based learning into a variety of disciplines.

This section of the plan indicates Selkirk College's intent and commitment to offering Indigenous programming, building partnerships to assist in the development of programming, supporting the inclusion of Indigenous content, practices, and paradigms in their programs as well as facilitating land based pedagogy and tools for curriculum development. Employee development and tools is another area of focus wherein the college commits to providing employees the opportunity to recognize gaps in their own educational experiences and understanding of Indigenous worldviews enabling them, to navigate systemic change in culturally safe and appropriate ways.



Employee development and tools: Providing a safe place for employees to recognize the potential gaps in their own educational experiences and understanding of Indigenous worldviews will support their change, process, and confidence to navigate systemic change in culturally safe and appropriate ways.

Inclusivity based recruitment and hiring policies and processes will be researched, developed implemented and regularly reviewed;

Key positions requiring the priority for Indigenous candidates will be developed in conjunction with the development and needs of the organization as a whole;

Increased curriculum development expertise will be developed in the Teaching and Learning Institute with respect to indigenization and decolonization;

Employee orientation and ongoing training regarding Indigenization/cultural fluency will be further developed, for example: cultural competency modules, facilitated study groups using the BC Campus Foundations in Indigenization Co-learning Circle; professional development offerings through BC Campus and other pertinent resources for faculty and staff;

Expand tools to help employees in various aspects of Indigenization, such as collaboration and communication protocols;

Ongoing professional development and additional resources for faculty and staff (internal as well as external training opportunities) will be supported to the furthest extent possible.

These initiatives are closely related to those in the Curricula and Programs area of focus and again highlight employee education as essential to systemic change.

TRU Indigenization plan is The Coyote Project16 which unites TRU "in creating a campus that is welcoming and supportive to all, especially Indigenous students and staff". It is about implementing the TRC's calls to action with special emphasis on elimination of educational and employment gaps between Indigenous and non-Indigenous Canadians and new Indigenous education legislation with the full consent and participation of Indigenous peoples. The Coyote Project will focus on recruitment, retention and completion issues for Indigenous students.

Each faculty has targets and goals that may include creation of new courses and programs, altering course content or curriculum, expanding research, Indigenizing support services, hiring expertise and/or enhancing environments. The Faculty of Science is sending mentors out to elementary schools to draw more Indigenous students to summer camps. Learning about science including traditional medicinal plants in that environment shows students that science is accessible. The goal is to take the mystery and intimidation out of science and show that it can provide engaging and experiential learning.



There are also a number of initiatives within the strategic plan and academic plan that identify Indigenization of TRU as a priority, inclusion of Aboriginal cultures and histories into the work of faculty members.

Existing Aboriginal, local and global learning contexts should be enhanced, including:

Increased integration of cultural awareness within curriculum and teaching

Increased opportunities for intercultural or international experiences for all students

Increased opportunities to study abroad, including field schools, student and faculty exchange programs, service learning project work, and research

Increased Aboriginal student participation in study abroad through cohort models, in the contexts of Aboriginal field schools, student and faculty exchange programs, service learning project work, and research, particularly in the context of international Aboriginal partnerships

Increased international student exposure to Aboriginal, local and regional cultural life and activities

Future development should include:

Programs and curriculum, including interdisciplinary studies, that make visible the history, traditions, and experience of underrepresented groups

Additional domestic and international degree options, such as dual-, joint-, and Masters degrees, with partner institutions

International "virtual or distance" projects and collaborations at the research, operational, and assessment stages, including distance study with other Open and Distance universities and other institutions offering multimodal learning

Engagement of regional students with the Kamloops campus, including student functions and conferences held in Kamloops, Williams Lake and the Regional Centres

Language offerings as required to support new program initiatives emerging from the Academic Plan

UVic Indigenization plan17 commits to building and strengthening relationships with Indigenous communities and with an expectation that goals will be met through Indigenous and non-Indigenous students, faculty and staff working together. The plan sets its vision around Dynamic Learning, Vital Impact and Academic Environment with goals and actions supporting that vision that respond to recommendations of the Truth and Reconciliation Commission. Five areas of focus (strands) are identified within the plan, each with specific goals and actions laid out. The strands are Students, Faculty and Staff, Education, Research, and Governance.

Curriculum development falls under Education and faculty education and training under Faculty and Staff as well as Students.



Education: The Indigenization plan emphasizes that programs should be inclusive and respectful to all students and that the most effective strategy for communicating Indigenous content and concepts is by integration into the design of programs which can be done with guidance from elders, knowledge holders and communities. There are a number of programs with Indigenous focus, Indigenous content and Indigenous epistemologies (Appendix B) made possible through collaborative efforts between the university, academic leaders, community and Indigenous faculty over the past two decades. There are number of programs such as Child and Youth Care, Indigenous Education, Law, Public Health and Social Policy, and Social work that educate and train individuals that work with Indigenous peoples and communities. These programs in particular are committed to making sure that students are aware of the history of Indigenous people in Canada and how past and current laws, policies and practices have systematically disadvantaged Indigenous peoples. Many other academic units have also committed to support curricula that integrate historical and current Indigenous knowledge so there are a number of courses in areas like Anthropology, English, Environmental Studies, Theater and Visual art, Geography, History and Political Science for example that offer experiential learning opportunities in Indigenous history, culture and art (Appendix B).

Actions to support these goals and continue work in the education strand include

Action:

- 1. Ensure the quality, sustainability and relevance of the university's Indigenous academic programs.
- a. Ensure that students in professional programs who will serve, and interact with, Indigenous peoples and communities become knowledgeable about Indigenous history and culture and the impact of colonial practices on Indigenous peoples and communities
- b. Continue to work with Indigenous students and communities to identify areas of educational programming that would be of interest and value to them, such as an Indigenous-focused Foundation Year through the Faculty of Continuing Studies
- c. Review existing programs to ensure they are of high quality and they are meeting Indigenous student and community needs
- d. Support the development of new programs where there is an identified student/community interest, where UVic has existing or emerging faculty expertise, and where we can develop quality programming and essential resources needed for program sustainability
- e. Develop an Indigenous Studies Major to complement the existing Indigenous Studies Minor
- 2. Develop opportunities for UVic students to gain a better understanding of Indigenous peoples, histories and cultures, and the impact of colonization.



- a. Develop opportunities for students to gain intercultural acumen competency related to Indigenous culture and history
- b. Work with the Division of Learning and Teaching Support and Innovation and academic units to support a framework to indigenize curricula in order to enable students to gain knowledge of Indigenous epistemologies and histories
- c. Offer faculty professional development opportunities about how to indigenize and decolonize pedagogy and curricula
- d. Highlight in campus publications and promotional materials opportunities for students to learn about Indigenous histories and issues
- e. Continue to develop, identify and promote opportunities for cultural learning through land- and water-based and community learning in a range of programs and courses at the undergraduate and graduate levels

We see in this plan, as in others, actions in place to ensure that all students achieve a better understanding of Indigenous peoples, histories and cultures and impact of colonization especially those that will be interacting with and serving Indigenous communities and that educational opportunities meet the needs of Indigenous students and that the university continues to engage local Indigenous communities to ensure that development of new programs meet the needs of the community.

Faculty and Staff: This strand which addresses the need to increase recruitment, retention and success of Indigenous staff and faculty and to support research and scholarship of Indigenous faculty. It also addresses the need provide professional development and educational opportunities to non-Indigenous staff and faculty so increase their understanding of Indigenous history and culture.

- 2. Provide professional development opportunities and recognition to non-Indigenous staff to foster understanding of Indigenous history and culture.
- a. Extend access to Indigenous Cultural Acumen Training (ICAT) as a resource for front-line staff so they become more aware of the history of Indigenous peoples in Canada, including colonial policies and practices
- b. Recognize staff in their reviews and performance evaluations for their significant contributions to university activities and programming for Indigenous students
- 5. Support faculty to develop greater knowledge of Indigenous history and culture.
- a. Work with the Division of Learning and Teaching Support and Innovation to develop mechanisms that support the indigenization and decolonization of our university curricula and pedagogy and new faculty orientation programming



- b. Continue development and delivery of the Indigenous Cultural Acumen Training (ICAT) programming for faculty
- c. Encourage, and provide opportunities for, faculty to participate in professional development opportunities about decolonization

The plan, like others demonstrates clear initiatives to address the curriculum development and faculty education and support that can bring about systemic change. There is an entity - the Division of Learning and Teaching Support and Innovation that is working on developing a framework for Indigenizing curricula to further these efforts. Focus on ensuring adequate knowledge of Indigenous histories and cultures for individuals in professional programs that will be working with Indigenous peoples and communities is more evident in this plan than in others. Extensive services for students and support for faculty are evident at UVic, these are supported at least in part, by funding through the Aboriginal Services Plan initiative.

Douglas College is in the process of finalizing their first over-arching long-term Indigenization Strategy18. The strategy consists of three main objectives and eight subsidiary ones that outline the intentions to guide Douglas College in its response to the TRC's Calls to Action and the provisions of UNDRIP. The first objective addresses programming and courses and the third addresses employee education.

Express Douglas College's commitment to Indigenization and reconciliation in ways that are tangible and visible to our communities, our students, our employees and our visitors to campus

Celebrate more visibly the College's setting among traditional Coast Salish territories and peoples, integrating Indigenous history, sense of place and ways of knowing into our educational and extra-curricular activities

Increase academic programs that have an Indigenous focus, are culturally relevant in content and pedagogy, and are informed and supported by Indigenous expertise

Identify and remove employment barriers faced uniquely by Indigenous peoples to enable increased hiring of Indigenous employees

There is clear intention to engage Indigenous expertise to increase programs with Indigenous focus and to integrate Indigenous history, sense of place and ways of knowing into educational activities. These initiatives are supported by the third main objective which is concerned with employee education.

Address professional development needs of all employee groups in support of Douglas College's meaningful efforts towards Indigenization and reconciliation

Address employee professional development and training needs related to Indigenous cultural competencies, anti-racism and inclusivity, and trauma-informed practice

Address faculty and educational support staff professional development needs related to Indigenous pedagogies, courses and programs



Develop protocols and policies in support of Indigenization efforts

Although there are no specific policies currently in place, their development is underway, and faculty are being, and will continue to be, supported in their education and training to improve Indigenous cultural competencies and Indigenous pedagogies.

KPU is in the process of developing an Indigenous strategy19 in response to the TRC Calls to Action. It will be based on a gradual and thoughtful approach to indigenization of educational delivery where indigenous knowledge and teaching methods are central and programs in indigenous languages will eventually offered. Dedication to true partnerships, ongoing consultation and communication with local Indigenous knowledge keepers, First Nation communities and indigenous organizations have informed and will continue to inform the process and progress through the initiatives that aim to make KPU a culturally-safe and welcoming institution for Indigenous learners providing post-secondary education that is accessible and that meets the educational needs of local Indigenous communities. The four areas of the plan are intended to:

Create university-wide awareness of indigenous perspectives, cultures, traditions, histories and ways of knowing among all members of the university community.

Build a welcoming and supportive place to significantly increase enrolment and participation of indigenous students at KPU,

Enhance services and support for indigenous learners at the university.

Leverage the value indigenous ways of knowing can contribute to our overall educational mission.

Currently KPU is promoting understanding of Indigenous cultures through online modules, to increase capacity of faculty, staff and administration to work with and support Indigenous students.

Okanagan College (OC) is also in the process of developing an Indigenization plan20. Currently in the engagement phase, OC has created an Indigenization Task Force and is engaging local Indigenous communities and organizations and developing meaningful relationships and partnerships so that through a collaborative effort, the College can create a plan that meets the needs and aspirations of Indigenous communities and is informed by Indigenous vision and knowledge. The goals of Indigenization plan are to engage and enhance partnerships with Indigenous community members; strengthen the physical, cultural and spiritual spaces at OC; increase Indigenous knowledge and culture within curriculum, and identify potential changes to College policies, structure and processes

Initiatives in Institutions Without Indigenization Plans

Some institutions within the BC Colleges and Universities network do not have Indigenization plans but most of these institutions do have Indigenous initiatives outlined in broader institutional plans (strategic and/or academic plans). These initiatives don't have the same range and scope as those within specific Indigenization



plans but it is a positive that these issues are addressed at an institutional level in most BC institutions. In relation to program and course Indigenization, there are a few other initiatives that specifically detail approaches to course and program Indigenization that are worth noting.

At Coast Mountain College21 inclusion of Indigenous pedagogy is at the discretion of faculty members and varies within courses and programs. Many programs and courses are designed and delivered in inclusive ways that support and respect First Nations cultural expectations, include discussions on Indigenous issues and current events, and offer students opportunities to participate in cultural awareness seminars.

To support course and program Indigenization CMC has an Aboriginal, Course, Program Articulation Committee (ACPAC) that advises and guides the incorporation of First Nations culture and knowledge into courses and programs. New and revised programs and courses are examined to determine whether the course/program incorporates an appropriate degree of Aboriginal knowledge, culture, and/or pedagogy. If it doesn't, the ACPAC will review, with the developer, how the course/program can include both Aboriginal and non-Aboriginal knowledge, culture and/or pedagogy and may recommend that the course/program incorporate additional Aboriginal knowledge, culture, and/or pedagogy. Recommendations are accompanied by specific resources provided through the Centre of Learning Transformation and, when possible, a mentor to assist with the curriculum development.

North Island College22 notes their commitment to regularly engage Knowledge Holders to share with students, without claiming ownership and respecting that the knowledge is not part of the College curriculum. This practice is common among faculty in ABE, English, Nursing, Social Sciences, Humanities Departments, and the Math/Science faculty who teach Enthno Biology and Ethno Math. Having Knowledge Holders share rather than faculty, ensures that local Indigenous knowledge is shared without the risk of misappropriation of intellectual property. In addition, there is consultation around revised and new curriculum with regional Aboriginal Advisory committees

University of the Fraser Valley23 addresses course and program indigenization in their strategic plan with a goal to increase Indigenous content in programs and to develop programs, services, and research initiatives that are directly responsive to Indigenizing their Academy and a commitment to develop curriculum/courses that reflect indigenous knowledge and ways of knowing across all disciplines/programs. UFV addresses academic curriculum and programming to increase awareness and develop capacity for Indigenization and Reconciliation in response to the TRC's calls to action. These initiatives are supported resources provided through the Teaching and Learning centre as well as guidance and support from Teaching and Learning Specialist (Indigenization Speciality) and the Senior Advisor on Indigenous affairs. The Indigenous Studies Curriculum Committee is responsible for development of Indigenous Studies curriculum as well as maintaining communication with other academic units on matters of Indigenizing curriculum. UFV has also recommended the creation of a new position of Director of Indigenized Curriculum and Programming to coordinate and enhance Indigenized curriculum and programming through creation and maintenance of an inventory of relevant activities that is



publicly available and to advise on development of new programs with Indigenous content and/or perspectives and enhanced indigenization of existing programs and coordinate faculty development opportunities.

Vancouver Community College24 is supporting faculty request for education and training on ways to incorporate Indigenous ways of knowing and culture into existing curriculum with a proposal for an Indigenizing Curriculum workshop series to help create a more supportive and inclusive environment for Indigenous learners and to increase Indigenous representation around the campus.

Yukon University25 a leader in Indigenization and reconciliation has an Indigenization plan that is more institutionally integrated plan than most; all students, are required to achieve core competency in knowledge of Yukon First Nations. Students are required to take a First Nations course and almost all programs meet core competency requirements (Appendix B). Close to 100% of all employees have also achieved core competency. The First Nations Initiatives Department (FNI) an arm of the President's office is dedicated to integrating an understanding and awareness of the culture, traditions and history of Yukon First Nations. All new or significantly changed curriculum must be reviewed by the First Nations Initiatives department before being submitted to Academic Council.



Appendix D - Resources for Students and Indigenous Team Composition

Resour ce	Camosun College	Capilano University	Coast Mountain College	College of New Caledonia	College of the Rockies	Douglas College	Kwantlen Polytechnic University	Langara College	North Island College	Northern Lights College	Okanagan College	Selkirk College	Simon Fraser University	Thompson Rivers University	University of British Columbia (O)	University of British Columbia (V)	University of the Fraser Valley	University of Northern British Columbia	University of Victoria	Vancouver Community College	Vancouver Island University	Yukon University
Indigenous Centre for education/O ffice of Aboriginal Education and Engagement /institute of self determinati on	x												x	x		x			x		x	x
Tutors	х	х		х									х	х		х		х		х		
Indigenous Peer Mentorship		х			х		x				x		x	х	х	x	x	х	x			
Indigenous Student Services ¹	х	х		х	х	x	x	х	х	х	x	x	x	х	x	x	х	х	х	х	х	х
Elders in Residence or Elders Program	Х	X		х			x	x	X		x	x	x	х		x	х	х	х	х	х	x
Indigenous Advisors/ac cess coordinator s	x		х		х			х	х		х	х	х	х	х	х	х	х	х	х	х	х
Aboriginal/i ndigenous Scholars									х		x			х		x						х
Guest Speaker Series												х						х				
Library Resources	х					х							х			х	х			х		х
Resource center/Indig enous Student Centre				х												х	х	X				х



Aboriginal Gathering Place					x	×	:	x	х	x	x		х	x	x	х	x	х	X	x	.)	x	3
Indigenizati on Plan	х					х	:	x				х	х	х	х	х	х			х			T
Reso urce	Camosun College	Capilano University	Coast Mountain College	College of New Caledonia	College of the Rockies	Douglas College	Kwantlen Polytechnic University	Langara College	North Island College	Northern Lights College	Okanagan College	Selkirk College	Simon Fraser University	Thompson Rivers University	University of British Columbia (O)	University of British Columbia (V)	University of the Fraser Valley	University of Northern British Columbia	University of Victoria	Vancouver Community College	Vancouver Island University	Yukon University	
Indigeno us Centre for educatio n/Office of Aborigin al Educatio n and Engagem ent/Insti tute of self determi nation	x												х	×		x			х		х	x	
Tutors	х	х		х									х	х		х		х		х			
Indigeno us Peer Mentors hip		х			х		х				x		х	х	х	х	х	х	х				
Indigeno us Student Services ¹	x	х		х	х	х	x	x	x	х	x	х	х	х	х	х	х	х	х	х	х	x	
Elders in Residenc e or Elders Program	x	x		х			х	x	×		x	х	x	x		x	x	х	х	х	х	x	
Indigeno us Advisors /access coordina tors	X		Х		X			x	X		X	X	X	X	X	х	X	X	X	x	X	x	
Aborigin al/indige nous Scholars									x		x			x		x						x	
Guest Speaker Series												×						х					
Library Resource	х					х							х			х	x			х		x	
Resource center/I ndigeno us Student Centre				х												х	х	x				х	



Aborigin			х	х	х	х	х	х		х	х	х	х	х	х	х	х	х	х	х
al																				
Gatherin																				
g Place																				
Indigeniz	х			х	х				х	х	х	х	х	х			х			х
ation																				
Plan																				

1. Includes services such as – Indigenous student team, Social, academic, financial, housing, awards, services, health and cultural supports, priority admission, counselling, advocacy and liaison support with band/tribal administration, agencies and community resources, hosting cultural events

Position/Role	Camosun College	Capilano University	Coast Mountain College	College of New Caledonia	College of the Rockies	Douglas College	Kwantlen Polytechnic University	Langara College	North Island College	Northern Lights College	Okanagan College	Selkirk College	Simon Fraser University	Thompson Rivers University	University of British Columbia (O)	University of British Columbia (V)	University of the Fraser Valley	University of Northern British Columbia	University of Victoria	Vancouver Community College	Vancouver Island University	Yukon University
Indigenous Faculty Advisor	х	х																			х	
Community Engagement Facilitator	х	х					х			х				х	х			x	х			
Indigenous Recruitment Advisor		х												х					х			
Student Success Facilitator		х		Х	х									Х								
Director (Ind. Ed. and affairs, Indigenization, Ind. Strat and reconciliation)	х	x	x	x	x								x		x	x			x			
Special Projects advisor		х																				
Aboriginal Relations and Executive Advisor to the president			х											х		х			х			
Indigenous Education/student Advisor					x	х		х	x		х		х		х	x		x	X	X	х	х
Manager, Ind. services for students				х			х							х				х				
Advisory Committee	х	х	х	х		х	х		х					х				х	х	х		х
Indigenous Student Council/association/Team		х					х									х						
Indigenous Coordinator/Advisor	х			х		х				x	x					х	х	x	х		х	
Aboriginal Ed Co									х		х											
Indigenization Task Force/Committee	Х			Х							х					х	х					
Teaching and Learning Specialist	X																х		х			



(indigenization)/Learning support												
Ind St. Curriculum Committee									х			
Chair, Indigenous Programs	х											
Indi. Initiatives Coordinator										х		
Dean of Indigenous Initiatives											Х	

Table 5. Staff and Faculty composition of Indigenous Teams at various institutions across BC. Those in orange print are those with funding through the Aboriginal Services Plan.



Appendix E – Research Funded Through the SFU Indigenization Strategic Initiative

A summary of one of the projects funded in response to the calls to action laid out in the Walk This Path with Us Report. The project falls under the Curriculum Innovation and Indigenization cluster of projects and is funded through the Disrupting Colonialism through Teaching: An Integrated Seminar Series and Grants Program. This gives some specific examples as to how a science course can be Indigenized, incorporating Indigenous epistemology, content and pedagogy.

Retrieved from: https://www.sfu.ca/istld/faculty/grant-programs/projects/DT/G0272.html

Decolonizing the Scientific Method in a First-year Breadth Science Course

Grant program: Disrupting Colonialism through Teaching: An Integrated Seminar Series and Grants Program

Grant recipient: Nienke van Houten, Faculty of Health Sciences

Project team: Mark Lechner and Ian Tietjen, Faculty of Health Sciences, and Stephen Thomson, research

assistant

Timeframe: September 2018 to January 2020

Funding: \$6000

Course addressed: HSCI 100 – Human Biology

Description: We plan to design a set of lessons that provides a counter-narrative to the dominant Western or Eurocentric biomedical science model. The module will be implemented in HSCI 100 - Human Biology and will focus on answering the question "how do we know?" and will broadly compare and contrast the "classic" scientific method and local Indigenous knowledge gathering approaches. Students will also consider how the environment (and to some extent culture) inform and influence these practices. The context for this module will consider how knowledge is gained with respect to the use of medicinal or native plants in both Indigenous and Western contexts. At SFU, we have the resource of a western academy as a model for the scientific method and the traditional lands of Burnaby Mountain to explore Indigenous knowledge building systems.

Questions addressed:

- How do students describe the similarities and differences between a Western/Eurocentric approach to science and an Indigenous approach to science or way of knowing?
- To what extent and in what ways are students able identify examples of good and bad Western/Eurocentric or Indigenous science and knowledge gathering practices?



- What misconceptions do students have about Western/Eurocentric approach to science and an Indigenous approach to science or way of knowing? And how do they change over the semester?
- Are students able to identify how knowledge systems are shaped by their history, environment, and culture?
- Do students achieve or increase an aggregate systemic view of the human body?
- Do students gain an affective change in how they view the relationship between their bodies/health and the local environment?

Knowledge sharing: We will use the Undergraduate Studies Committee in the Faculty Health Sciences (FHS), Faculty Council and special events organized around teaching and learning initiatives in FHS to share our findings. This has been a routine practice for the TLDGs undertaken by faculty in FHS.

Our study findings could impact how other natural science courses and instructors approach the way in which they cover science, human biology and human health. The project does fit within the larger goals of the FHS curriculum renewal and its upcoming five-year Academic Plan, which includes items found within the recommendations from the SFU Aboriginal Reconciliation Council. These recommendations and plans call for indigenizing and decolonizing our curriculum, of which "Human Biology" is one element. A modified "Human Biology" class as we are proposing may be suitable for the SFU Aboriginal University Preparation Program.



Appendix F – Sample Course outline and Course Descriptions of Science Courses with Indigenous Content.

The following provides some examples of Science courses with Indigenous content evident in course outlines and course descriptions. Where possible, full course outlines are shown and Indigenous content is highlighted. Course descriptions are given for institutions that do not have publicly available course outlines.

Northern Lights College

BIOL 127 - Botany Basics

From marshlands to grasslands to forests, plants make up the diverse communities that are an integral part of a complex system. This course will focus on the structure of various plants, how plants grow, the effects of environmental factors on plant growth, plant classification and identification, the use and significance of native plants, plant ecology, inventory methods, and the cultural significance to indigenous people to establish a holistic approach to the discipline of botany.

Course Content:

Overview & Taxonomic Principles

- Importance of Botany: Scope, Implications & Evolution of Discipline
- Ethnobotany perspective
- Incorporating botany in all disciplines of practice
- Scientific taxonomy: examine dichotomous keys and proper format of scientific names
- Other forms of taxonomy (invasive plants, forestry, commercial crops)
- Indigenous taxonomy and plant groupings
- Role of language in naming and classification of plants

Plant Morphological Structures

- Floral types and structures



- Indigenous significance and use of florals
- Leaf types, shapes, surfaces
- Leaf shape and control of invasive species using herbicides
- Fruit types
- Indigenous harvesting and use of fruits and seeds
- Internal structures
- Floral parts and influence on plant use by people and animals
- Indigenous significance and use of leaves
- Grazing pressure, invasive species, weather extremes

Plant Identification & Field Application

- Plant families (Scientific and Indigenous Perspective)
- Tree identification, native and cultivar
- Shrub identification, native and cultivar
- Wildflower and grass identification, native and agronomic
- Emerging plant identification
- Identification of invasive species

Root Function

- Plant cell structure
- Root morphology
- Root functions, systems, and growth
- Specialized roots of invasive species
- Indigenous collection and use of roots

Basic Plant Physiological and Growth Processes

- Photosynthesis and respiration



- Transport of water and material in plants
- Indigenous collection and wildlife use during transport phases
- Plant hormone systems
- Physiology of growth
- Significance of maintaining a balance and wellness of plants for indigenous people

Environmental and Site Factors on Plant Growth

- Effects extreme temperatures, moisture levels and other limiting factors on plant growth
- Measures of environmental and site factors
- Evolving natural sites and highly disturbed sites
- Impacts of industrial contaminants on plant growth (salts, minerals, hydrocarbons, herbicides)
- Plant adaptations to site conditions and impacts on wildlife and indigenous people

Site Suitability Factors & Considerations for Plant Growth

- Key factors influencing the type of plant to grow in an area
- Managing, documenting & evaluating Insolation
- Soil type and the influence on plant establishment
- Utilizing native plants in reclamation

Basic Concepts of Plant Ecology

- Concept of succession
- Ecological equivalence and amplitude
- The edatopic grid
- Indigenous knowledge for reclamation and the natural system perspective

Use basic techniques to measure and calculate plant characteristics

- Compass, dbh tape, and clinometer
- Nested quadrats and nearest neighbour techniques



- Calculate tree density and height
- Holistic approach to documenting baseline assessments, inventory, reclamation, and planning

Learning Outcomes:

- Demonstrate approach to botany with scientific fundamentals and an indigenous perspective
- Identify plant morphological structures
- Describe plant physiology and growth processes
- Describe role of environmental & site conditions on plant growth (native & cultivars)
- Demonstrate use of dichotomous keys & ability to identify some local species
- Use basic techniques to measure and calculate plant characteristics
- Identify native plants and their indigenous uses
- Link plant communities to habitat use
- Describe how indigenous plant knowledge complements reclamation
- Identify invasive, agronomic plants (emergent/mature stages)
- Apply the distribution and density coding, field guide to forested ecosites and other applicable field assessment tools

FRST 225 - Forest Ecology

Forest Ecology provides students with a thorough understanding of the natural processes that regulate the structure and function of forest ecosystems at the tree, stand, and landscape scale. The material covered in the course constitutes the ecological basis for silviculture and forest management, with a focus on reclamation occurring in forested areas. The emphasis will be on boreal forests with examples from other regions.

Course Content:

Introduction - what is forest ecology



- Define forest ecosystem
- Describe importance of Forest Ecology in today's world
- Describe the role of forests in Global Ecology
- Describe environmental functionality of forests
- Explain ecosystem services provided by forests

Biomes

- Explain biome, and their diversity
- Identify different forest biomes of the world and recognize different forest landscapes
- Describe boreal forest biome
- Explain forest structure and resources use

Forest ecosystem dynamics/ temporal and spatial changes in forests at various scales

- Explain environmental gradients in forest ecosystem
- Describe forest variation along an environmental gradient

Explain Vegetation Resources Inventory (VRI)

- Explain B.C. Land Cover Classification Scheme

Energy flow and Nutrient Cycle

- Explain source sink concept
- Describe source sink functions with respect to carbon and nutrients
- Evaluate effect of environmental parameters to plant functioning
- Describe water transport in plants and associated mechanism
- Define nutrient cycling
- Explain mechanistic processes driving the cycling of carbon and nutrients in forested ecosystems

Forest Ecophysiology

- Describe Forest Ecophysiology



- Describe various ecophysiological methods and techniques in forest research

Forest Community Ecology

- Explain principles of Community Ecology
- Describe ecological hierarchy
- Explain biodiversity and ecological niche
- Describe importance of forest ecology in forest resource management

Natural disturbances and Forest health

- Describe the factors that affect forest health
- Explain the relationship between climate change and Forest health from British Columbian perspective
- Describe the opportunities and challenges faced by British Columbia's forests in changing climate
- Describe BC's Forest Carbon Initiative

Applied Forest Ecology

- Describe silvics and functional ecology of tree species
- Explain forest succession, stand dynamics, growth and yield modelling
- Explain silvicultural systems and forest conservation ecology
- Define old growth forests
- Describe Area Based Analysis
- Describe Cumulative Effect Assessment

First Nations Perspective

- Describe the Indigenous use of and relationship with forests
- Define Traditional Ecological Knowledge (TEK) and its importance
- Provide examples of integrating TEK and Science in Natural Resource Management

Learning Outcomes:



The goal of this course is to familiarize students with the fundamental concepts of forest ecology and forest management.

Upon successful completion of this course, in addition to acquiring understanding of important ecological concepts, students will be able to:

- Describe the biotic and abiotic components of forest ecosystems.
- Explain the interactions found within a forest ecosystem.
- Describe the impact of environmental components and changes on different forest types on spatial and temporal scales.
- Practice "ecological thinking" in analyzing different abiotic and biotic factors and processes that might affect the forest issue under study.
- Review current scientific literature in Forest Ecology and apply this information to problem-solving analysis in the realms of natural resource management and stewardship.
- Present scientific arguments effectively in both written and oral communication that are backed by data, facts and reliable sources of information.
- Consider the social, cultural, and traditional value perspectives in environmental issues related to Forest Ecology; and apply holistic, integrated, and moral dimensions in finding solutions.
- Improve technical writing and speaking skills

WATR 250 - Introduction to Freshwater Resources

An introduction to the science and practice of freshwater management with a focus on north-east BC watersheds and a range of applications for working in industry, local governments/First Nations and community organizations. The course is presented with a balance of perspectives, traditional knowledge integration and cross-cultural awareness to understanding basic principles and concepts of hydrology. It then covers key features and functions for understanding and maintaining a healthy watershed including riparian zones, wetlands, and water bodies are covered. Key concepts in water resource science related to limnology, surface/groundwater flows and quality protection are explored with a preliminary opportunity to apply field measurement techniques. Local issues and activities from various perspectives are presented with particular attention to the practice of source water and aquatic habitat protection, regulatory considerations and integrated water management.



Course Content:

Introduction to Water Science

- Watersheds, water cycles and water balance
- Contemporary issues in water management
- Global to local Indigenous perspectives on water
- Hydro-ecosystems and traditional ecological knowledge
- Water stewardship activities in the Peace

Riparian Zones

- Riparian area values and functions
- Fish management
- Stream classification system
- Stream habitat assessment

Wetlands

- Wetland features and classification system
- Wetland stewardship and enhancement
- Regional issues in wetland conservation

Applied Hydrology

- Flow measurements
- Building a stage curve
- Establishing a flow monitoring network
- Regional applications in surface hydrology
- First Nations watershed management experiences

Field Applications



- Community lake stewardship
- Drinking water treatment
- Groundwater monitoring
- Stream gauging
- Industry water issues and best practices

Introduction to Limnology

- Lake ecology fundamentals
- Stewardship practices
- Lake monitoring
- Regional issues and practices in lake stewardship

Groundwater management

- Aquifer classification, risk assessment and protection
- Regional applications in ground water monitoring for oil/gas development
- Groundwater monitoring techniques

Water Quality

- Protection quality standards and guidelines
- Ground/surface quality trends and issues
- Source Water Protection Plans
- Sampling procedures

Water regulation and management

- Water legislation framework
- Water sustainability act
- The North-east Water Strategy
- Towards watershed governance



Integrated water management

- Regional issues in climate change adaptation
- Aboriginal perspectives and experiences
- Water use monitoring and allocation
- Municipal and rural source water treatment and protection

Learning Outcomes:

Working within interior freshwater systems in a technical support role, the student will be able to:

- Identify a range of hydro-ecosystem types and component processes for healthy watershed function;
- Compare various perspectives on water including the role and application of indigenous knowledge and experiences;
- Identify key features of watershed degradation and restoration;
- Describe riparian zones, streams, wetlands and aquatic life relevant to undertaking land reclamation;
- Articulate public interest issues and solutions as they relate to community and regional water stewardship objectives;
- Analyze integrated water management issues of interest to industry, communities, First Nations and regulatory agencies
- Understand legal constraints, multiple resource values and water use objectives related to watershed restoration;
- Identify office-based referrals for water-related resource assessments to support land reclamation;
- Identify key factors in support of regulatory compliance
- Identify best-practices for integrated water management in industrial operations.

LAND 227 - Wildlife Habitat Conservation

The conservation of wildlife habitat is an essential component of wildlife management and remains a priority for provincial and federal governments, industry, non-profit organizations as well as indigenous communities. This



course addresses the concepts and management of wildlife habitat as well as the habitat protection measures designed to reduce potential effects of industrial development on wildlife including species at risk. The course emphasizes ecological processes and applied aspects of wildlife habitat relationships including habitat assessment as well as the response of wildlife populations to anthropogenic disturbance with a focus on oil and gas development and forest management. The cultural significance of wildlife to indigenous communities including the contribution of traditional knowledge to wildlife habitat conservation is examined using case studies.

Course Content:

Introduction to Wildlife Habitat

- Define and describe the process of wildlife management
- Describe the role habitat plays in wildlife conservation and management
- Describe the various government agencies and partners responsible for managing wildlife in Canada including the legislation and regulations that protect wildlife habitat in British Columbia
- Summarize the history of wildlife management and explain how it is has informed present management practices legislation and regulations
- Describe the various government agencies and partners responsible for managing wildlife in Canada and British Columbia
- Identify provincial and federal legislation and regulations designed to protect wildlife and wildlife habitat

Social and Cultural Values of Wildlife

- Describe various ways people value wildlife (societal values)
- Describe the cultural significance of wildlife and wildlife habitat to indigenous communities
- Explain how Aboriginal Traditional Knowledge (ATK) can be used to complement the assessment and protection of wildlife habitat

Defining Wildlife Habitat

- Define and explain habitat terminology (i.e., habitat use, selection, availability, quality)
- Define the components of habitat and the influence of vegetation patterns and the physical environment on habitat



- Recognize and discuss the importance of escape terrain to mountain ungulates

Demographic Consequences

- Describe how demographic parameters affect population growth rates
- Describe habitat-population relationships (e.g., importance of multiple habitats to meet species needs across life stages)
- Differentiate between individual and population level effects
- Describe how wildlife habitat can be affected indirectly due to anthropogenic noise and light

Managing Wildlife Habitat

- Describe and compare a species-specific and ecosystem management approach to maintaining biodiversity
- Discuss the challenges associated with managing wildlife habitat and monitoring species
- Define adaptive management and explain how this approach can be used to manage and monitor wildlife

Key Wildlife Habitats and Features

- Describe key wildlife habitats (e.g., old growth forest, riparian, wetlands) and species that depend on them
- Describe the objectives and management practices in designated Wildlife Habitat Areas (WHA), Ungulate Winter Ranges (UWR) and Old Growth Management Areas (OGMA)
- Discuss the importance of thermal and snow interception cover to wintering ungulates
- Identify and discuss the importance of maintaining wildlife habitat features (e.g., nests, mineral licks, wallows)

Wildlife Habitat Assessment

- Apply desktop assessment methods to identify key wildlife habitats and wildlife species occurrence using online tools such as CDC iMap and BC Species and Ecosystems Explorer
- Develop a Species Account and evaluate habitat suitability (field assessment) using the BC Wildlife Habitat Assessment Form and Wildlife Habitat Ratings Standards

Habitat Loss and Degradation

- Differentiate between habitat loss and fragmentation
- Define edge effect and describe the process of habitat fragmentation



- Discuss the implications of small patch size on interior forest conditions. Differentiate between individual and population level effects
- Explain the importance of defining habitat quality to describe species abundance and occupancy
- Describe how wildlife habitat can be affected indirectly due to anthropogenic noise and light

Habitat Fragmentation and Corridors

- Define landscape ecology, fragmentation and corridor
- Discuss the importance of maintaining habitat linkages and connectivity in industrial landscapes
- Explain the importance of identifying wildlife movement and migration corridors to wildlife populations

Disturbance and Succession

- Describe the effects of disturbance and succession on wildlife habitat (e.g., fire)
- Discuss the importance of spatial and temporal scales of disturbance and succession
- Recognize the variability of post- disturbance succession (i.e., wildlife habitats might not return to predisturbance conditions)

Wildlife Habitat and Forest Management

- Evaluate the potential effects of forest harvesting and silvicultural practices on wildlife habitat
- -Define silvicultural systems and discuss how they affect wildlife habitat (i.e., forest structure and composition)
- Describe the influence of horizontal and vertical structure on wildlife species diversity
- Define Sustainable Forest Management
- Discuss stand-level and landscape-level approaches to maintaining biodiversity
- Recommend best management practices to reduce potential effects of forest harvesting on wildlife (e.g., wildlife tree retention)

Energy Development and Wildlife

- Discuss the potential effects of energy development on wildlife habitat including oil and gas, coal mining, hydroelectric and renewable resources
- Differentiate between direct and indirect effects



- Describe how various wildlife species respond to oil and gas infrastructure including roads, well pad development as well as potential sensory disturbance associated with compressor stations

Cumulative Effects

- Define cumulative effects and explain the various ways cumulative effects occur
- Describe the British Columbia Cumulative Effects Framework

Mitigation Planning

- Describe and explain the mitigation hierarchy (i.e., avoid, minimize and restore)
- Apply best management practices (BMP) to protect wildlife habitat (e.g., timing windows, pre-construction surveys)
- Describe the components of a Wildlife Mitigation Plan
- Identify the constraints of operating in designated wildlife habitats (e.g. WHAs)
- Define zone of influence
- Describe boreal caribou mitigation to reduce potential effects of linear development (i.e., pipelines and seismic lines)

Wildlife Habitat Restoration

- Define wildlife habitat restoration
- Discuss the principles and challenges related to wildlife habitat restoration
- Describe the components of an effective wildlife habitat restoration plan
- Explain the constraints related to wildlife habitat restoration (e.g., ecological, financial)
- Increase awareness and describe how traditional knowledge can be used in wildlife habitat conservation and restoration

Learning Outcomes:

- Define and describe the process of adaptive management as it relates to wildlife habitat conservation
- Describe the legislation and regulations as well as habitat protection measures designed to protect wildlife habitat in British Columbia



- Describe the cultural significance of wildlife to indigenous communities and how traditional knowledge can be integrated into a framework for environmental stewardship and wildlife habitat conservation
- Describe the habitat requirements of selected wildlife species that occur in western Canada with an emphasis on species that occur in the Peace Region
- Apply habitats assessment methods to evaluate habitat suitability for various species
- Discuss how potential land use activities (e.g., oil and gas, forestry) affect wildlife habitat and populations
- Define and discuss the concepts of habitat fragmentation and corridors
- Apply mitigation measures and describe best management practices to reduce potential effects of industrial development on wildlife habitat with an emphasis on oil and gas activities and forest management
- Describe the key components of a wildlife habitat restoration plan and discuss ways to improve effectiveness of restoration efforts
- Compare and contrast traditional knowledge and western science-based methods used to inform woodland caribou recovery efforts

Coast Mountain College (Course descriptions – course outlines not available online)

ACE 134 Fishes of the Pacific Northwest Rearing

This course will introduce students to the ecology, physiology, life cycles, migration characteristics, identification traits, fisheries and management practices for key fish species that are harvested in commercial, recreational and Aboriginal fisheries in Northwest British Columbia, with particular emphasis on the different species of Pacific salmon. This course will outline key identifying characteristics of salmon, trout and key non-salmonid species, including groundfish, Pacific herring, and eulachon. This course will cover in-field enumeration and biological sampling techniques for salmon and other fish species. During the field component of this course, students will observe and participate in fisheries research projects coordinated by local conservation, government and First Nations organizations.

GEOG 222 Economic Geography

Economic Geography investigates the concepts, theories, and principles which determine the spatial arrangement and organization of economic activities and processes. A Global approach is taken, emphasizing



the interdependencies of local and regional economies within multi- national settings, including the spatial patterns of economic success and the on-going processes of globalization. This course is set in the context of Northwest British Columbia, and examines the roles that corporations play in resource extraction and local economies. Globalization processes will be contrasted with traditional First Nations economies, and, using regional examples, how communities and First Nations groups relate to and interact with economic processes. This course may include a field study component, which examines local industries as well as traditional economies.

GEOG 227 Ethnogeography of Northwest BC

This course will examine how the different cultures in northwestern British Columbia provide unique perspectives on the relationship between people and the environments they inhabit. An overriding theme of this course will be the power and idea of Land and Place from both a geographical and cultural perspective. In addition, the course will introduce territorial land claim issues and First Nations rights and title as applied to activities affecting local environments.

Simon Fraser University (Course descriptions – course outlines not available online)

Introduction to Ethnoecology in Indigenous Studies

Through the interdisciplinary lens of ethnoecology, this course is an exploration of ongoing, hard-earned and reciprocal relationships between people and their environment. This course considers the cultural underpinnings of perception and interaction with landscape and ecologies - as one way to appreciate issues of sustainability and diversity in a global context. Students with credit for FNST 232 may not take this course for further credit.

Ethnobotany of British Columbia First Nations

This course is an introduction to the study of plant knowledge and use by First Nations peoples in British Columbia. It provides students with information about the role of plants in First Nations' cultures including such areas as foods, medicines, technology, ceremony, ecological indicators, and within First Nations' knowledge and classification systems. Special focus may be placed on the ethnobotany of one or more Aboriginal groups or culture areas. Students with credit for FNST 322 may not take this course for further credit. Breadth-Science.

Thompson Rivers University (Course descriptions – course outlines not available online)



GEOG 2230 The Regional Geography of British Columbia and Yukon

Students explore the emergence of British Columbia in the context of Indigenous history, colonial interactions, the modern nation-state, and emerging concerns about social and economic sustainability in a global economy. British Columbia's physical geography, its evolving human-nature adaptations, and the emergence of new cultural, political, and economic organisation are introduced through survey lectures and analysed through explorations of case studies of distinct sub-regional processes and concerns. Note that students cannot receive credit for both GEOG 2230 and GEOG 2231

University of British Columbia (Okanagan) (Course descriptions – course outlines not available online)

INDG 307 Traditional Ecological Knowledge

Shows how human life depends on complex systems of cultural knowledge about the natural world. Indigenous people's biological classification and nomenclatural systems, ethnobiology, and Indigenous explanatory models of environmental systems and the application of this knowledge in practice. [3-0-0]

University of Victoria (Course descriptions – course outlines not available online)

ES 200 - Introduction to Environmental Studies

Introduction to the symptoms and sources of environmental problems and approaches to resolving them. Students will apply their understanding through a distinctive interdisciplinary exploration of three main themes: ecological restoration (the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed), political ecology (the theory and practice behind sustainability) and ethnoecology (the study of the relationship between people and their habitats).

ES 321 - Ethnoecology

Environmental knowledge systems of indigenous and other local peoples are increasingly recognized as having relevance in understanding and documenting biological diversity and conservation and in undertaking ecological restoration. The different aspects of local and traditional ecological knowledge and their relationships to



western academic knowledge are reviewed and the issues and requirements for applying local knowledge in environmental sustainability are explored.

ES 421 - Ethnobotany: Plants and Human Cultures

An introduction to the study of the relationship between plants and human cultures, with a focus on the indigenous peoples and environments of northwestern North America.

Use of plants as foods, materials and medicines, plant nomenclature and folk classification, and the role of plants in religion and mythology are topics covered. There will be one or more field trips.

ES 423 - Traditional Systems of Land and Resource Management (Also ER 326)

The role of traditional ecological knowledge in the understanding and documentation of the biodiversity of natural systems and their restoration. Examination of how restoration strategies can benefit from the close relationship of Indigenous Peoples to their local environments, and from their knowledge of plants and animals, their habitats and ecological interrelationships, as well as from traditional land and resource management strategies.





CAMOSUN COLLEGE School of Arts & Science Department of Social Sciences

GEOG-105-001 Geography of British Columbia Winter, 2020

COURSE OUTLINE

The course description is online @ http://camosun.ca/learn/calendar/current/web/geog.html

□ Please note: This outline will <u>not</u> be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

1. Instructor Information

(a)	a) Instructor		Hilary Sandford	
(b)	b) Office hours		M-Th 10:30-11:30	
(c)	Location		Fisher 342C	
(d)	Phone	250-3	70-3393	Alternative:
(e)	E-mail		sandford@camosun.bc.ca	

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

- 1. Distinguish between regional and topical geography.
- 2. Use appropriate techniques and information sources in the geographic study of British Columbia.
- 3. Describe the physical and human geography of British Columbia.
- 4. Describe and analyze, using geographic themes and approaches, topics related to the Geography of British Columbia, such as resource management and use, settlement patterns and development, and regional identities and issues.

3. Required Materials

Text: There will be no official text for this course and instead we will be using a series of articles from the BC Journal.

4. Course Content and Schedule

<u>Lectures</u>: There will be up to four hours of lecture per week, but normally, only two on Mondays. The whiteboard will be heavily utilized and digital images will augment the traditional lecture style. I am choosing to structure this course along four themes: the physical characteristics of the province, the primary economic sectors and associated politics, the cultural past and present, and the social norms that are uniquely British Columbian.

<u>Assignments</u>: There are ten assignments in the course all of which focus on specific facets of each of the province. You'll be given a week, usually, to complete a series of questions that pertain to a topic or a locale. Computer access will be required for most of the assignments as you will be referring you to a variety of websites and data sources. <u>Late submissions will not be accepted</u> once marked assignments have been handed back unless an alternate arrangement has been made.

<u>Pick-a-Town-Any-Town Project</u>: You will be asked to choose a town in British Columbia – small or large, urban or rural – and prepare a five-page brief summarizing its attributes. One photo will be required and the rest of the text will address the physical, economic, political and social personality of your town.

Template Published by Educational Approvals Office (VP Ed Office)
Page 1 of 4

1/31/2020



Readings: A selection of readings will be assigned throughout the term to introduce you to the scholarship found in <u>BC Studies: The British Columbia Quarterly</u>. I will ask you to summarize each of the readings and submit your compilation at the end of the term.

<u>Tests</u>: There will be three tests this term, the first one on **Wednesday, February 5**th, the second on **Wednesday, March 18**th and the third on **Wednesday, April 8**th. Each test will have a selection of short-answer, multiple-choice, and short essay-type questions. Attendance is mandatory and illness must be declared <u>before</u> the exam begins and confirmed with a doctor's note for a re-sit to be possible. There is no final exam during Exam Week for this course.

2020 COURSE SCHEDULE: Geography 105-001

Week of:	Monday	<u>w</u>	/ednes	day
Jan 6		Course Concepts		Lab 1: BC Property Values
Jan 13		Physical – Topography		Lab 2: BC Forests
Jan 20*		Physical – Bio Regions		Lab 3: Caribou in BC
Jan 27		Physical – Climate		Lab 4: Temperature & Precipitation
Feb 3		Review Class		TEST #1
Feb 10		Resources - Oil, Gas & LNG	i	Lab 5: Coal Mining in BC
Feb 17		Reading Break		Reading Break
Feb 24		Resources – Hydro & Forestr	ry	Lab 6: Renewable Energy
Mar 2		Resources – Fishing & Agricu	ulture	Lab 7: BC Bud
Mar 9**		Politics – Then & Now		Lab 8: Urban vs. Rural
Mar 16		Review Class		TEST #2
Mar 23		Cultural – First Nations		Lab 9: Nisga'a Treaty
Mar 30		Cultural – Immigration		Lab 10: Chinese Restaurants
Apr 6		Social – The Left Coast		TEST #3

^{*} January 20th, 2020, is the fee deadline for this course and the last day to drop for refund

5. Basis of Student Assessment (Weighting)

The final mark for the course will be determined by student performance in each of these components.

Assignments	25%
Test #1	20%
Test #2	20%
Test #3	15%
Readings	5%
Pick-a-Town Project	<u>15%</u>
•	100%

6. Grading System

X	Standard Grading System (GPA)
	Competency Based Grading System

Template Published by Educational Approvals Office (VP Ed Office)
Page 2 of 4

1/31/2020

^{**} March 12th, 2020, is the last day to drop this course without penalty



7. Recommended Materials to Assist Students to Succeed Throughout the Course

<u>D2L</u>: I use D2L, a learning support software, extensively in this course. It is a user-friendly site that allows you to access lecture notes, hand in your assignments digitally, track your mark, and be alerted to upcoming due dates or changes in assignments. I strongly encourage you to use this support site for this course.

8. College Supports, Services and Policies



Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ http://camosun.ca/about/mental-health/emergency.html or http://camosun.ca/services/sexual-violence/get-support.html#urgent

College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at http://camosun.ca/

College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at http://camosun.ca/about/policies/. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

A. GRADING SYSTEMS http://camosun.ca/about/policies/index.html

The following two grading systems are used at Camosun College:

1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	Α		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
СОМ	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.

Template Published by Educational Approvals Office (VP Ed Office)
Page 3 of 4

1/31/2020



DST	The student has met and exceeded, above and beyond expectation, the goals, criter or competencies established for this course, practicum or field placement.	
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.	

B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at http://camosun.ca/about/policies/index.html for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description		
I	Incomplete: A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.		
IP	In progress: A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.		
CW	Compulsory Withdrawal: A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.		



snaweyał lelam.

Langara.
THE COLLEGE OF HIGHER LEARNING

THE COLLEGE OF HIGHER LEARNING.

SAMPLE COURSE OUTLINE

Course Code, Number, and Title:

ABST 1207: Aboriginal Traditional Knowledge and Contemporary Science

Course Format:

[Course format may vary by instructor. The typical course format would be:]

Lecture 3 h + Seminar 1 h + Lab 0 h

Credits: 3 Transfer credit: For information, visit bctransferguide.ca

Course Description, Prerequisites, Corequisites:

This science course will integrate Aboriginal Traditional knowledge with the basic elements of the physical and biological sciences. Contemporary science will be examined and compared with Aboriginal Traditional Knowledge. The Aboriginal concepts of nature, governance, origin accounts, knowledge systems, and stewardship issues, amongst other topics, will be explored. The course will be taught from an Aboriginal perspective that is respectful of culture and Traditional Knowledge, yet attentive of the realities of contemporary science.

Prerequisites and Corequisites currently unavailable, please consult Department for details

Learning Outcomes:

Upon successful completion of this course, students will be able to:

Information currently unavailable, please consult Department for details

Instructor(s): TBA

Office: TBA Phone: 604 323 XXXX Email: TBA

Office Hours: TBA

Textbook and Course Materials:

[Textbook selection may vary by instructor. An example of texts and course materials for this course might be:}

Summer 2019:

For textbook information, visit https://mycampusstore.langara.bc.ca/buy_courselisting.asp?selTerm=3|8

sneweyeł lelem Langara College acknowledges that we are located on the unceded territory of the Musqueam people.

Page 1 of 2



snaweyał lelam.

Langara.

THE COLLEGE OF HIGHER LEARNING.

Note: This course may use an electronic (online) instructional resource that is located outside of Canada for mandatory graded class work. You may be required to enter personal information, such as your name and email address, to log in to this resource. This means that your personal information could be stored on servers located outside of Canada and may be accessed by U.S. authorities, subject to federal laws. Where possible, you may log in with an email pseudonym as long as you provide the pseudonym to me so I can identify you when reviewing your class work.

Assessments and Weighting:

Final Exam %

Other Assessments %

(An example of other assessments might be:) %

Information currently unavailable, please consult Department for details

Grading System:

Specific grading schemes will be detailed in each course section outline.

Information currently unavailable, please consult Department for details

Topics Covered:

[Topics covered may vary by instructor. An example of topics covered might be:]

Information currently unavailable, please consult Department for details

As a student at Langara, you are responsible for familiarizing yourself and complying with the following policies:

College Policies:

E1003 - Student Code of Conduct

F1004 - Code of Academic Conduct

E2008 - Academic Standing - Academic Probation and Academic Suspension

E2006 - Appeal of Final Grade

F1002 - Concerns about Instruction

E2011 - Withdrawal from Courses

Departmental/Course Policies:

This generic outline is for planning purposes only.

Page 2 of 2