

Vancouver Senate

**THE NINTH REGULAR MEETING OF THE VANCOUVER SENATE
FOR THE 2020/2021 ACADEMIC YEAR**

WEDNESDAY, 19 MAY 2021

6:00 P.M.

Via Remote Attendance

1. Senate Membership

Nominating Committee

As a result of the call for nominations issued last month, Julia Burnham and Dante Agosti-Moro are acclaimed as elected to the Senate Nominating Committee until 31 March 2022 and thereafter until replaced. (information)

2. Minutes of the Meetings of 14 April 2021 – Dr Santa Ono
(approval) (docket pages 4-33)

3. Business Arising from the Minutes – Dr Santa Ono

4. Remarks from the Chair – Dr Santa Ono

- a. General Remarks (information)
- b. 2021-2022 Budget Presentation – with Vice-President Finance & Operations Peter Smailes (information)

5. Candidates for Degrees – Dr Santa Ono

The list as approved by the faculties is available for advance inspection by contacting the Senate office.

The Chair of Senate calls for the following motion:

That the candidates for degrees and diplomas, as recommended by the faculties, be granted the degrees for which they were recommended, effective May 2021 or as otherwise specified, and that a committee comprised of the Registrar, the dean of the relevant faculty, and the Chair of Senate be empowered to make any necessary adjustments. (approval) (2/3 majority required)

6. From the Council of Senates Budget Committee – Ms Eshana Bhangu

Annual Report of the Vancouver Sub-Committee (information) (docket pages 34-36)

7. Academic Building Needs Committee – Dr Charles Menzies

Annual Report (information) (docket pages 37-39)

8. Admissions Committee – Prof. Carol Jaeger

- a. Revisions to Undergraduate Admissions Policies for Deferrals and for Advanced Credit (approval) (docket pages 40-45)
- b. Suspension of Admission to Vantage College Management Stream (approval) (docket pages 46-57)

9. Awards Committee – Dr Sally Thorne

New and Revised Awards (approval) (docket pages 55-71)

10. Curriculum Committee – Dr Claudia Krebs

- a. Curriculum Proposals from the Faculties of Applied Science, Arts, Commerce and Business Administration, Graduate and Postdoctoral Studies, Medicine, and the Peter A. Allard School of Law (approval) (docket pages 72-174)
- b. Variable Credit Courses and Workday Student Implementation (approval) (docket pages 175-177)

11. Joint Report of the Admissions and Curriculum Committees – Prof. Carol Jaeger and Dr Claudia Krebs

- a. New Program: Master of Indigenous Education (approval) (docket pages 178-412)
- b. New Programs: Doctor of Philosophy and Master of Science in Women+ and Children's Health Sciences (approval) (docket pages 178-412)

12. Library Committee – Dr Shigenori Matsui

Annual Report (information) (docket page 413)

13. Nominating Committee – Dr Paul Harrison

- a. Final Report of the Ad Hoc Committee on Student Appeals Processes and Structures (approval) (docket pages 414-421) – with former Senator Natasha Rygnestad-Stahl
- b. Committee Adjustments (approval) (docket pages 422-424)
- c. Changes to Composition of the Senate Academic Policy and Teaching & Learning Committees (approval) (docket pages 425-426)
- d. Proposals for a Committee and/or a Structure to Further Equity, Diversity, and Inclusion Considerations in Senate (information) (docket pages 427-429)

14. Research and Scholarship Committee – Dr Guy Faulkner

Establishment of the Language Sciences Institute (approval) (docket pages 430-469)

15. Teaching & Learning Committee – Dr Joanne Fox

Report on Progress on Student Experience of Instruction (information) (docket pages 470-493)

16. Tributes Committee – Dr John Gilbert

- a. Emeritus Appointments (approval) (docket pages 494-497)
- b. Call for Nominations for Honorary Degree Candidates (information)

17. Report from the Provost – Acting Provost Pam Ratner

- a. Designation of the Language Sciences Institute as a Global Research Excellence Institute (approval) (docket pages 498-501)
- b. BC Ministry of Advanced Education Return-to-Campus Primer (information) (docket pages 502-512)

18. Other Business

Section 16 (b) of the *Rules and Procedures of the Vancouver Senate* states that meetings will adjourn no later than 8:30 p.m. Regrets: Telephone 604.822.5239 or e-mail: facsec@mail.ubc.ca

Convocation

THE ONE HUNDRED AND SIXTH SPRING MEETING OF THE CONVOCATION

WEDNESDAY, 19 MAY 2021

Directly following the adjournment of the Senate

Via Remote Attendance

- 1. Call to Order – The Vice-Chancellor**
- 2. Conferral of Degrees and Awarding of Diplomas and Certificates in Absentia – The Chancellor**
- 3. Adjournment – The Vice-Chancellor**

VANCOUVER SENATE

MINUTES OF 14 APRIL 2021

DRAFT

Attendance

Present: J. M. Holmes (Vice-Chair), J. Burnham (Vice-Chair), K. Ross (Secretary), A. Szeri, S. Parker, S. Bates, J. Olson, G. Averill, M. MacDougall, B. Frank, J. Benedet J. Innes, R. Helsley, R. Yada, M. Coughtrie, S. Gopalakrishnan, K. Lo, N. Ford, R. Boushel, J. Bulkan, H. Zerriffi, J. Dierkes, A. Singh, J. J. Stewart, A. Scott, A. Collier, K. Smith, P. Choi. A. Greig, P. Englezos, S. Forwell, J. Fox, M. MacPhee, C. Krebs, C. Marshall, H. von Bergmann, C. Menzies, S. Grayston, A. Ivanov, Price, C. Jaeger, S. Pelech, S. Thorne, S. Singh, L. Stothers, J. G. Stewart, , C. F. Andrew, G. Faulkner, J. Gilbert, P. Harrison, R. Spencer, M. Tan, A. Uzama, A. Zhao, G. Tsiakos, M. Higgins, R. Topping, L. Shpeller, E. Cantiller, L. Wang, D. Goyal, X. Jiang, J. Schumacher, L. White, A. Sandhu, S. Cooper, D. Born, K. Yu, D. Agosti-Moro, E. Bhangu, S. Mehta, G. Yee

Regrets: S. Ono, S. Point, Porter, M. Aronson, Kelleher, S. Matsui, M. Kuus, A. Fischer, P. Wolf, B. Fischer, H. Leong, M. Stewart, A. Dulay, L. Burr, J. Greenman, C. Godwin, M. Lorenz, K. Khosla,

Clerk: C. Eaton

Call to Order

The Vice-Chair of Senate, Mr J. Maximillian Holmes called eighth regular meeting of the Senate for the 2020/2021 academic year to order at 6:08 pm.

Amendment to Agenda

HsingChi Von Bergmann }	<i>That the agenda be amended to strike Remarks from the Chair and add in its place a Report from the Provost on Return to Campus planning.</i>
Sally Thorne	

Approved

Senate Membership

NEW MEMBERS:

The Registrar, Dr Kate Ross, announced the following new members of Senate for terms from April 1, 2021 to March 31, 2022 and thereafter until replaced. One representative elected from each faculty, two from the Faculty of Graduate and Post-doctoral Studies, and five members at-large:

Applied Science
Laia Shpeller

Arts
Emmanuel Cantiller

Commerce and Business Administration
Leonard Wang

Dentistry
Dee Goyal

Forestry
Xiutong Tony Jiang

Graduate and Postdoctoral Studies
Jackson Shumacher
Lisa White

Land and Food Systems
Anisha Sandhu (Continuing)

Allard Law
Sebastian Cooper

Medicine
Dawson Born

Pharmaceutical Sciences
Kanika Khosla

Science
Keanna Yu

Members at -large
Dante Agosti-Moro – Faculty of Commerce & Business Administration
Eshana Bhangu – Faculty of Arts (Continuing)
Julia Burnham – Faculty of Graduate & Postdoctoral Studies (Continuing)
Shivani Mehta – Faculty of Science
Georgia Yee – Faculty of Science

NB: The Education Student Senator Position transitions in October each year.

NOMINATING COMMITTEE

The Registrar issued a call for nominations for two (2) student members of Senate to serve on the Senate Nominating Committee until 31 March 2022 and thereafter until replaced. Nominations were due by 4 pm on 30 April 2021.

VICE -CHAIR OF SENATE

Dr Ross announced that in response to the call for nominations issued with the agenda, Julia Burnham was acclaimed elected as Vice-Chair of Senate for a term of no more than one year.

Minutes of the Previous Meetings

Eshana Bhangu	}	<i>That the Minutes of 17 March 2021 be adopted as corrected:</i>
Mary McDougall		

Senator Topping was present.

Approved

Report from the Provost

RETURN TO CAMPUS PLANNING

The Vice-President Academic & Provost, Dr Andrew Szeri advised that the UBC Administration had **confirmed** that UBC was planning for a return to on-campus activity for Winter Session, Term 1, with the guidance of the Provincial Health Officer, Dr. Bonnie Henry, and the public health teams in the health authorities. Dr Szeri noted that Dr Henry has been clear that post-secondary institutions, such as UBC, should be confident that a return to on-campus instruction and increased levels of on-campus research activity can be undertaken safely and successfully. As a result, based on current immunization timelines and vaccine approvals, and with strong and effective safety plans in place, are planning for a return to on-campus activity for Winter Session, Term 1, in September.

The Provost noted that faculties were currently planning the fall course schedule, with increased on-campus instruction. He said that they were planning for as much on-campus activity as possible, subject to ongoing public health guidance, and some courses (or elements of courses) may remain online. Faculties will confirm details about the mode of delivery by the time the course schedule is finalized in mid-May.

Dr Szeri concluded in saying that as we work towards more in-person activity, UBC would continue to support our community in maintaining the preventive practices of daily health self-

assessment; hand hygiene; wearing non-medical masks; early detection and testing; and isolation, when indicated. He noted that further communication would be forthcoming.

Senator S. Singh noted that going forward we seemed to be abandoning our alternative options of hybrid or online instruction only; he asked what we would do if campus was not sufficiently vaccinated in time or if the Coronavirus further mutated and if there was an option to revert to hybrid or online if needed still.

Dr Szeri said that this was a continually evolving situation and we would be watching the number carefully. He noted that we were seeing increased hospitalizations and variants of concerns, but also immunizations on an accelerated timeline. He said that we needed to keep in close contact with Public Health Officers to understand the situation and we will make the best decisions we can as the pandemic unfolds and our highest principle must be upholding the health of our people.

Senator Menzies asked what we learned from the alleged outbreaks at Orchard Commons student housing, the fraternities, and athletics teams.

Senate recognized Vice-President, Students, Dr Ainsley Carry who replied. He noted that we were aware of a number of cases of infections in student residences, in fraternity and sorority houses, and visitors, largely in social situations. 98% of those cases were associated with fraternities and sororities. We have been issuing regular warnings about the risks of gatherings, but he noted that there was a lot of COVID-fatigue going on. Dr Carry said that contact tracing worked to address these situations and ensure that self-isolation is directed. We are confident that we have learned from this year and have a process to address this in the fall.

Senate recognized Vice-Provost Pam Ratner. She noted that we had a rapid antigen testing at Orchard Commons supported by Health Canada and the UBC School of Nursing. She noted that the cases that Senator Menzies referenced were detected by this program and we were able to contain the cluster so that it did not result in an outbreak. She noted that we were expecting to receive tens of thousands of more testing kits for this summer session.

Senator Von Bergmann noted that the BC COVID modeling group recommended cutting the variants of concern to 40% of current state. She asked if we had a plan b for the Winter Session and what would be our cut off date to make such a decision.

Senator Szeri said that as noted at a previous Senate, we needed to make that decision by mid-May, but adjustments could be made after then if absolutely necessary.

Senator Harrison asked how our fall planning would work for international students who may have challenges in obtaining study permits, vaccines, or travelling to Canada for September.

Vice-Provost Ratner said that enrolment was looking very good, with more applications than ever before. For those students who have been admitted, they have expressed a strong desire largely to be on campus while a small minority has expressed a concern with in-person learning. She noted that we were aware that it was taking much longer than usual to issue study permits. Citizenship and Immigration Canada was aware of the delays and was trying to expedite matters but we realized that some students may not have visas by September.

Senator Bates said that faculties were making plans for the fall to be flexible where possible, especially for first year students and the challenges that international students may face. We hoped to offer at least one fully-online section for each of our larger multi-section first year classes. There is also interest in the faculties for greater use of lecture capture.

Academic Policy Committee

The Chair of the Senate Academic Policy Committee, Dr Kin Lo, presented.

FACULTY OF LAND AND FOOD SYSTEMS - WITHDRAWALS, ACADEMIC LEAVE, AND LETTER OF PERMISSION

Kin Lo	}	<i>That Senate approve revisions to the Withdrawals,</i>
Anubhav Pratap-Singh		<i>Academic Leave, and Letter of Permission</i>
		<i>Calendar entry set out in the proposal</i>

Dr Lo noted that this proposal was being made to clarify language around policies and procedures rather than to make substantive changes.

Approved

REVISIONS TO POLICY V-102: EXAMINATION HARDSHIPS AND CLASHES

Kin Lo	}	<i>That Senate approve Policy V-102 Examination</i>
HsingChi Von Bergmann		<i>Hardships and Clashes to replace Policy J-102</i>
		<i>Examination Hardships and Clashes</i>

Dr Lo noted that this was largely a technical change. J-102 was the current policy; however, UBC Okanagan has decided to go its own way with amendments and thus the policy was being renumbered as a Vancouver-only policy.

Senator Yee noted that the Okanagan had changed the definition of a hardship from three exams in 24 hours to three exams in 27 hours and asked if we would be considering a similar change.

Dr Lo said that they discussed this in committee; however, they were advised by the Registrar that change was not something our current examination scheduling system could support for either campuses as it only worked in 24-hour increments.

Dr Ross said that the Okanagan made a number of changes that brought them more in line with Vancouver; however, this 27-hour change was not supported technically by our scheduling system. She advised that at this point, UBC Okanagan could not implement this policy in the examination scheduling system.

Approved

Agenda Committee

Senate Recognized the Chair of the Senate Agenda Committee, former Senator J. Maximillian Holmes.

INDIGIENOUS STRATEGIC PLAN

Sally Thorne	}	<i>That Senate Endorse in Principle the UBC Indigenous Strategic Plan 2020, as attached</i>
Gage Averill		

Mr Holmes noted that significant work had gone into the Indigenous Strategic Plan and he thanked everyone involved in its development, including Drs Moss and Lightfoot, and UBC's indigenous students, faculty and staff. He noted that endorsement meant support in principle for the plan but that specific ideas in the plan would still go through the usual Senate and Board processes.

Senator Gopalakrishnan asked what endorse in principle meant and why this was something Senate should do with a strategic plan. He said this seemed “fuzzy” without actionable items.

Mr Holmes said that we spent time with the plan proponents to decide on wording that would work for them and for the Senate. He noted that similar language was used for the University's strategic plan and other plans. This was a commitment to moving in the direction of this plan but there were hundreds of actions within it that would have to go through the usual flows of approval. This would show support for the direction of the plan but this would only be the start of our work on having the plan be implemented.

Senator Sandhu asked what committees could do to implement the plan.

Mr Holmes said that the Agenda Committee – largely the chairs of other committees – had discussed this. Committee can reach out to the Indigenous Initiatives office and the plan proponents, and some committees have already reached out to see what they can do. He suggested that the Senate can ask for updates as it needs on the plan's implementation.

Approved

ROLL CALL VOTES

Dante Agosti-Moro	}	<i>That, effective 1 September 2021, Section 22(a) of the Rules and Procedures of Senate be amended as follows: Voting on ordinary business and motions is normally by roll call vote. A member may request at any time through a motion that a secret ballot vote be conducted. Such a motion requires a simple majority in the affirmative to pass.</i>
Paul Harrison		

The Vice-Chair noted that as a change to the *Rules and Procedures of Senate*, a vote of 2/3rds in favour would be required for this motion to pass.

Mr Holmes said the Agenda Committee has considered the matter of roll call votes as two of its previous meetings. Currently, normal senate business was conducted by a show of hands, but members may propose that votes be conducted by roll call or by secret ballots. The Committee had noted that roll call votes can be a political tool, but can also increase transparency in voting as it allows constituents to see what actions senators take on issues. Mr Holmes noted that there were a variety of technical solutions being considered for both online and in-person voting, as presently a roll call vote took several minutes to record properly.

Senator Spencer asked how a secret ballot could be conducted by Zoom.

Mr Holmes noted that this option was already available and wasn't being adjusted in this proposal.

The Clerk, Mr Christopher Eaton, suggested that he would likely set up a quick Qualtrics survey.

Senator Pelech asked how this could be done efficiently, either in person or with hybrid meetings, and raised a concern with the motivations for peoples votes not being apparent by just observing how one voted. He suggested that if it was important that a vote be recorded, the current system of that requiring a motion be retained.

The Clerk noted that their previous experiment with a hybrid Senate meeting at the Okanagan campus had not gone well and he would encourage the Senate to either meet in person or entirely online.

Mr Holmes noted that one issue with voting for roll call votes is that under the Senate rules, that motion itself wasn't debatable so one couldn't motivate or debate the merits of it for specific cases.

Senator Menzies noted that as a full professor with tenure, he did not care how people responded to his votes, but that he had noted that roll call votes had been used as a tactic of shaming and control, especially with the use of social media. He said he supported the status quo.

Senator Agosti-Moro said that in online meetings it wasn't easy for constituents to see how senators were voting and that this motion encouraged accountability. He noted that the Senate was the only body at the University where his name wasn't regularly attached to his votes, and encouraged senators to support the motion for transparency and accountability.

Senator Bhangu said that if people were concerned by how roll call votes were used by a tool in the past year it could address that by applying it to all votes.

Senator Coughtrie spoke against the motion, noting that roll call votes were used as a tool for intimidating and shaming. He noted that most of Senate's votes were procedural or transactional in nature, but that for controversial subjects Senators should debate a matter robustly and take whatever positions they feel are appropriate when voting. Senator Coughtrie said that this system had been in place since the start of the University and had worked extremely well.

Senator Yee said that she appreciated the position that roll call votes should not be weaponized and said that making roll call votes the default option would remove this implication.

Senator Lo spoke against the motion, suggesting that this proposal would run contrary to the Senate's goal of encouraging more faculty to get involved given the use of social media for criticism.

Senator Uzama said that he appreciated the views of both the students and the faculty on this matter, and suggested that criticism on social media would occur regardless of roll call votes.

The Senate recognized Mr Holmes in debate.

Mr Holmes said that the concerns raised around weaponization were addressed by this proposal – it removed the use of roll call votes as a tool by making it normal for all motions. He noted that this proposal increased transparency for constituents. Mr Holmes noted that if senators felt they wanted more consultation on this, they could move to refer it back to Committee.

Senator Gopalakrishnan said that one issue was the senate generally only saw a matter once and they only had three days generally with material before a meeting. He suggested that they needed several weeks to speak with constituents about matters and then have robust debates, without that, a roll call vote is rather meaningless.

Senator Pratap-Singh spoke against the motion, noting that as an assistant professor not yet tenured, he was not as secure in his appointment as others, and that roll call votes were a tool to suppress minority opinions.

Senator S. Singh noted that he had been a senator for over a decade, and had not seem roll call votes be an issue like they had been over the past year. He suggested that this motion was premature and that Senate should reconsider the matter after it was meeting again in person, as this seemed tied up in emotion.

Senator Bhangu asked if we could change the way roll call votes were called.

The Clerk replied yes, we could set out separate rules for them.

Satish Gopalakrishnan	}	<i>That this proposal be referred back to the Senate Agenda Committee for further review and input from Senators.</i>
Anisha Sandhu		

Approved

CONVOCATION RULES

The Vice-Chair of the Agenda Committee, Dr Paul Harrison, presented.

Paul Harrison	}	<i>1) That the rules of the Convocation be suspended until 31 December 2021 to allow remote attendance at Meetings of the Convocation via such remote attendance means as deemed acceptable to the Secretary to the Convocation;</i> <i>2) That the regular Meetings of the Convocation in May and June and November 2021 be cancelled;</i>
Sue Forwell		

3) That formal meetings of the Convocation be called for May and November 2021, to directly follow the regularly-scheduled Senate meetings, such meetings to be convened via remote attendance of the Okanagan or Vancouver Senates and any other members of the Convocation who may be attending remotely; and
4) That the rules of the Convocation be suspended for the May and November Meetings of the Convocation to limit the Order of Business to a Call to Order, Conferral of Degrees and Awarding of Diplomas and Certificates in absentia, and Adjournment.

Approved

Awards Committee

The Chair of the Senate Awards Committee, Dr Sally Thorne, presented.

NEW AND REVISED AWARDS

See Appendix A: Awards Report

Sally Thorne
Guy Faulkner

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That Senate accept the new awards as listed, that they be forwarded to the Board of Governors for approval, and that letters of thanks be sent to the donors.

Approved

Curriculum Committee

The Chair of the Senate Curriculum Committee, Dr Claudia Krebs, presented.

APRIL CURRICULUM PROPOSALS

See Appendix B: Curriculum Report

Claudia Krebs HsingChi Von Bergmann	}	<i>That the new programs, new courses, new course code and revised course codes brought forward by the Faculties of Arts, Graduate and Postdoctoral Studies (Education), Medicine, Pharmaceutical Sciences, and Science be approved.</i>
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Approved

Ad-Hoc Committee to Review Student Appeal Procedures and Structures

INTERIM REPORT

See Appendix C: Interim appeals report

Senate recognized former Senator Natasha Rygnestad-Stahl, chair of the Ad Hoc Committee, who presented their interim report

Senator Harrison asked why the Admissions Committee was being addressed differently from the other appeals committees.

Ms Rygnestad-Stahl said that the Admissions Committee considered matter based on written submission rather than in-person hearings, and had around 200 matters a year before it. The Ad Hoc Committee has been considering what types of training and support would be most appropriate for that format. The Ad Hoc Committee had noted that a few admissions appeals every year did look much more like a standing appeal matters and the Ad Hoc Committee was considering how to address that.

Senator Forwell said that she appreciated the opportunity to look at this matter early. She said that Senate should adopt this model for more proposals.

Senator Bulkan asked if the Ad Hoc Committee had considered changing the rules when there is a tie.

Ms Rygnestad-Stahl said that they hadn't considered changes to that rule but they would look into it.

Senator Spencer asked why the suggestion was being made for it to be easier to remove committee chairs.

Ms Rygnestad-Stahl said that several of our conversations around appeals issues in recent years have stemmed from a lack of institutional knowledge and chairs having a lot of

influence over processes. She said that they hoped to find a way to address challenges with chairs that were less confrontational.

Senator Collier said that she also appreciated the draft being shared in time for meaningful comments. She said that this draft respected her comments and those issues shared with her by others.

Senator Pratap-Singh asked if there were specific recommendations regarding equity and diversity training for committees.

Ms Rygnestad-Stahl said that they did discuss this and made recommendations but this could be made more specific.

The Senate recessed for 5 minutes by general consent.

Reports from the Provost

STUDENT EVALUATIONS OF TEACHING

The Vice-President Academic and Provost, Dr Andrew Szeri, introduced Senator Simon Bates and Professor Moura Quayle.

Senator Bates said that this year's annual report will focus on the impact of COVID-19, revisions in quantitative metrics, and changes to evaluations moving forward. He noted that 2019W data was split into terms 1 and 2 as a result of two very different semesters. The Term 2 data showed a consistent pattern of responses, with lower level courses having on average worse responses than higher level. Response rates overall were lower while ratings were the same or slightly higher. Faculty can choose to include or exclude these evaluations for 2019W Term 2 from tenure and promotion considerations.

With respect to revisions to metrics, Senator Bates UBC was moving away from mean and standard deviations and now used an interpolated median as a measure of centrality, a dispersion index as a matter of spread, and an overall percentage favorable.

Professor Quayle set out the changes to Student Evaluations of Teaching in their revision to be Student Experience of Instruction. She noted that on March 10th, an open forum was held to get feedback. She noted that the planned implementation date for new questions was September 2021, and a new website was set up. Professor Quayle advised that further details would be provided at upcoming Senate meetings.

Senator Zerriffi asked how bias was being considered with the new questions and what the change in name meant.

Dr Bates said that bias as reported in literature and also in UBC data were focal points in the Working Group that brought forward 16 recommendations to Senate last May. To conclusion of the Working Group is that with many types of surveys, eliminating bias was impossible and our approach had to be to mitigate it as much as possible. The change in name was to reflect the reality of what students were doing: students are uniquely positioned to evaluate their experience when being taught. The evaluation of teaching requires multiple data types and needed to be a synthesis.

Senator Benedet said she was grateful for the resources and work put into instructional support over the past year.

Senator Pelech asked what was common among these courses where scores were low.

Dr Bates said that they hadn't done that analysis across UBC but he expected heads would do that across units. His sense was that there would be many reasons.

Senator Schumacher said that given that it was impossible to remove bias entirely, what policies were in place to mitigate it.

Dr Bates noted that our own data in the aggregate showed no statistically different results for gender; however, that did not mean that the lived experience for some faculty members would be the same, and we had heard instances of discriminatory or hurtful comments in text replies. Heads of departments had to synthesize various data sources into a report.

The Provost said that student evaluations and peer reviews of teaching were raw data that went into reviews, but they were commented and put into context, nuance, and understanding by department committees, heads, and deans.

Senator Zerrieffi said that best practices should be set for department heads in how to deal with bias.

The time to adjourn was extended by 30 minutes by general consent.

Reports from the registrar

ELECTIONS RESULTS

Dr Ross advised that further to the call for nominations for students of the Vancouver campus to fill the one (1) position for representatives of each Faculty on the Vancouver Senate issued on 5 February 2021, thirty (30) valid nominations have been received. The following students were elected as representatives of the Faculties on the Vancouver Senate for terms beginning on 1 April 2021 and ending 31 March 2022 and thereafter until successors are elected:

Laia Shpeller, Faculty of Applied Science

Emmanuel Cantiller, Faculty of Arts
Leonard Wang, Faculty of Commerce and Business Administration
Anisha Sandhu, Faculty of Land and Food Systems
Dawson Born, Faculty of Medicine
Sebastian Cooper, Peter A. Allard School of Law
Kanika Khosla, Faculty of Pharmaceutical Sciences
Keanna Yu, Faculty of Science

Additionally, the following students were acclaimed as elected as representatives of the Faculties on the Vancouver Senate for terms beginning on 1 April 2021 and ending 31 March 2022 and thereafter until successors are elected:

Dee Goyal, Faculty of Dentistry
Xiutong Tony Jiang, Faculty of Forestry

N.B. the Education Student Senator's term runs from 1 October 2020 to 30 September 2021.

Dr Ross further advised that the following graduate students are elected as representatives of the Faculty on the Vancouver Senate for terms beginning on 1 April 2021 and ending 31 March 2022 and thereafter until successors are elected:

Jackson Schumacher
Lisa White

Dr Ross further advised that the following students were elected as representatives at-large on the Vancouver Senate for terms beginning on 1 April 2021 and ending 31 March 2022 and thereafter until successors are elected:

Dante Agosti-Moro
Eshana Bhangu
Julia Burnham
Shivani Mehta
Georgia Yee

Finally, Dr Ross advised that the following students are elected as representatives of students on the Board of Governors for terms beginning on 1 April 2021 and ending 31 March 2022 and thereafter until successors are elected:

J. Maximillian Holmes
Georgia Yee

Adjournment

Seeing no other business, the meeting was adjourned at 9:01 pm

Appendix A: Awards Report

NEW AWARDS – ENDOWED

Campora-Hanni Scholarship in Engineering

Scholarships totalling \$2,000 have been made available through an endowment established by Garry Hanni (B.Sc. 1970) and Dr. Elisabetta Campora for outstanding domestic students in the Bachelor of Applied Science program. The scholarships are made on the recommendation of the Faculty of Applied Science. (First award available for the 2021/2022 winter session).

NEW AWARDS – ANNUAL

Catherine Chow Award in Law for IBPOC Students

Two awards of \$1,500 each have been made available annually through a gift from Catherine Chow (LL.M. 2007) for second and third-year J.D. students who identify as Indigenous, Black or a Person of Colour and demonstrate financial need. This award was established to recognize and uplift those who endure racism as IPBOC law students. The awards are made on the recommendation of the Peter A. Allard School of Law. (First award available for the 2021/2022 winter session).

Dr. Gary Derkson Memorial Award in Dentistry

Awards totalling \$3,000 have been made available annually through gifts from friends, family and colleagues in memory of Dr. Gary Derkson (1942-2018) for students in the Combined M.Sc. and Diploma in Pediatric Dentistry program who have demonstrated academic excellence. Dr.

Derkson was born in Winkler, Manitoba, and received his Doctor of Dental Medicine from the University of Manitoba. Before relocating to Vancouver, he undertook additional graduate studies in pediatric dentistry at the University of Connecticut. Dr. Derkson joined the Faculty of Dentistry in 1977 as an Associate Professor of Pediatrics, retiring as an Associate Professor Emeritus in 2004, and served as the Chief of Dentistry at the BC Children's Hospital from 1986 to 2004. This award was established in recognition of Dr. Derkson's commitment to resident education in pediatric dentistry. The awards are made on the recommendation of the Faculty of Dentistry, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2021/2022 winter session).

Fortuna Foundation Award in Finance

Awards totalling \$5,000 have been made available annually through a gift from the Fortuna Foundation for Bachelor of Commerce students in the Finance Option who have demonstrated outstanding academic achievement and an interest in capital markets or venture capital.

Preference will be given to students who have shown an interest in securities and corporate finance. Financial need may be considered. Fortuna Foundation is the charitable arm of Fortuna Investments, a private investment firm based in Vancouver, British Columbia specializing in venture capital investments and advisory services. The awards are made on the recommendation of the UBC Sauder School of Business. (First award available for the 2021/2022 winter session).

Gwyneth and J.T. Sandy Memorial Award in Surgical Oncology

Awards totalling \$5,500 have been made available annually through a gift from the Gwyneth and

J.T. Sandy Memorial Fund for outstanding medical residents in the Department of Surgery who have shown leadership and demonstrated an interest in surgical oncology. Dr. Gwyneth J. Sandy grew up in Red Deer, Alberta and received her medical degree from the University of Manitoba. She served as President of the BC and Yukon Division of the Canadian Cancer Society from 1978 to 1981 and as Director of the National Cancer Institute of Canada. Dr. John Trevor “J.T.” Sandy (1928-2015) was born in Cavan Township, Ontario and completed his medical degree at University of Western Ontario. He completed his internship and a residency in general surgery at Vancouver General Hospital, where he continued to work as a surgeon until he retired in 1993. He joined the UBC Faculty of Medicine in 1971, where he trained and mentored generations of medical students before his retirement as a Professor Emeritus in 1994. The awards are made on the recommendation of the Department of Surgery. (First award available for the 2021/2022 winter session).

Zymeworks Centennial Scholars Award for Black or Indigenous Students

A \$10,000 renewable entrance award has been made available annually through a gift from Zymeworks Biopharmaceuticals Inc. for an outstanding domestic student who identifies as Black or Indigenous and is entering the Bachelor of Science or Bachelor of Applied Science program directly from secondary school or transferring from another post-secondary institution.

Recipients are academically qualified and would not be able to attend UBC without financial assistance. In addition to academic merit, consideration is given to qualities such as leadership skills, community service, and recognized extra-curricular achievement. Subject to continued academic standing, the award will be renewed for a further three years of study or until the first undergraduate degree is obtained (whichever comes first). Zymeworks Biopharmaceuticals Inc. is a wholly-owned subsidiary of Zymeworks Inc., a biopharmaceutical company based in Vancouver, British Columbia that focuses on the development of biotherapeutics to treat cancer.

The award is made on the recommendation of the Centennial Scholars Entrance Award Committee. (First award available for the 2021/2022 winter session).

NEW AWARDS – INTERNAL

Beyond Tomorrow Scholars Award – Vancouver

Awards of up to \$20,000 each have been made available annually by the University of British Columbia for outstanding domestic UBC Vancouver students who identify as Black and are entering an undergraduate program directly from secondary school or transferring from another post-secondary institution. Recipients are academically qualified and would not be able to attend UBC without financial assistance. In addition to academic merit, consideration is given to qualities such as leadership skills, community service, and extra-curricular achievement. Subject to continued academic standing, the awards will be renewed for a further three years of study or until the first undergraduate degree is obtained (whichever comes first). The awards are adjudicated by Enrolment Services. (First award available for the 2021/2022 winter session).

International Impact Award (Tuition)

Awards ranging in value up to the full cost of the student's program and living costs are offered upon recommendation by the International Student Initiative to outstanding international students who demonstrate financial need. The value of each award will depend on the applicant's financial circumstances. The awards are made to students entering the University of British Columbia Vancouver campus directly from secondary school or from a post-secondary institution, to an undersubscribed undergraduate program of study. In addition to academic merit, priority is given to those exhibiting qualities such as leadership skills, involvement in student affairs or contribution to community service, first generation learners and those from diverse lived and socioeconomic backgrounds. Candidates must demonstrate prior commitment to, and interest in engaging further, via artistic expression or community engagement, social justice and equity, human wellness or conservation, sustainability and climate change. Consideration is restricted to students nominated by the educational institution they are attending. The awards will be renewed for up to three additional years of undergraduate study or to degree completion, whichever is less, provided the recipient maintains award standing in their program of study and maintains their status on a student authorization to study in Canada. Award winners will have their situations reviewed annually regarding both academic progress and financial need.

International Impact Award (Living Allowance)

Awards ranging in value up to the full cost of the student's program and living costs are offered upon recommendation by the International Student Initiative to outstanding international students who demonstrate financial need. The value of each award will depend on the applicant's financial circumstances. The awards are made to students entering the University of British Columbia

Vancouver campus directly from secondary school or from a post-secondary institution, to an undersubscribed undergraduate program of study. In addition to academic merit, priority is given to those exhibiting qualities such as leadership skills, involvement in student affairs or contribution to community service, first generation learners and those from diverse lived and socioeconomic backgrounds. Candidates must demonstrate prior commitment to, and interest in engaging further, via artistic expression or community engagement, social justice and equity, human wellness or conservation, sustainability and climate change. Consideration is restricted to students nominated by the educational institution they are attending. The awards will be renewed for up to three additional years of undergraduate study or to degree completion, whichever is less, provided the recipient maintains award standing in their program of study and maintains their status on a student authorization to study in Canada. Award winners will have their situations reviewed annually regarding both academic progress and financial need.

International Impact Award (Start-Up)

Awards ranging in value are offered to outstanding international students who demonstrate financial need and have been selected to study at UBC under the International Impact Award (Tuition and Living Allowance). The value of each award is determined by the International Student Initiative and is dependent on the applicant's financial circumstances and requirements for a successful transition to living and studying at UBC. The awards are made to students entering the University of British Columbia Vancouver campus directly from secondary school or from a post-secondary institution, to an undersubscribed undergraduate program of study. In addition to academic merit, priority is given to those exhibiting qualities such as leadership skills, involvement in student affairs or contribution to community service, first generation learners and those from diverse lived and socioeconomic backgrounds. Candidates must demonstrate prior commitment to, and interest in engaging further, via artistic expression or community engagement, social justice and equity, human wellness or conservation, sustainability and climate change. Consideration is restricted to students nominated by the educational institution they are attending.

International Impact Bursary (Tuition)

Bursaries ranging in value up to the full annual cost of the student's academic program tuition and fees are offered upon recommendation by the International Student Initiative to continuing international undergraduate students who were previously awarded the International Impact Award and continue to demonstrate financial need but do not meet the Senate's academic criteria for a continuing award. The value of each bursary will depend on the applicant's financial circumstances. The bursary may be renewed for up to three additional years of undergraduate study or to degree completion, whichever is less, provided the recipient remains an international student on a valid Canadian study permit. Bursary

recipients will have their situations reviewed annually by their Faculty as well as Enrolment Services regarding both academic progress and financial need.

International Impact Bursary (Living Allowance)

Bursaries ranging in value up to the full cost of the student's living costs are offered upon recommendation by the International Student Initiative to continuing international undergraduate students who were previously awarded the International Impact Scholars Award and continue to demonstrate financial need but do not meet the Senate's academic criteria for a continuing award. The value of each bursary will depend on the applicant's financial circumstances. The bursary may be renewed for up to three additional years of undergraduate study or to a degree completion, whichever is less, provided the recipient remains an international student on a valid Canadian study permit. Bursary recipients will have their situations reviewed annually by their Faculty as well as Enrolment Services regarding both academic progress and financial need.

PREVIOUSLY APPROVED AWARDS WITH CHANGES IN TERMS OR FUNDING SOURCE

Endowed Awards

2822 – Katherine Genevieve MacDougall Memorial

Prize Rationale for Proposed Changes

Law 360 (Children and the Law) is no longer offered consistently. The description has been revised to reward students who have done well in a course with a focus on family law, with priority given to courses that focus on children's rights. University Counsel, the Peter A. Allard School of Law, and the donor have reviewed and approved the revisions to the description.

Current Award Description

A \$1,700 prize has been endowed by family and friends in memory of Katherine MacDougall. The award is made on the recommendation of the Peter A. Allard School of Law, to a student who achieves high academic standing. In years when Law 360 (Children and the Law) is offered, the prize is offered for that course.

Proposed Award Description

A \$1,700 prize has been ~~endowed~~ made available through an endowment established by family and friends in memory of Katherine Genevieve MacDougall (1970-1986), for a J.D. student who achieves high academic standing in a course with a focus on family law, with priority given to courses that focus on children's rights. The prize ~~award~~ is made on the recommendation of the Peter A. Allard School of Law, ~~to a student who achieves high~~

~~academic standing. In years when Law 360 (Children and the Law) is offered, the prize is offered for that course.~~

Annual Awards

4837 – Akanksha Stevens Prize in Political Science**Rationale for Proposed Changes**

The donors wish for the prize to recognize their family more generally, rather than their child specifically.

Current Award Title: Akanksha Stevens Prize in Political Science

Current Award Description

A \$500 graduating prize is offered by the Goel family in memory of the victims of the Jewish Holocaust. The award is offered to an outstanding graduating student in political science and is made on the recommendation of the department, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies.

Proposed Award Title: Goel Family Akanksha Stevens Prize in Political Science

Proposed Award Description

A \$500 graduating prize is offered by has been made available annually through a gift from the Goel Family in memory of the victims of the Jewish Holocaust. The award is offered to for an outstanding graduating undergraduate or graduate student in the Department of Political Science, and is The prize is made on the recommendation of the Department of Political Science, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies.

2887 – DLA Piper (Canada) LLP Prize in Alternative Dispute Resolution**Rationale for Proposed Changes**

Law 477 (Negotiations & Dispute Resolution), Law 478 (Alternative Dispute Resolution), and Law 479 (Mediation) are not all offered in the same year, and since the prize was established, the Peter A. Allard School of Law has begun to offer more courses in alternative dispute resolution. The description has been revised so that the prize can be awarded to J.D. students who have excelled in any course that focuses on alternative dispute resolution. The donor and the Peter A. Allard School of Law have reviewed and approved the revisions to the description.

Current Award Description

A \$500 prize is offered by DLA Piper (Canada) LLP, to a law student who achieves high academic standing in one of the following courses: Negotiations & Dispute Resolution (Law 477), Alternative Dispute Resolution (Law 478) or Mediation (Law 479). The award is made on the recommendation of the Peter A. Allard School of Law.

Proposed Award Description

A \$500 prize ~~is offered by~~ **has been made available annually through a gift from** DLA Piper (Canada) LLP, ~~to~~ **for** an outstanding J.D. law student who **has excelled in a course that focuses on alternative dispute resolution** ~~achieves high academic standing in one of the following courses: Negotiations & Dispute Resolution (Law 477), Alternative Dispute Resolution (Law 478) or Mediation (Law 479).~~ The award **prize** is made on the recommendation of the Peter A. Allard School of Law.

1203 – Goel Scholarship in South Asian Studies

Rationale for Proposed Changes

The donors wish for the scholarship to recognize their child specifically, rather than their family more generally.

Current Award Title: Goel Scholarship in South Asian Studies

Current Award Description

A scholarship of \$600 has been made available by Dr. and Mrs. D. P. Goel in memory of her brother, Mr. Om Prakash Agrawal. The award is made on the recommendation of the Department, to a student majoring in South Asian Studies (preferably in Hindi, Sanskrit or other languages of India).

Proposed Award Title: **Akanksha Stevens** ~~Goel~~ Scholarship in South Asian Studies

Proposed Award Description

A ~~scholarship of \$600~~ **scholarship** has been made available **annually through a gift from** by Dr. and Mrs. D. P. Goel in ~~memory of her brother, Mr. Om Prakash Agrawal~~ **honour of Akanksha Stevens for an outstanding undergraduate or graduate student in the Department of Asian Studies focusing on South Asian Studies (preferably in Hindi, Sanskrit or other languages of India).** The award **scholarship** is made on the recommendation of the Department **of Asian Studies, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies** ~~to a student majoring in South Asian Studies (preferably in Hindi, Sanskrit or other languages of India).~~

5420 – International Pipeline Conference Foundation Award in Pipeline Engineering

Rationale for Proposed Changes

The award will now be managed by the Canadian Energy Pipeline Association. The award title and description have been updated to reflect this.

Current Award Title: International Pipeline Conference Foundation Award in Pipeline Engineering

Current Award Description

Awards totalling \$5,000 are offered annually by the International Pipeline Conference Foundation for outstanding undergraduate and graduate students in the Faculty of Applied Science who have excelled in a pipeline engineering course. Preference will be given to candidates who are (1) First Nations, Inuit, or Métis students of Canada or (2) women. This academic award is made on the recommendation of the Faculty of Applied Science, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies.

Proposed Award Title: ~~International Pipeline Conference Foundation~~ Canadian Energy Pipeline Association Award in Pipeline Engineering

Proposed Award Description

Awards totalling \$5,000 are offered annually by the ~~International Pipeline Conference Foundation~~ Canadian Energy Pipeline Association for outstanding undergraduate and graduate students in the Faculty of Applied Science who have excelled in a pipeline engineering course. Preference will be given to candidates who are (1) First Nations, Inuit, or Métis students of Canada or (2) women. This academic award is made on the recommendation of the Faculty of Applied Science, and in the case of a graduate student, in consultation with the Faculty of Graduate and Postdoctoral Studies.

2011 – NITEP Aurora Award

Rationale for Proposed Changes

The description has been revised to increase the value of the award and ensure recipients receive

\$6,000 in their final year of study. The Indigenous Teacher Education Program has reviewed and approved the revisions to the description.

Current Award Title: NITEP Aurora Award

Current Award Description

An award of \$3,000 is offered annually to support student entering the first year of the Indigenous Teacher Education Program. The award may be renewed for up to two years, subject to the student's satisfactory completion of the previous year and enrolment in a following year of study in the Indigenous Teacher Education Program. Preference will be given to a mature student in financial need. The award is made on the recommendation of Indigenous Teacher Education Program.

Proposed Award Title: ~~NITEP~~ Indigenous Teacher Education Program Aurora Award

Proposed Award Description

~~An award of \$3,000~~ \$15,000 entrance award, disbursed over four years, has been made available is offered annually to support for students entering the first year of in the Indigenous Teacher Education Program (NITEP) who have achieved good academic standing. Preference will be

given to mature students with financial need. Recipients should receive the award for multiple years in a row or intermittently, up to a maximum of four academic years total. Each recipient will receive \$3,000 a year. Students in the final year of their degree will receive \$6,000. The award may be renewed for up to two years, subject to the student's satisfactory completion of the previous year and enrolment in a following year of study in the Indigenous Teacher Education Program. Preference will be given to a mature student in financial need. The awards is are made on the recommendation of Indigenous Teacher Education Program.

Appendix B: Curriculum Report

FACULTY OF ARTS

New courses

SOCI 224 (3) Sociology of Personal Life; SOCI 280 (3) Data and Society; SOCI 290 (3) Global Pandemics; SOCI 314 (3) Sociology of Masculinity

FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

Education

New courses

ETEC 543 (3) Understanding Learning Analytics; ETEC 544 (3) Digital Games & Learning

FACULTY OF MEDICINE

New course

OSOT 301 (3) Introduction to Human Occupation

FACULTY OF PHARMACEUTICAL SCIENCES

New course

PHRM 307 (2-6) c Directed Studies in Epidemiology and Health Outcomes

FACULTY OF SCIENCE

New programs

Bachelor of Science in Neuroscience; Minor in Data Science; Minor in Geophysics

New courses

NSCI 200 (3) Fundamentals of Cellular and Molecular Neuroscience; NSCI 201 (3) Fundamentals of Behavioural and Cognitive Neuroscience; NSCI 300 (3) Laboratory Techniques for the Neurosciences; NSCI 301 (3) Neuroscience, Ethics, and Society; NSCI 302 (3) Mechanisms of Nervous System Dysfunction and Recovery; NSCI 311 (3) Advanced Neuroanatomy; NSCI 398 (3) Cooperative Work Placement I; NSCI 399 (3) Cooperative Work Placement II; NSCI 400 (6) Neuroscience Capstone; NSCI 448 (3/6) d Directed Studies in Neuroscience; NSCI 498 (3) Cooperative Work Placement III; NSCI 499 (3) Cooperative Work Placement IV; BIOL 424 (3) Tropical Ecology and Conversation; CPSC 368 (3) Databases in Data Science; DSCI 310 (3) Reproducible and Trustworthy Workflows for Data Science; DSCI 320 (3) Visualization for Data Science; EOSC 325 (3) Principles of Physical Hydrogeology; MATH 319 (3) Introduction to Real Analysis; SCIE 320 (3) Socio-Ecological Systems Research



New course code

NSCI: Neuroscience Undergraduate

Revised course codes

NRSC: Neuroscience Graduate; GEOS: Geographical Sciences.

Appendix C: Interim Report of the Ad-Hoc Committee to Review Student Appeal Procedures and Structures

Preliminary Recommendations

1.0 Training

1.1

Enhancements are needed to the training regime offered to members of Appeals Committees. In particular, the Ad Hoc Committee believes that sufficient training opportunities must be offered so as to make it reasonable to have all members of Appeals Committees attend a full training session prior to hearing a matter and for such training to be mandatory.

1.2

While Admissions Committee members should not be required to attend the same training regime as offered to the Appeals Committees, all senators should be welcome and encouraged to attend, in particular but not limited to members of the Admissions Committee.

1.3

The Ad Hoc Committee has noted that various amounts of training have been offered to appeals committee members over the past decade. The Ad Hoc Committee believes that to properly address the amount of material needed by Appeals Committee members, an in-depth two-day training course should be offered at least annually for all Appeals Committee members; in year 1 of the triennium this should occur in the fall, and in years 1, 2 & 3 in the spring, to allow participation by properly trained student senators for their following year-long term on the Senate.

1.4

In addition to the detailed introductory training offered in S 1.3, in-service training should be offered at least once per term to allow for detailed focus on issues and application for matters both generally and as arise from time to time at each committee.

1.5

In addition to the current focus on administrative law and procedural fairness, both annual and in-service training should be expanded, as appropriate for each Appeals Committee, to include trauma-informed approaches, student mental health issues, sexual assault, cultural competency, and more practical information such as practice and conduct at hearings.

1.6.

In addition to the annual and in-service training recommended above, specialized mandatory training for Appeals Committee chairs and vice-chairs, especially in regard to procedures and the writing of reasons should be developed, to be supplemented,



where possible, with one-on-one coaching and mentorship from previous chairs. The Ad Hoc Committee suggests that this should be at least two half-days near the start of their terms of office and additionally as required.

1.7

Where possible, on-line and printed training resources should be made available both for recitation and to benefit those who cannot attend in-person sessions.

1.8

Templates should be maintained for chairs and vice-chairs of Appeals Committees and of the admissions committee for both the conduct of hearings and reporting of decisions and reasons for decisions.

2.0 Composition of Appeals Panels

2.1

The Ad Hoc Committee does not believe that the Appeals Committees should be joined (Such as they are at the Okanagan campus) given the differences in the jurisdictions and mandates and the relative differences in scale between the campuses.

2.2

The Ad Hoc Committee believes that the current sizes and quorums of the Appeals Committees and the admissions committee are appropriate.

2.3

To encourage a diversity of backgrounds on appeals panels while ensuring timely consideration of appeals, every Appeals Committee panel should better represent the breadth of senate membership, with at least one student, one faculty member, and one convocation senator on each panel wherever possible.

2.4

The Ad Hoc Committee notes that senators who are associate deans who act on student matters are presently excluded from membership on the Appeals Committees in practice. This restriction should be codified.

2.5

The Ad Hoc Committee notes that presently, Appeals Committee chairs are generally elected triennially. The Committee recommends that this be changed to an annual (re)election for chairs and vice-chairs of each committee and that a simpler mechanism for removing committee chairs than that provided in Roberts Rules of Order Newly Revised be made available to Appeals Committees.

3.0 Resources for

Appellants 3.1

The Ad Hoc Committee believes that former members of Appeals Committees should be permitted and encouraged to make themselves available to appellants and potential



appellants to guide them in appeals processes. The Ad Hoc Committee recognizes that there may be legal and ethical considerations for this suggestion that need to be further explored, but also recognizes the need of appellants to have better advice on University processes that this may address.

3.2

While recognizing the need for specific language in appeals regulations, the Ad Hoc Committee proposes that plain language explanations should be developed to describe and educate appellants, respondents, and committee members of appeals processes.

3.3

All faculty-level final decisions on matters of academic standing should include language noting both that finality at the faculty level as well as the Senate appeals process and resources available to students.

4.0 Committee

Functioning 4.1

Greater clarity is needed regarding the roles of a panel chair, panel members, and panel secretary in the drafting and review of reasons for decisions.

4.2

Mechanisms must be created to ensure more timely consideration of appeals by Appeals Committees, including availability and completion of training of Appeals Committee members, and availability of appellants, respondents, and witnesses. The committee is exploring if summary judgments to grant appeals to students if their appeal is not heard in a reasonable time may be implemented.

4.2

The Ad Hoc Committee believes that “blended” hearings where some persons are in attendance in person and some remotely are not advantageous to committee functioning. The Ad Hoc Committee suggests that should the Registrar or the Chair permit an appellant to attend remotely, the hearing should be conducted remotely.

4.3

Specific language should be added to appeals regulations reminding all attending, either in person or remotely, of the confidentiality of proceedings and the prohibition of audio, visual or other recording of hearings. Presently, while confidentiality is stated in the rules, there is no explicit reference to a prohibition on recordings, although this is stated by the chair at the start of each hearing.

4.4

The Ad Hoc Committee believes that the Appeals Committees and admissions committee rules should specify timelines for the distribution of reasons for decisions to



appellants and respondents. The Ad Hoc Committee suggests that reasons for decision should take no more than 60 days from the conclusion of the hearing to be finalized.



19 May 2021

To: Vancouver Senate

From: Council of Senates Budget Committee - Vancouver Sub-Committee

Re: **Annual Report** (information)

Please find attached the 2020-21 Annual Report summarizing the activities of the Council of Senates Budget Committee - Vancouver Sub-Committee.

If you have any questions, please contact Christopher Eaton at christopher.eaton@ubc.ca.

Respectfully submitted,

Council of Senates Budget Committee - Vancouver Sub-Committee

Council of Senates Budget Committee – Vancouver Sub-Committee

Report to Senate – May 19, 2021

Terms of Reference (abridged)

The Committee shall meet with the President and assist in the preparation of the University budget; and make recommendations to the President and report to the Okanagan and Vancouver Senates at least annually concerning academic planning and priorities as they relate to the preparation of the University budget. In advising the President on the University budget, the Budget Committee may request information on any of the University's fund accounts.

Background

Officially, the Council of Senates Budget Committee includes representation from both UBC Vancouver and UBC Okanagan. Separate subcommittees have been formed on each campus and these committees meet regularly to discuss budgetary issues affecting the specific campus. This report is from the Vancouver Sub-Committee.

Membership

The Vancouver Sub-Committee's membership for 2020-21 is as follows:

- Chris Hakim, Chair, Student Representative (Arts)
- Eshana Bhangu, Vice-chair, Student Representative (Arts)
- Dr. Peter Choi, elected by the Joint faculties (Medicine)
- Dr. Peter Englezos, elected by the Joint Faculties (Applied Science)
- Dr. Adlai Fisher, Faculty of Commerce and Business Administration
- Dr. Susan Forwell, elected by the Joint Faculties (Medicine)
- Dr. Andre Ivanov, elected by the Joint Faculties (Applied Science)
- Dr. Kin Lo, Faculty of Commerce and Business Administration
- Dr. James Stewart, Peter A. Allard School of Law

Report on Activities

The Committee met regularly over the course of the 2020-21 academic year with the Provost and Vice-President Academic, the Vice-President Finance and Operations, the Vice-Provost and Associate Vice-President, Enrolment and Academic Facilities, the Comptroller, and the Executive Director of Academic Initiatives from the Office of the Provost and Vice-President Academic. In addition, other guests attended individual meetings in order to deliver presentations or provide input on specific issues.

The Committee met six times in 2020-21. Meetings are held immediately prior to the main Senate meetings. Meetings typically begin with a 30-minute meeting of Senators alone, followed by presentations and discussions with representatives of the administration, and other guests. The agendas for the meetings of the Vancouver Sub-Committee are developed in collaboration with the Office of the Provost and Vice-President Academic and the Office of the Vice-President Finance and Operations.

The topics addressed by the Committee during the 2020-21 academic year include the following:

- *Budget Process Overview;*
- *Provost and VP Finance Priorities;*
- *Capital Planning and Prioritization Process;*
- *President's Academic's Excellence Initiative (PAEI);*
- *Enrolment Planning and its Impact on the Budget;*
- *COVID-19's Impact on the University's Finances;*
- *Bursaries;*
- *Tuition Allocation Model.*

Concluding Remarks

Working collaboratively with the Office of the Provost and Vice-President Academic, and the Office of the Vice-President Finance and Operations, the Vancouver Sub-Committee of the Council of Senates Budget Committee has had a productive year in which many important issues were openly discussed, debated and investigated. The student and faculty Senators on the Committee provided the president's office and guest presenters with feedback on potential challenges and opportunities that stemmed from topics of importance to the Committee. The Committee appreciates the level of consultation and collaboration with senior administration and the opportunity to provide an important academic perspective on behalf of the Vancouver Senate.

19 May 2021



Vancouver Senate
THE UNIVERSITY OF BRITISH COLUMBIA

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Vancouver, BC V6T 1Z1

Phone 604 822 5239
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May 19, 2021

To: Vancouver Senate
From: Senate Academic Building Needs Committee
Re: **Annual Report 2020-2021**

Attached please find for your information the 2020-21 Annual Report of the activities of the Senate Academic Building Needs Committee.

Respectfully submitted,

Dr. Charles Menzies, Vice-Chair
Senate Academic Building Needs Committee

**The University of British Columbia
Senate Academic Building Needs Committee
Annual Report to Senate, 2020– 2021**

Committee Activities

The Senate Academic Building Needs Committee (SABNC) undertakes a significant portion of its activities through it being consulted on a wide range of relevant plans, projects, and topics. Such consultations occur in three ways:

1. Through presentations to the SABNC.
2. Through presentations to the Property and Planning Advisory Committee (PPAC). (All SABNC members are members of PPAC; the SABNC Chair is Vice-Chair of PPAC.)
3. Through meetings of the Capital Planning Working Group (CPWG). (The SABNC chair is a member of CPWG.)

Beyond the Committee's roles in being consulted in these ways, the Committee undertook the following activities:

Committee's Role in the Capital Project Prioritization and Approval Process

Prioritization Process. Each year, the University updates a scoring of all potential building project priorities with respect to both strategic priorities and operational priorities; in turn this scoring is taken into account in the development of an updated Five-Year Capital Plan, which lists the highest priority projects for government funding. The Committee participates in this process through its responses to related presentations at Committee and PPAC meetings. As well, the Committee Chair is a member of the Capital Planning Working Group and thereby provides, on behalf of the Committee, additional input to this prioritization process.

Approval Process. For projects valued at over \$5M, the capital project approval process formally requires three levels of Executive approval and three levels of Board approval (see Board Policy 126, Capital Projects, Capital Purchases and Internal Loans). However, the approval of the Committee (via PPAC) is an additional step in this process.

Appendix I – Presentations to the Committee

The following presentations were made to the Committee during the 2012/21 academic year:

20 October 2020 – Annie Yim (Vancouver Scheduling Project Lead, Acting Deputy Registrar and HR Director, Enrolment Services); Oana Toma (Associate Director, Scheduling Services, Enrolment Services)

19 January 2021 - UBC Facilities Capital Planning & Prioritization – Input Gathering 2021 (John Metras, Associate Vice-President, Facilities; Jennifer Sanguinetti, Managing Director, Infrastructure Development)

16 February 2021 – UBC Facilities COVID-19 Impact Presentation (Jodi Scott, Senior Learning Space Planner, Facilities Planning; Jennifer Sanguinetti, Managing Director, Infrastructure Development)

20 April 2021 - Climate Action Plan (John Madden, Director, Sustainability and Engineering Campus & Community Planning; Maxi Kniewasser, Climate Action Planner)

Items for Information:

15 December 2020 – Capital Planning Working Group Update (Cole Evans, Chair)

19 May 2021



Vancouver Senate
THE UNIVERSITY OF BRITISH COLUMBIA

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Phone 604 822 5239
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To: Vancouver Senate
From: Senate Admissions Committee
Re: Revisions to Undergraduate Admissions Policies for Deferrals and for Advanced Credit
Date: 19 May 2021

The Senate Admissions Committee has reviewed the materials submitted by Enrolment Services and has enclosed the revised policies it deems ready for consideration by the Senate for approval:

Motion: *That Senate accept the revised Policy with respect to Deferring an offer of admission 2021W and the Advanced Credit or Placement Policy.*

Respectfully submitted,
Professor Carol Jaeger, Chair, Senate Admissions Committee

Deferring an Offer of Admission - Revised Proposal for 2021W

Prepared by Enrolment Services - Undergraduate Admissions

Background:

UBC currently has policies in place that permit students admitted to year 1 of an undergraduate degree program to apply to defer an offer of admission. An approved deferral permits many students to take one year off directly after the completion of secondary school and then commence their degree program in the subsequent Winter Session. The current policies on deferrals are listed in the Calendar (<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,278,0,0>).

Last May, in response to concerns that a significant number of students may choose to defer their offer of admission as a result of the ongoing pandemic, UBC implemented changes to its undergraduate admission deferral process. The primary changes considered at that time were to move the deferral request submission deadline from August 1st to July 15th for the 2020W admission cycle, and to adopt procedures to review deferral requests more carefully and limit approvals to situations where the rationales provided were appropriate (prior to the 2020W admission cycle, deferral requests were approved in almost all instances). The goal being sought from these changes was to provide the University with more flexibility to control incoming student enrolment and mitigate any late outflows of registered students - an earlier submission deadline would permit us to admit more students should any single program receive too many deferral requests, and the closer scrutiny of requests would limit excessive approvals of deferrals for any program. Although these changes were approved, faculties were flexible with the approach and still considered deferrals requests after July 15th deadline concluded.

Ultimately, the University did receive a greater volume of deferral requests last year. Taking both domestic and international requests together, 129 additional deferral requests were received over the 2019W cycle. We approved 50 more but also denied 79 (please see table below). While this volume was lower than what we anticipated, the ability to exert greater control over the enrolment process was considered by our faculties to be valuable. Important to note is that more than half of the total increase in deferral requests was to the Bachelor of Arts program.

A further insight gained last year was that a submission deadline date and approval timeline that was after the course registration period did add additional complexities to resolve. Students who are waiting for deferral approvals are holding on to courses that they in fact do not intend to participate in and the approval of a deferral and the subsequent communication back to a student did not happen until early August (some additional time would also lapse before the student would withdraw themselves from classes). This situation is less than ideal for overall course planning and advising exercises. For faculties, it continues to extend uncertainties about specific course planning later into the summer and closer to the start of Term 1. And for students in waitlisted sections, these additional seats would only be made available late in the summer which is generally viewed as a less than ideal as well.

To that end, Enrolment Services is recommending that we make further adjustments to the undergraduate deferral policy.

Recommendation: Move the deferral submission deadline date prior to the commencement of the course registration for Year 1 students where possible.

As discussed both above and last year, the primary benefit to this approach is that we would learn earlier in the summer, how many students are interested in deferring offers of admission. If that volume is much higher than it has been traditionally, we can decide to admit more students to buffer against potential enrolment losses. Becoming aware of students who are interested in deferrals late in the summer leaves little to no time to admit more students to assist in the achievement of our enrolment targets. The additional benefit that an earlier deadline also provides is that it reduces specific course enrolment planning and waitlist advising scenarios as more of these uncertainties would be resolved prior to registration commencing.

Moving forward, we are recommending that we adopt a flexible approach to communicating the deferral submission deadline. Instead of a singular, fixed deadline date to submit deferral request, we advise that the deadline be linked with the acceptance deadline that a student receives when they are admitted to the University (e.g. a student is admitted in March is given a May 1st acceptance deadline). We would articulate that the deadline to submit a request for deferral is no later than 10 business days after the offer acceptance deadline. This window would give all year 1 admitted students some time to think about whether they would like to defer their offer of admission and would leave enough time for the University to consider enrolment implications. Students admitted later in the admission cycle or off of our waitlist would automatically have a deferral submission deadline that is later since their acceptance deadline would also be later making this approach somewhat easier to communicate and utilize. Students who have their deferral requests approved would also not need to register which reduces time and effort that they would need to invest to navigate the complete deferral approval process, and, course enrolment planning and waitlist advising for faculties would also be reduced.

Given that the May 1 acceptance deadline is fast approaching, it might not be palatable to adopt the above mentioned change this year. Should that be the case, Enrolment Services would request that we proceed with a July 1st deadline for this year (the 2021W admission cycle) prior to making the permanent change discussed above. July 1st is prior to the commencement of Year 1 registration and will assist with some of the course planning features discussed above.

Also, please note that the ability for faculties to limit the number of deferrals approved through a review process as was done for the 2020W admission cycle is currently possible under the current undergraduate deferral policy and is not changing in this proposal.

Table 1: Approved and Denied Deferral Requests by Program – 2019W to 2020W comparison

Approved Deferral Requests				Denied Deferral Requests		
PROGRAM	19W	20W	CHANGE	19W	20W	CHANGE
BA	86	115	29	2	40	38
BASC	28	47	19	0	7	7
BCOM	19	10	-9	1	6	5
BCS	1	1	0	0	3	3
BDES		2	2	0	0	0
BEST		3	3	0	1	1
BFA	1	3	2	0	0	0
BIE	4	2	-2	0	8	8
BKIN	8	5	-3	0	0	0
BMS	7	6	-1	0	0	0
BMW		1	1	0	0	0
BPSC		1	1	0	0	0
BSAB	9	4	-5	1	4	3
BSC	37	54	17	1	2	1
BSCN	3	5	2	0	0	0
BSCW		1	1	0	0	0
BSF	2	1	-1	0	1	1
BSFE		1	1	0	0	0
BSFN	2	6	4	0	3	3
BSFS		1	1	0	0	0
BSN	5		-5	0	0	0
BUF	2	1	-1	0	0	0
VC-BA	6	1	-5	0	4	4
VC-BAS	0	0	0	0	3	3
VC-BSC	2	1	-1	0	2	2
Grand Total	222	272	50	5	84	79

PROPOSED POLICY AMENDMENT

Advanced Credit or Placement

Advanced placement, and in many cases advanced credit, may be given in appropriate secondary school subjects where high academic achievement has been attained as long as the required coursework and exams are completed prior to attendance in a degree program at UBC. This provision applies particularly to the Advanced Placement, International Baccalaureate (Higher Level), and General Certificate of Education (Advanced Level) programs. Applicants should refer to the Undergraduate Viewbook or [you.ubc First Year Credit page](#) for more information.

Calculus Examination Certificate

Working in collaboration, UBC, Simon Fraser University, the University of Victoria, and the University of Northern British Columbia offer a three-hour calculus examination to all students who have completed, or are currently registered in, a calculus course in secondary school. Students who pass the examination will be awarded a UBC-SFU-UVIC-UNBC Calculus Examination Certificate. The certificate may be presented for credit in MATH 100 at UBC, MATH 151 at SFU, MATH 100 at UVIC, or MATH 100 at UNBC, after registering at one of the four universities. Students claiming credit at UBC will have their examination score shown on their transcript as their grade in MATH 100. Only one attempt is permitted. Students who have already started college or university may not participate. Students already eligible for transfer credit because of high AP or IB scores retain their eligibility regardless of their examination score.

The duties of organizing and hosting the examination rotate between the Mathematics Departments of the participating universities. Web links to the latest information are maintained by the UBC Mathematics Department (see [Calculus Examination](#)).

UBC-SFU-UVic-UNBC Calculus Exam

c/o Mathematics Department

The University of British Columbia

Vancouver, BC V6T 1Z2

Tel: 604.822.2666

Email: challengeexam@math.ubc.ca

Advanced Credit for BC FP 12 for NITEP

Working in collaboration with the Vancouver School Board, UBC offers advanced placement for NITEP students who pass the secondary school course, BC First Peoples 12 through the Vancouver School District, prior to attendance in the NITEP Bachelor of Education program at UBC. Students who take the BC First Peoples 12 course through the Vancouver

School Board as a secondary school course will be awarded EDUC 141: Indigenous Studies if enrolled in the NITEP BEd degree program. Students claiming credit at UBC (NITEP program only) will have their grade shown on their transcript as their grade in EDUC 141: Indigenous Studies.

The duties of organizing and hosting this course occur in collaboration with NITEP UBC and the Vancouver School District.

c/o NITEP

Faculty of Education

University of British Columbia

Vancouver, BC V6T 1Z2

Email: nitep.educ@ubc.ca

19 May 2021



Vancouver Senate
THE UNIVERSITY OF BRITISH COLUMBIA

Docket Page 46 of 512
Office of the Senate
Brock Hall | 2016 - 1874 East Mall
Vancouver, BC V6T 1Z1

Phone 604 822 5239
Fax 604 822 5945
www.senate.ubc.ca

To: Vancouver Senate
From: Senate Admissions Committee
Re: Suspension of admission to Vantage College Management Stream
Date: 19 May 2021

The Senate Admissions Committee has reviewed the materials submitted by Vantage College that it deems ready for consideration by the Senate for approval:

Motion: *That Senate approve the suspension of admission to the UBC Vantage College Management Stream until further notice.*

Respectfully submitted,
Professor Carol Jaeger, Chair, Senate Admissions Committee



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: UBC Vantage College Department: UBC Vantage College Faculty Approval Date: Feb 16th, 2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: February 16th, 2021 Contact Person: Dr. Suzie Lavallee Phone: Email: academic.director@vantagecollege.ubc.ca</p>
<p>Proposed Calendar Entry: <i>Applicants to Vantage College</i></p> <p>Applicants apply to UBC Vantage College via an online application form. The fundamental principles governing admission to UBC Vantage College are the mandate to diversify the international student population and the capacity of the student to matriculate into a UBC degree program.</p> <p>All applicants to UBC Vantage College must demonstrate.</p> <ul style="list-style-type: none"> a minimum level of English proficiency as indicated in the English Language requirement section. a suitable level of academic proficiency in the senior level of secondary school study in their domestic curriculum equivalent to having at least a 70% average in the BC/Yukon Secondary School curriculum. <p>Further, students applying to the Engineering stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) senior-level Chemistry senior-level Physics <p>Further, students applying to the Management stream in the Vantage Program must have completed:</p> <p>Admission to the UBC Vantage College Management Stream is suspended until further notice.</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) <p>Further, students applying to the Science stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus), with a minimum grade of 68% (or nearest equivalent on other grading scales) 	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,309,0,0#23351</p> <p>Present Calendar Entry: <i>Applicants to Vantage College</i></p> <p>Applicants apply to UBC Vantage College via an online application form. The fundamental principles governing admission to UBC Vantage College are the mandate to diversify the international student population and the capacity of the student to matriculate into a UBC degree program.</p> <p>All applicants to UBC Vantage College must demonstrate.</p> <ul style="list-style-type: none"> a minimum level of English proficiency as indicated in the English Language requirement section. a suitable level of academic proficiency in the senior level of secondary school study in their domestic curriculum equivalent to having at least a 70% average in the BC/Yukon Secondary School curriculum. <p>Further, students applying to the Engineering stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) senior-level Chemistry senior-level Physics <p>Further, students applying to the Management stream in the Vantage Program must have completed:</p> <p>Admission to the UBC Vantage College Management Stream is suspended for the 2019 winter session.</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) <p>Further, students applying to the Science stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus), with a minimum grade of 68% (or nearest equivalent on other grading scales)



THE UNIVERSITY OF BRITISH COLUMBIA

<p>Grade 11 Chemistry and Physics or equivalents to BC/Yukon school curriculum</p> <p>Due to receipt of more qualified applicants than there are spaces available, a higher admission average may be required. Applicants will be assessed for admission based on the following criteria:</p> <ul style="list-style-type: none"> • academic performance in secondary school • secondary school curriculum and coursework • level of English language preparation <p>The UBC Vantage College admissions committee may seek additional information relevant to the applicant's background such as, for example, an applicant's personal statement of academic experience and aspirations.</p> <p>The Principal of UBC Vantage College has the right to make case-by-case admission decisions on behalf of the College. The College reserves the right to determine whether or not a student is eligible for admission.</p> <p>Many students will be admitted on the basis of interim grades to ensure that offers of admission meet the needs of both the applicant and the university for timely decision-making. Students who are admitted on interim grades and whose final grades drop below the final competitive admission average may be contacted by the College and required to participate in support programs to facilitate academic success or have their offers of admission withdrawn at the discretion of the College.</p>	<ul style="list-style-type: none"> • Grade 11 Chemistry and Physics or equivalents to BC/Yukon school curriculum <p>Due to receipt of more qualified applicants than there are spaces available, a higher admission average may be required. Applicants will be assessed for admission based on the following criteria:</p> <ul style="list-style-type: none"> • academic performance in secondary school • secondary school curriculum and coursework • level of English language preparation <p>The UBC Vantage College admissions committee may seek additional information relevant to the applicant's background such as, for example, an applicant's personal statement of academic experience and aspirations.</p> <p>The Principal of UBC Vantage College has the right to make case-by-case admission decisions on behalf of the College. The College reserves the right to determine whether or not a student is eligible for admission.</p> <p>Many students will be admitted on the basis of interim grades to ensure that offers of admission meet the needs of both the applicant and the university for timely decision-making. Students who are admitted on interim grades and whose final grades drop below the final competitive admission average may be contacted by the College and required to participate in support programs to facilitate academic success or have their offers of admission withdrawn at the discretion of the College.</p> <p>Type of Action: Update to calendar language</p> <p>Rationale for Proposed Change: Admission into the UBC Vantage College Management program was previously suspended with no intakes in 2019, 2020. This calendar notification already exists in the calendar as enrolment into the program was previously suspended.</p> <p>The following calendar updates indicate that admissions to the Vantage One Management program continues to be suspended <i>until further notice</i>. We have identified three specific locations for these updates in both the UBC Okanagan and UBC Vancouver calendars.</p>



Proposed Calendar Entry:

Vantage One Management

Admission to the Vantage One Management Program is suspended until further notice.

Students must complete:

- ECON 101 and ECON 102
- LLED 200
- MGMT 100 and MGMT 110
- PSYC 101 and PSYC 102
- SOCI 101 and SOCI 102¹
- VANT 140²
- VANT 148 and VANT 149
- WRDS 150³ and ASTU 204¹

Total Credits

¹ Students must register in UBC Vantage College specific

² Credits will not count toward requirements for a Bachelor's degree in Management at UBC Okanagan.

³ WRDS 150 will fulfill the English requirement for the Faculty of Business minimum grade of 60% is required for WRDS 150.

URL:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.307.943.0>

Present Calendar Entry:

Vantage One Management

Admission to the Vantage One Management Program is suspended for the 2019-winter session.

Students must complete:

- ECON 101 and ECON 102
- LLED 200
- MGMT 100 and MGMT 110
- PSYC 101 and PSYC 102
- SOCI 101 and SOCI 102¹
- VANT 140²
- VANT 148 and VANT 149
- WRDS 150³ and ASTU 204¹

Total Credits

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² Credits will not count toward requirements for a Bachelor's degree in Management at UBC Okanagan.

³ WRDS 150 will fulfill the English requirement for the Faculty of Business minimum grade of 60% is required for WRDS 150.

Type of Action:

Update to calendar language

Rationale for Proposed Change:

Admission into the UBC Vantage College Management program was previously suspended with no intakes in 2019, 2020. This calendar notification already exists in the calendar as enrolment into the program was previously suspended.

The following calendar updates indicate that admissions to the Vantage One Management program continues to be suspended *until further notice*. We have identified three specific locations for these updates in both the UBC Okanagan and UBC Vancouver calendars.

MEMO**Submitted to:**

UBC Okanagan Senate, Admissions and Awards Committee and, UBC Vancouver Senate, Admissions Committee.

Re: Update to calendar notations indicating, "Admission to the UBC Vantage College Management stream is suspended until further notice."

February 16th, 2021

Admission into the UBC Vantage College Management program was previously suspended with no intakes in 2019, 2020. This calendar notification already exists in the calendar as enrolment into the program was previously suspended.

The following calendar updates indicate that admissions to the Vantage One Management program continues to be suspended *until further notice*. We have identified three specific locations for these updates in both the UBC Okanagan and UBC Vancouver calendars.

Calendar updates:

For the Okanagan Calendar,

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,287,1091,1364>

Under the heading "**Transition from UBC Vantage College**", add the notation:

"Admission to the UBC Vantage College Management Stream is suspended until further notice."

For the Vancouver Calendar,

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,309,0,0#23351>

Following the text "students applying to the Management stream in the Vantage Program", add the notation:

"Admission to the UBC Vantage College Management Stream is suspended until further notice."

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,307,943,0>

Under the "**Management stream**" heading, add the same notation:

"Admission to the UBC Vantage College Management Stream is suspended until further notice."

MEMO**Submitted to:**

UBC Okanagan Senate, Admissions and Awards Committee and, UBC Vancouver Senate, Admissions Committee.

Re: Update to calendar notations indicating, "Admission to the UBC Vantage College Management stream is suspended until further notice."

February 16th, 2021

Admission into the UBC Vantage College Management program was previously suspended with no intakes in 2019, 2020. This calendar notification already exists in the calendar as enrolment into the program was previously suspended.

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Calendar updates:

For the Okanagan Calendar,

<http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,287,1091,1364>

Under the heading "**Transition from UBC Vantage College**", add the notation:

"Admission to the UBC Vantage College Management Stream is suspended until further notice."

For the Vancouver Calendar,

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,309,0,0#23351>

Following the text "students applying to the Management stream in the Vantage Program", add the notation:

"Admission to the UBC Vantage College Management Stream is suspended until further notice."

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,307,943,0>

Under the "**Management stream**" heading, add the same notation:

"Admission to the UBC Vantage College Management Stream is suspended until further notice."



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: UBC Vantage College Department: UBC Vantage College Faculty Approval Date: Feb 16th, 2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: February 16th, 2021 Contact Person: Dr. Suzie Lavallee Phone: Email: academic.director@vantagecollege.ubc.ca</p>
<p>Proposed Calendar Entry: <i>Applicants to Vantage College</i></p> <p>Applicants apply to UBC Vantage College via an online application form. The fundamental principles governing admission to UBC Vantage College are the mandate to diversify the international student population and the capacity of the student to matriculate into a UBC degree program.</p> <p>All applicants to UBC Vantage College must demonstrate.</p> <ul style="list-style-type: none"> a minimum level of English proficiency as indicated in the English Language requirement section. a suitable level of academic proficiency in the senior level of secondary school study in their domestic curriculum equivalent to having at least a 70% average in the BC/Yukon Secondary School curriculum. <p>Further, students applying to the Engineering stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) senior-level Chemistry senior-level Physics <p>Further, students applying to the Management stream in the Vantage Program must have completed:</p> <p>Admission to the UBC Vantage College Management Stream is suspended until further notice.</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) <p>Further, students applying to the Science stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus), with a minimum grade of 68% (or nearest equivalent on other grading scales) 	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,309,0,0#23351</p> <p>Present Calendar Entry: <i>Applicants to Vantage College</i></p> <p>Applicants apply to UBC Vantage College via an online application form. The fundamental principles governing admission to UBC Vantage College are the mandate to diversify the international student population and the capacity of the student to matriculate into a UBC degree program.</p> <p>All applicants to UBC Vantage College must demonstrate.</p> <ul style="list-style-type: none"> a minimum level of English proficiency as indicated in the English Language requirement section. a suitable level of academic proficiency in the senior level of secondary school study in their domestic curriculum equivalent to having at least a 70% average in the BC/Yukon Secondary School curriculum. <p>Further, students applying to the Engineering stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) senior-level Chemistry senior-level Physics <p>Further, students applying to the Management stream in the Vantage Program must have completed:</p> <p>Admission to the UBC Vantage College Management Stream is suspended for the 2019 winter session.</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus) <p>Further, students applying to the Science stream in the Vantage Program must have completed:</p> <ul style="list-style-type: none"> senior-level Mathematics (Pre-Calculus), with a minimum grade of 68% (or nearest equivalent on other grading scales)



THE UNIVERSITY OF BRITISH COLUMBIA

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Proposed Calendar Entry:

Vantage One Management

Admission to the Vantage One Management Program is suspended *until further notice*.

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³ WRDS 150 will fulfill the English requirement for the Faculty of Business minimum grade of 60% is required for WRDS 150.

URL:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.307.943.0>

Present Calendar Entry:

Vantage One Management

Admission to the Vantage One Management Program is suspended for the ~~2019 winter session~~.

Students must complete:

- ECON 101 and ECON 102
- LLED 200
- MGMT 100 and MGMT 110
- PSYC 101 and PSYC 102
- SOCI 101 and SOCI 102¹
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- VANT 148 and VANT 149
- WRDS 150³ and ASTU 204¹

Total Credits

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³ WRDS 150 will fulfill the English requirement for the Faculty of Business minimum grade of 60% is required for WRDS 150.

Type of Action:

Update to calendar language

Rationale for Proposed Change:

Admission into the UBC Vantage College Management program was previously suspended with no intakes in 2019, 2020. This calendar notification already exists in the calendar as enrolment into the program was previously suspended.

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19 May 2021



Vancouver Senate
THE UNIVERSITY OF BRITISH COLUMBIA

Docket Page 55 of 512
Office of the Senate
Brock Hall | 2016 - 1874 East Mall
Vancouver, BC V6T 1Z1

Phone 604 822 5239
Fax 604 822 5945
www.senate.ubc.ca

To: Vancouver Senate
From: Senate Awards Committee
Re: Awards for Acceptance by the Senate
Date: 19 May 2021

The Senate Awards Committee has reviewed the materials submitted by Development and Alumni Engagement and has enclosed the list of new and revised awards it deems ready for consideration by the Senate for approval:

Motion: *That Senate accept the awards as listed, that they be forwarded to the Board of Governors for approval, and that letters of thanks be sent to the donors.*

Respectfully submitted,
Dr. Sally Thorne, Chair, Senate Awards Committee

May 2021

From: Daniel Galpin, Associate Director, Awards Development

To: Senate Committee on Student Awards, Vancouver

Re: Awards recommended for acceptance by the Senate Committee

NEW AWARDS – ENDOWED

Andrew Arida Memorial Award

Awards totalling \$5,000 have been made available through an endowment established by friends, family and colleagues in memory of Andrew Arida (1970-2021), along with matching funds from the University of British Columbia, for outstanding domestic students who identify as Black and are entering an undergraduate program directly from secondary school or transferring from another post-secondary institution. Recipients are academically qualified and would not be able to attend UBC without financial assistance. In addition to academic merit, consideration is given to qualities such as leadership skills, community service, and recognized extra-curricular achievement. Subject to continued academic standing, the awards will be renewed for a further three years of study or until the first undergraduate degree is obtained (whichever comes first). Ideally, recipient selection will alternate between the Vancouver and Okanagan campuses.

Andrew (B.A., M.A. 2014) joined UBC in 1996, working in a variety of positions in recruitment and admissions before assuming the position of Deputy Registrar in 2018. He was devoted to attracting well-rounded students to campus, and was proud to see UBC become increasingly diverse and accessible under his leadership. Andrew received UBC's President's Service Award for Excellence in 2018 in recognition of his contributions and service. A musician, traveler, and soccer fan, Andrew regularly gave back to the community through volunteer work. The awards are adjudicated by Enrolment Services. (First award available for the 2021/2022 winter session).

Dr. Gerd and Dr. Ursula Asche Memorial Bursary in Medicine

Bursaries totalling \$30,000 have been made available through an endowment established by an estate gift from Dr. Gerd Asche (1920-2017) in memory of his wife Dr. Ursula Asche (1925-2017), for M.D. students. Dr. Gerd Asche graduated from Friedrich Wilhelm University in what was then West Germany in 1951. He and his wife, Dr. Ursula Asche (née Quint), emigrated to Hope, British Columbia shortly after, where they spent the rest of their lives. They practiced as physicians at the Asche Medical Clinic in Hope, which they owned and operated. The bursaries are adjudicated by Enrolment Services. (First award available for the 2021/2022 winter session).

Diane Hales Award in Pharmaceutical Sciences for Indigenous Students

Awards totalling \$2,000 have been made available through an endowment established by an estate gift from Diane Hales (B.Sc. (Pharm) 1952) for undergraduate First Nations, Inuit or Métis students in the Faculty of Pharmaceutical Sciences with outstanding academic achievement. Preference will be given to students who have demonstrated community service, volunteerism or leadership skills. Diane practiced as a pharmacist in Campbell River, British Columbia, and spent her retirement on Salt Spring Island. These academic awards are made on the recommendation of the Faculty of Pharmaceutical Sciences. (First award available for the 2021/2022 winter session).

Kellough Tillinghast Nitikman Prize in Tax Law

A \$2,000 prize has been made available through an endowment established by Joel A. Nitikman, Q.C. (B.Sc. 1982, LL.B., LL.M.) in honour of Howard J. Kellough, Q.C. and David R. Tillinghast (1930-2018) for the top graduating student in the LL.M. in Taxation program. Mr. Kellough is a retired tax lawyer and was a founding partner of Mawhinney & Kellough (now Dentons Canada LLP). His practice focused on domestic and international corporate tax matters. He served as Chairman of the Canadian Tax Foundation and the National Tax Section of the Canadian Bar Association. Mr. Tillinghast was an international tax lawyer, and from 1962 to 1965 was the first US Department of the Treasury Special Assistant for International Affairs. He helped develop the US international tax system, the structure of which remains in place today. Mr. Nitikman is a leading Canadian tax litigation lawyer. In 2006 and 2016 he received the Douglas J. Sherbaniuk Distinguished Writing Award from the Canadian Tax Foundation, and in 2012 was awarded a Queen's Diamond Jubilee Medal. The prize is made on the recommendation of the Peter A. Allard School of Law. (First award available for the 2021/2022 winter session).

Richard J. and Julia Krejsa Scholarship in Oceans and Fisheries

Scholarships totalling \$2,500 have been made available through an endowment established by Richard J. Krejsa (Ph.D. 1965) and Julia Krejsa (née Sheehan) for outstanding graduate students enrolled in the M.Sc. or Ph.D. in Oceans and Fisheries program studying biological remediation methods of fishery recovery and restoration within marine, estuarine, and/or freshwater ecosystems affected by environmental impacts, particularly pollution and climate change. Preference will be given to First Nations, Inuit and Metis students of Canada. Richard and Julia met at UBC while Ph.D. candidates in the Department of Zoology and the Department of English respectively. Richard is a Professor Emeritus of Biological Sciences at California Polytechnic State University in San Luis Obispo. This scholarship was established in honour of Richard's thesis supervisor, Professor Casimir C. Lindsey, and his wife, Shelagh P. Lindsey, and in memory of Dean Walter H. Gage (1905-1977), who loaned Richard a few hundred dollars after his and Julia's first son Daniel was born in Acadia Camp on campus. The scholarships are made on the recommendation of the Institute for the Oceans and Fisheries, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2021/2022 winter session).

Daymond Ling Award in Physics

Awards totalling \$2,000 have been made available through an endowment established by Daymond Ling (B.Sc. 1976, M.Sc. (Bus Admin) 1978) for third or fourth-year students in the B.Sc. Major, Honours, Combined Major or Combined Honours in Physics or Combined Honours in Biophysics programs who are in good academic standing and have excelled in science communication by demonstrating the ability to communicate the ideas and implications of physics to a wide audience. Daymond has worked for over forty years as a data scientist in financial services, and is regarded as an industry leader. After graduating from UBC, he joined American Express's fraud investigation team, where he was a recipient of a Chairman's Award of Excellence for Innovation. Daymond then joined CIBC in 1996 to assist its customer relationship management team, and was awarded the company's Achievers Award for Innovation twenty times for his contributions in analytics. After 20 years at CIBC, he joined Questrade Financial Group in 2019 as Head of Analytics. Daymond serves as an analytics advisory board member, mentor and is regularly invited to speak at conferences. The awards are made on the recommendation of the Department of Physics & Astronomy. (First award available for the 2021/2022 winter session).

Bill Meekison Memorial Scholarship in Public Health

Scholarships totalling \$5,000 have been made available through an endowment established by friends and family in memory of Bill Meekison (1934-2019) for outstanding M.P.H. and Ph.D. students in the School of Population and Public Health who are researching public health. Bill (B.A. 1957, M.D. 1962, M.P.H.) obtained his Master of Public Health from the University of Toronto after graduating from UBC, and began his career as a public health officer in Williams Lake, British Columbia. He later served as Director of the Boundary Health Unit in the Lower Mainland, during which he prohibited a bar from serving drinks with a frost-bitten toe in them, an incident chronicled by one newspaper under the headline "Dr. Bill Says Toe Must Go". Bill was an advocate for preventative medicine and public health, advising on vaccine clinical trials for the chicken pox vaccine and serving as a Director for the New Westminster-based Affordable Housing Societies. The scholarships are made on the recommendation of the School of Population and Public Health, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2021/2022 winter session).

Claire Milne Memorial Scholarship in Social Work

Scholarships totalling \$10,000 have been made available through an endowment established by the Milne Family in memory of Claire Milne (1927-2020) for outstanding students in the Bachelor of Social Work program who have demonstrated an interest in geriatric social work or in working with vulnerable populations. Preference will be given to students who are from communities that have been historically, persistently and systemically discriminated against. Claire (B.A. 1949, B.S.W. 1950) was born and raised in Vancouver, British Columbia. While

studying at UBC, she spent her summers working for the Vancouver Parks Board as a supervisor at Maple Grove Park in the Kerrisdale neighbourhood of Vancouver. Claire worked with vulnerable young women after receiving her social work degree. She returned to social work after raising her four children, and cared for the elderly, work she continued until her retirement. This scholarship was established in recognition of Claire's work to serve and care for vulnerable populations. The scholarships are made on the recommendation of the School of Social Work. (First award available for the 2021/2022 winter session).

Thelma Sieffert Memorial Bursary in Nursing

Bursaries totalling \$4,000 have been made available through an endowment established by the Sieffert Family in memory of Thelma Sieffert (1923-2015) for undergraduate and graduate students in the School of Nursing. Thelma was born in Vancouver, British Columbia and graduated from the Vancouver General Hospital School of Nursing in 1946. She received a Diploma in Public Health Nursing from UBC in 1956, and worked as Public Health Nurse from 1958 to 1981. The bursaries are adjudicated by Enrolment Services. (First award available for the 2021/2022 winter session).

Irene M. Stewart Memorial Award in Law

A \$7,000 award has been made available through an endowment established by the Stewart Family and Fraser Litigation Group in memory of Irene M. Stewart (1948-2020) for an outstanding second or third-year domestic J.D. student who has achieved academic excellence and demonstrated an interest in corporate or commercial law through academic pursuits and volunteer involvement. Irene (B.A., LL.B. 1971) was born in Caterham, England, and moved to Canada as a child. She was called to the bar in British Columbia in 1972 and practiced for forty-eight years as a corporate and real estate lawyer before her unexpected passing. Irene was a partner at Russell DuMoulin and Gowling WLG LLP before joining Singleton Urquhart Reynolds Vogel LLP. Irene was highly regarded in the legal community for her outstanding legal knowledge and skills, professionalism and dedication to her clients. This academic award is made on the recommendation of the Peter A. Allard School of Law. (First award available for the 2021/2022 winter session).

Art Vertlieb Thunderbird Men's Hockey Award

Awards totalling \$2,000, which may range from a minimum value of \$500 each to the maximum allowable under athletic association regulations, have been made available through an endowment established by Art Vertlieb, Q.C., for outstanding members of the Thunderbird Men's Hockey Team. Preference will be given to goaltenders. Art is a Partner at Vertlieb & Co, focusing on personal injury law and medical negligence. He is a leading member of the law profession, serving as President of the Law Society of British Columbia in 2013. In 2012, Art received the Queen Elizabeth II Diamond Jubilee Medal in recognition of his contributions to the legal community. He is a long-time supporter of the Thunderbird Men's Hockey Team,

previously serving as the Director of the Thunderbird Hockey Alumni Society. Art established this award to support outstanding members of the team. The awards are made on the recommendation of the Head Coach of the Men's Hockey Team and the Athletics Awards Committee. (First award available for the 2021/2022 winter session).

NEW AWARDS – ANNUAL

Dr. John P. Aitchison Memorial Award in Chemistry

Awards totalling \$2,000 have been made available annually through gifts from friends and family in memory of Dr. John P. Aitchison (1934-1983) for third and fourth-year B.Sc. students majoring in Chemistry who have demonstrated mentorship to second-year B.Sc. Chemistry students. Dr. Aitchison (B.A. 1957, M.Sc., Ph.D.) was born in Burnaby, British Columbia, and completed his undergraduate studies in chemistry at UBC, where he served as a mentor to younger students. He relocated to California in 1965 and enrolled in the M.Sc. in Pharmacology program at the University of California, Berkeley. In 1967, on the advice of a professor at the School of Medicine at the University of California, San Francisco, he transferred to the School's newly developed Ph.D. program in Toxicology. In 1969 he joined the Oregon Health & Science University in Portland, Oregon, where he established the Section of Toxicology in the Department of Clinical Pathology, conducted research on drug poisoning and ran a clinical laboratory. The awards are made on the recommendation of the Department of Chemistry. (First award available for the 2021/2022 winter session).

Arts Undergraduate Society Bursary in Arts

Bursaries totalling \$6,000 have been made available annually through a gift from the Arts Undergraduate Society (AUS) for members of the Arts Undergraduate Society, which includes all students in the Bachelor of Fine Arts, Bachelor of Media Studies and Bachelor of Arts programs who are not majoring in Economics. The bursaries will ideally be assigned to at least three recipients each year. The Arts Undergraduate Society works to enhance the social, academic, personal and professional lives of undergraduate students in the Faculty of Arts at UBC Vancouver. The bursaries are adjudicated by Enrolment Services. (First award available for the 2021/2022 winter session).

Arts Undergraduate Society Scholarship in Arts

A \$2,000 scholarship has been made available annually through a gift from the Arts Undergraduate Society (AUS) for an outstanding member of the Arts Undergraduate Society, which includes all students in the Bachelor of Fine Arts, Bachelor of Media Studies and Bachelor of Arts programs who are not majoring in Economics. The scholarship should not be assigned to the same recipient more than once. The Arts Undergraduate Society works to enhance the social, academic, personal and professional lives of undergraduate students in the Faculty of Arts at

UBC Vancouver. The scholarship is made on the recommendation of the Faculty of Arts. (First award available for the 2021/2022 winter session).

Canadian Society for Asian Arts - Honos Foundation Scholarship

A \$2,000 scholarship has been made available annually through a gift from the Canadian Society for Asian Arts and the Honos Foundation for an outstanding M.A. or Ph.D. student in the Department of Art History, Visual Art & Theory who is focusing on Asian art. The Honos Foundation is based in Vancouver, British Columbia and seeks to improve human capital by promoting scholarship and research. The Canadian Society for Asian Arts (CSAA) was founded in 1969 to promote the understanding and appreciation of the arts of Asia by conceptualizing, organizing and presenting programs, exhibitions and publications that build bridges and explore links between and among cultures. This scholarship was established to support the study of Asian art on a pan-Asian basis, reflecting the rich diversity of cultures and art. The scholarship is made on the recommendation of the Department of Art History, Visual Art & Theory, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2021/2022 winter session).

Sandra Cawley Award in Education for Indigenous Students

A \$5,000 award has been made available annually through a gift from the Y. P. Heung Foundation in honour of Sandra Cawley (B.Com. 1981) for a First Nations, Inuit or Métis student of Canada in the Bachelor of Education program who has achieved good academic standing and demonstrated leadership and community involvement. Sandra developed a very successful career in real estate appraisal and land use, specializing in the valuation of commercial real estate. She has given back to UBC by serving as the Vice-Chair of the UBC Board of Governors and as a Director of UBC Properties Trust. The award is made on the recommendation of the Faculty of Education. (First award available for the 2021/2022 winter session).

Sandra Cawley Award in Nursing for Indigenous Students

A \$5,000 award has been made available annually through a gift from the Y. P. Heung Foundation in honour of Sandra Cawley (B.Com. 1981) for a First Nations, Inuit or Métis student of Canada in the Bachelor of Science in Nursing program who has achieved good academic standing and demonstrated leadership and community involvement. Sandra developed a very successful career in real estate appraisal and land use, specializing in the valuation of commercial real estate. She has given back to UBC by serving as the Vice-Chair of the UBC Board of Governors and as a Director of UBC Properties Trust. The award is made on the recommendation of the School of Nursing. (First award available for the 2021/2022 winter session).

Sandra Cawley Award in Social Work for Indigenous Students

A \$5,000 award has been made available annually through a gift from the Y. P. Heung Foundation in honour of Sandra Cawley (B.Com. 1981) for a First Nations, Inuit or Métis student of Canada in the Bachelor of Social Work program who has achieved good academic standing and demonstrated leadership and community involvement. Sandra developed a very successful career in real estate appraisal and land use, specializing in the valuation of commercial real estate. She has given back to UBC by serving as the Vice-Chair of the UBC Board of Governors and as a Director of UBC Properties Trust. The award is made on the recommendation of the School of Social Work. (First award available for the 2021/2022 winter session).

Dean Blye Frank Graduate Scholarship in Education

Scholarships totalling \$10,000 have been made available annually through a gift from Robert Quartermain, in honour of Dean Blye Frank, for outstanding graduate students in the Faculty of Education whose research focuses on creating education policy and education curriculum, and educating educators in SOGI (Sexual Orientation and Gender Identity)-inclusive education. Dean Frank (B.A., B.Ed., M.Ed., Ph.D.) served as Professor and Head of the Division of Medical Education in the Faculty of Medicine at Dalhousie University before joining UBC as Dean of the Faculty of Education in 2011. His research focuses on equity, diversity and inclusion in education and healthcare, and played a vital role in developing the Faculty of Education's SOGI Inclusive Education Initiative, and the A.R.C. Foundation's SOGI 123 program, which helps educators make schools more inclusive for all pupils. In 2006 he received the May Cohen Gender Equity, Diversity and Gender Award from the Association of Faculties of Medicine of Canada, and in 2021 was awarded the Distinguished Alumni Award from the Acadia Alumni Association. The scholarships are made on the recommendation of the Faculty of Education, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2021/2022 winter session).

Laura Huber Memorial Award for Women in Video Gaming

A \$10,000 award has been made available annually through a gift from Electronic Arts, in memory of Laura Huber (1967-2015), for a third or fourth-year female student enrolled in an undergraduate degree program in the Department of Computer Science. The recipient will have demonstrated outstanding academic achievement, an interest in pursuing a career in the gaming industry, and have shown excellence in video game programming through a course or their portfolio. Laura (née Pool) grew up in Fox Chapel, Pennsylvania and attended Colgate University in Hamilton, New York. She moved to San Francisco, California after graduation to pursue a career as a graphic designer. Laura served as an art director and designer for *Game Developer* and Gamasutra. In 2000, she married Jeff Huber, a member of Electronic Art's Board of Directors. This award was established in recognition of Laura's desire to encourage women entering the gaming industry. This academic award is made on the recommendation of the Department of Computer Science. (First award available for the 2020/2021 winter session).

Gary Kusin Award for Women in Video Gaming

A \$10,000 award has been made available annually through a gift from Electronic Arts, in honour of Gary Kusin, for a third or fourth-year female student enrolled in an undergraduate degree program in the Department of Computer Science. The recipient will have demonstrated outstanding academic achievement, an interest in pursuing a career in the gaming industry, and have shown excellence in video game programming through a course or their portfolio. Gary was born in Texarkana, Texas. He received his B.A. from the University of Texas, Austin and his M.B.A. from the Harvard Business School. Gary served as Director of Electronic Arts from 1995 to 2010 and is a co-founder of GameStop. He currently serves on the Board of Directors of the Dallas Chamber of Commerce and is a member of the Dallas Citizen's Council. This academic award is made on the recommendation of the Department of Computer Science. (First award available for the 2020/2021 winter session).

Guru Nanak Award in Medicine

Awards totalling \$2,000 have been made available annually through a gift from Talveen Gill and Jasdeep Chahal through the University of Victoria, in honour of Guru Nanak, for M.D. students in the Island Medical Program whose volunteer work or community service has focused on equity and inclusion. Preference will be given to students who are from communities that have been historically, persistently and systemically discriminated against. Guru Nanak was the founder of Sikhism and originated the idea of Seva, or selfless service. This award was established to recognize students who have served their communities and helped to promote equity and inclusion. The awards are made on the recommendation of the Faculty of Medicine. (First award available for the 2021/2022 winter).

Brian Robert Nielsen Scholarship in Forest Resources Management

Scholarships totalling \$2,000 have been made available annually through a gift from the Nielsen Family in honour of Brian Robert Nielsen for outstanding domestic third or fourth-year undergraduate students in the Faculty of Forestry who are studying forest resource management and have demonstrated an interest in sustainable forest management practices. Brian (B.S.F. 1993) received his Professional Forester designation in 1995, and worked in a variety of forest management and forest product positions. He started his extensive career with road building and logging roles at West Fraser Mills in Quesnel, British Columbia. In 2002 Brian transitioned into manufacturing, starting in quality control for Pacific Inland Resources in Smithers, British Columbia, eventually progressing to a Sawmill Superintendent position. He joined Western Forest Products in 2015 in Cowichan Bay, British Columbia as Operations Manager. He was an avid outdoorsman, and was passionate about sustainable forest management and silviculture. Brian was also an Accredited Silviculture Surveyor and obtained his Interior BC Log Scaling License. This scholarship was established in recognition of Brian's commitment to excellence in

forest resource management. The scholarships are made on the recommendation of the Faculty of Forestry. (First award available for the 2021/2022 winter session).

Henrik Moberg Parker Memorial Award in Kinesiology

Awards totalling \$2,000 have been made available annually through gifts from friends and family in memory of Henrik Moberg Parker (2001-2020) for students in the Bachelor of Kinesiology program who are participating in varsity or club sports. Preference will be given to students who volunteer with children who have special needs. Henrik was born in North Vancouver, British Columbia. After graduating from Vancouver College in 2019, he entered the Bachelor of Kinesiology program at UBC. Henrik was a leader on his hockey and soccer teams, and volunteered regularly with children who have special needs. He was an avid yachter and sailor, was recognized as one of British Columbia's top sailors from age eleven, and represented Canada at international competitions. This award was established in recognition of Henrik's accomplishments as an athlete, and his work to support children who have special needs. The awards are made on the recommendation of the School of Kinesiology. (First award available for the 2021/2022 winter session).

Rio Tinto Scholarship for Women in Engineering

Scholarships totalling \$5,000 have been made available annually through a gift from Rio Tinto for outstanding female Bachelor of Applied Science students majoring in Biological, Chemical, Computer, Electrical, Materials, Mechanical or Mining Engineering. The scholarship will rotate through the disciplines in alphabetical order. Rio Tinto is a global metal and mining group operating in thirty-five countries across six continents. They are committed to increasing the representation of women in mining and creating an engaging and inclusive environment. The scholarships are made on the recommendation of the Faculty of Applied Science. (First award available for the 2021/2022 winter session).

Dr. Michael Ross Memorial Award in Surgery

Awards totalling \$2,000 have been made available through an endowment established by the Victoria Medical Society and held at the University of Victoria, in memory of Dr. Michael Ross (1935-2020), for fourth-year M.D. students in the Island Medical Program who have been matched to a surgical residency. Preference will be given to students matched to an ENT or vascular surgery residency. Dr. Ross was born in England, where he trained as a family physician. He immigrated to Canada in 1960, and settled in Victoria, British Columbia. He completed a residency in otolaryngology in Seattle, Washington after noticing cancers of the mouth and tongue in his practice. Dr. Ross served as the Chief of Surgery at the Royal Jubilee Hospital, was the President of the Victoria Medical Society, and taught at the University of Victoria. He briefly retired at age seventy, but quickly returned to assisting vascular surgeons in the operating room, retiring at age eighty-five in 2020. This award was established in recognition of Dr. Ross's accomplishments as an otolaryngologist. The awards are made on the

recommendation of the Faculty of Medicine. (First award available for the 2021/2022 winter session).

Dr. Kim Stevenson Memorial Award in Anesthesiology

Awards totalling \$2,000 have been made available annually through a gift from the Association of Victoria Anesthesiologists and held at the University of Victoria, in memory of Dr. Kim Stevenson (1965-2020), for outstanding fourth-year M.D. students in the Island Medical Program who have matched to a residency program in anesthesia. Dr. Stevenson received his medical degree from the University of Orange Free State in South Africa. He was a Clinical Assistant Professor with the Department of Anesthesia, Pharmacology, and Therapeutics in the UBC Faculty of Medicine, and the section head of obstetric anesthesia in the Department of Anesthesiology, Pain and Perioperative Medicine at Victoria General Hospital. Dr. Stevenson was the Island Medical Program educational representative for anesthesia, and was an enthusiastic teacher to medical students during their anesthesia rotations. The awards are made on the recommendation of the Faculty of Medicine. (First award available for the 2021/2022 winter session).

St. Pierre, Romilly, Nathanson Entrance Award in Law for Black Students

A \$15,000 entrance award has been made available annually through gifts from David St. Pierre, Selwyn Romilly (B.A. 1963, LL.B. 1966) and Matthew Nathanson (LL.B. 1997) for a domestic student entering the J.D. program who identifies as Black, demonstrates financial need, and has a history of community service or volunteerism. Preference will be given to students who have demonstrated an interest in criminal law. David St. Pierre practiced criminal law as a partner of Cobb, St. Pierre, Lewis, Barristers and Solicitors before being appointed to the Provincial Court of British Columbia in 2009. Selwyn Romilly was appointed to the Provincial Court of British Columbia in 1974 and elevated to the Supreme Court of British Columbia in 1995, the first Black judge named to any court in British Columbia. Matthew Nathanson is a criminal defence lawyer practicing out of downtown Vancouver. David, Selwyn, and Matthew established this award to support Black students as they begin their legal education. The award is made on the recommendation of the Peter A. Allard School of Law. (First award available for the 2021/2022 winter session).

Professor Madanlal T. Wasan Memorial Prize in Urologic Sciences

A \$2,000 prize has been made available annually through a gift from Dr. Kishor Wasan in memory of his father, Professor Madanlal T. Wasan (1930-2005), for an outstanding Ph.D. student whose supervisor is in the Department of Urologic Sciences. Professor Wasan (B.A., M.A., Ph.D.) was born in Sarai Saleh, Haripur District, Pakistan (then British India), and moved to Mumbai, India (then Bombay) in 1947, where he attended Siddharth College at the University of Bombay. During his undergraduate studies he was awarded a prestigious Dr. B. R. Ambedkar Scholarship in recognition of his mathematical abilities. In 1956 he came to the United States to

work on his Ph.D. in Statistics and Probability at the University of Illinois. He was a Professor of Statistics and Probability at Queen's University for over forty years, where he established a statistics lab and wrote books that were published in the US, the UK, and the Soviet Union. This prize was established in recognition of Dr. Wasan's commitment to championing international graduate students and trainees, and his legacy as a father, professor and mentor. The prize is made on the recommendation of the Department of Urologic Sciences. (First award available for the 2020/2021 winter session).

NEW AWARDS – INTERNAL

Bachelor of Pharmaceutical Sciences Entrance Award

Awards totalling \$40,000, valued at up to \$10,000 each, have been made available annually by the Faculty of Pharmaceutical Sciences for students entering the Bachelor of Pharmaceutical Sciences program. In addition to academic merit, consideration is given to qualities such as leadership skills, community service and recognized extra-curricular achievement. If possible, two recipients will be First Nations, Inuit or Métis and/or from a rural community. The awards are made on the recommendation of the Faculty of Pharmaceutical Sciences. (First award available for the 2021/2022 winter session).

Graduate Covid Program Delay Tuition Award

Graduate Covid Program Delay Tuition Awards have been made available annually by the University of British Columbia to support graduate students whose academic and/or research progress was delayed by disruptions due to the Covid-19 pandemic. Students who were registered in an eligible graduate program during the Summer 2020 term will receive an award equivalent to their tuition assessment, less any other tuition awards received for the same term, upon registration in the 8th term of a research-based Master's program or the 17th term of a PhD program. The awards are made on the recommendation of the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2020/2021 winter session).

Sweet Student Fund Emergency Bursary in Dentistry

The Sweet Student Fund Emergency Bursary in Dentistry has been established to assist Dentistry students who are faced with an unexpected financial challenge of a serious nature which impacts their well-being and/or their ability to continue in the program. The student must demonstrate that all other possible sources of support have been explored before an application is considered. All requests are determined on a case-by-case basis, and adjudicated by Enrolment Services in consultation with the Faculty of Dentistry. (First award available for the 2020/2021 winter session).

Peter Wanyenya Memorial Graduate Award

Awards totalling \$2,000 have been made available through an endowment established by the Faculty of Arts for graduate students in the Institute for Gender, Race, Sexuality and Social Justice whose research focuses on African refugees, African-Canadian/Black Canadian studies, Indigeneity and Africanity, African Migrants or Asylum seekers resettlement. Preference will be given to students who have demonstrated community engagement, mentorship or advocacy within the African-Canadian/Black Canadian youth communities. The awards are made on the recommendation of the Institute for Gender, Race, Sexuality and Social Justice, in consultation with the Faculty of Graduate and Postdoctoral Studies. (First award available for the 2021/2022 winter session).

PREVIOUSLY APPROVED AWARDS WITH CHANGES IN TERMS OR FUNDING SOURCE

Endowed Awards

8572 – CHAN, Yuet Lan Scholarship

Rationale for Proposed Changes

The donor would like to be recognized in the description by their full first name rather than their initials.

Current Award Description

A \$1,350 scholarship has been made available through an endowment established by T.Y. Lung in honour of his mother, Chan, Yuet Lan (aka Yuet Lan Lung). As an accomplished author, Chan, Yuet Lan's book on Chinese classics is catalogued in UBC's Asian Library. This endowed scholarship is offered to an undergraduate student in any year or any field of study. The award is made, on a rotating basis, on the recommendation of the Faculties offering undergraduate degrees.

Proposed Award Description

A \$1,350 scholarship has been made available through an endowment established by **Tin-Yick**-Lung in honour of his mother, Chan, Yuet Lan (aka Yuet Lan Lung). As an accomplished author, Chan, Yuet Lan's book on Chinese classics is catalogued in UBC's Asian Library. This endowed scholarship is offered to an undergraduate student in any year or any field of study. The award is made, on a rotating basis, on the recommendation of the Faculties offering undergraduate degrees.

Annual Awards

7911 – Burnaby Public Library Picard Memorial Bursary

Rationale for Proposed Changes

The description has been updated so that multiple bursaries totalling \$2,500 can be offered, and to clarify the candidate pool.

Current Award Description

A bursary of \$750 has been made available by the Trustees of the Burnaby Public Library, in memory of Marcelle Lucienne Eleonore Picard. The award is made to a student entering second year in the School of Library, Archival and Information Studies in need of financial assistance, and demonstrating a particular interest in public librarianship. Whenever possible, the award is made to a student who has some connection with Burnaby either through residence or work experience.

Proposed Award Description

A bursary of \$750 **Bursaries totalling \$2,500** has **have** been made available **annually through a gift from** by the Trustees of the Burnaby Public Library, in memory of Marcelle Lucienne Eleonore Picard. ~~The award is made to a~~ **for** students ~~entering second year~~ in the School of Library, Archival and Information Studies ~~in need of financial assistance, and demonstrating a particular interest in public librarianship. Whenever possible, the award is made to a student who~~ has **have** ~~some~~ a connection with Burnaby, **British Columbia through** either ~~through~~ residence or work experience. **The bursaries are adjudicated by Enrolment Services.**

8091 – Delta Kappa Gamma Society Bursary in Education

Rationale for Proposed Changes

The award title and description to reflect that the bursary is funded by the Vancouver Chapter of Delta Kappa Gamma Society.

Current Award Title: Delta Kappa Gamma Society Bursary in Education

Current Award Description

A \$600 bursary has been made available by Vancouver Chapter, Delta Kappa Gamma Society International, an honour society of women educators. The award is intended to assist a single parent who is entering or enrolled in a teacher education program in the Faculty of Education.

Proposed Award Title: Delta Kappa Gamma Society, **Vancouver Chapter** Bursary in Education

Proposed Award Description

A \$600 bursary has been made available by **the** ~~Vancouver Chapter~~, Delta Kappa Gamma Society International, **Vancouver Chapter**, an honour society of women educators. The award is

intended to assist a single parent who is entering or enrolled in a teacher education program in the Faculty of Education.

1431 – International Undergraduate Study Preparation Program (IUSPP) Scholarship in Continuing Studies

Rationale for Proposed Changes

Extended Learning no longer offers the International Undergraduate Study Preparation Program. The award title and description have been updated to support a different Extended Learning program, the International Graduate Studies Preparation Program (IGSPP).

Current Award Title: International Undergraduate Study Preparation Program (IUSPP) Scholarship in Continuing Studies

Current Award Description

Three scholarships of \$1,000 each are offered by Mr. Ming Cai to international students who have previously graduated from the International Undergraduate Study Preparation Program (IUSPP) of UBC Continuing Studies, are currently in the second year of any undergraduate degree program at the University of British Columbia, have completed no less than 27 credits in their first year at UBC with no failed courses, and achieved a minimum grade average of 75%. The awards are made to the top three candidates with the top grade averages on the recommendation of UBC Continuing Studies, in consultation with Enrolment Services.

Proposed Award Title: International Undergraduate Study **Graduate Studies** Preparation Program (~~IUSPP~~) Scholarship ~~in Continuing Studies~~

Proposed Award Description

Three scholarships of ~~A~~ \$1,000 ~~scholarship~~ each are offered by ~~has been made available annually through a gift from~~ Mr. Ming Cai ~~for~~ to international students who have ~~previously graduated from the International Undergraduate Study Preparation Program (IUSPP) of UBC Continuing Studies, are currently in the second year of any undergraduate degree program at the University of British Columbia, have completed no less than 27 credits in their first year at UBC with no failed courses, and achieved a minimum grade average of 75%~~ **completed the International Graduate Studies Preparation Program (IGSPP) offered by UBC Extended Learning, and have been accepted into a graduate program within one year of graduation from IGSPP. The scholarship is given to the IGSPP graduate with the highest IGSPP GPA.** The awards are ~~scholarship is made to the top three candidates with the top grade averages on the recommendation of UBC Continuing Studies~~ **Extended Learning**, in consultation with ~~Enrolment Services~~ **the Faculty of Graduate and Postdoctoral Studies.**

2002 – International Tuition Award in Education (12-Month Option)

Rationale for Proposed Changes

The Bachelor of Education program is currently an eleven-month program. The award title and description have been updated to remove reference to the length of the program.

Current Award Title: International Tuition Award in Education (12-Month Option)

Current Award Description

Awards in the amount of \$4,000 each are offered by the Faculty of Education to international undergraduate students enrolled in the 12-Month Option of the Bachelor of Education Program. The awards are made on the recommendation of the Faculty.

Proposed Award Title: International Tuition Award in Education (~~12-Month Option~~)

Proposed Award Description

Awards in the amount of \$4,000 each are offered by the Faculty of Education to international undergraduate students enrolled in ~~the 12-Month Option of~~ the Bachelor of Education Program. The awards are made on the recommendation of the Faculty.

1272 – Native Brotherhood of B. C. Jubilee Scholarship**Rationale for Proposed Changes**

The donor's intention for this scholarship was that it would support students studying arts or science disciplines, rather than students specifically in the Faculty of Arts or the Faculty of Science. The description has been updated to clarify that students in arts and sciences regardless of faculty should be eligible for the scholarship.

Current Award Description

A \$4000 scholarship was established in 1990 by the Native Brotherhood of B.C. on the occasion of its 60th year. The award is made to a First Nations student from a B.C. coastal community and is open to students in the Faculties of Arts and Science.

Proposed Award Description

A \$4,000 scholarship was established in 1990 by the Native Brotherhood of B.C. on the occasion of its 60th year. The award is made to an undergraduate First Nations student from a B.C. coastal community and is open to students studying in the Faculties of arts and or sciences. The scholarship is adjudicated by Enrolment Services.

0476 – Dr Terry Swanson Memorial Scholarship**Rationale for Proposed Changes**

The Plant Pathology Society of Alberta offers the Swanson Award in Plant Pathology and Nematology at two other universities. The award title and description have been updated to bring the award in line with how it is referred to at the other universities.

Current Award Title: Dr Terry Swanson Memorial Scholarship

Current Award Description

A scholarship of \$500, made available by the Plant Pathology Society of Alberta, is awarded to the graduate student in plant pathology who best exemplifies Dr. Swanson's high standard of achievement in coursework and in applied research. An outstanding B.Sc. (Agr.) graduate of UBC (1977), Dr. Swanson completed his Ph.D. in California (1984). His promising career with Alberta Agriculture was tragically curtailed by an air crash on Oct. 19, 1984. The scholarship is rotated among the University of British Columbia, the University of California-Riverside, and the University of Alberta. The scholarship is made available at UBC in 2003-04 on the recommendation of the Faculty of Land and Food Systems in consultation with the Faculty of Graduate and Postdoctoral Studies.

Proposed Award Title: ~~Dr Terry Swanson Memorial Scholarship~~ Award in Plant Pathology and Nematology

Proposed Award Description

A \$1,000 scholarship award of \$500, has been made available by the Plant Pathology Society of Alberta, is awarded to the for an outstanding graduate student in plant pathology and/or nematology who best exemplifies Dr. Swanson's high standard of achievement in coursework and in applied research. An outstanding B.Sc. (Agr.) graduate of UBC (1977), Dr. Swanson completed his Ph.D. in California (1984) Dr. Swanson received his B.Sc. (Agr.) from UBC in 1977, and his Ph.D. from the University of California, Riverside in 1984. His promising career with Alberta Agriculture was tragically curtailed by an air crash on Oct. 19, 1984. The scholarship award is rotated among the University of British Columbia, the University of California, Riverside, and the University of Alberta. The scholarship award is made available at UBC in 2003-04 on the recommendation of the Faculty of Land and Food Systems, in consultation with the Faculty of Graduate and Postdoctoral Studies.



19 May 2021

To: Vancouver Senate

From: Senate Curriculum Committee

Re: May Curriculum Proposals (approval)

The Senate Curriculum Committee has reviewed the material forwarded to it by the Faculties and encloses those proposals it deems as ready for approval.

The following is recommended to Senate:

Motion: *“That the revised programs, new courses, revised courses, and revised degree parchments brought forward by the Faculties of Applied Science, Arts, Commerce and Business Administration, Graduate and Postdoctoral Studies (Arts, Commerce and Business Education, Medicine), Medicine, and the Peter A. Allard School of Law be approved.”*

Respectfully submitted,

Dr. Claudia Krebs, Chair
Senate Curriculum Committee

FACULTY OF APPLIED SCIENCE

Revised programs

Bachelor of Applied Science in Mechanical Engineering, Aerospace Option; Bachelor of Applied Science in Materials Engineering

New courses

CHBE 478 (3) Polymer Science and Processing; CHBE 497 (1-6) d Topics in Chemical and Biological Engineering; CPEN 212 (4) Computing Systems II; CPEN 322 (4) Software Construction II; CPEN 497 (1-3) d Research Experience in Computer Engineering; ELEC 497 (1-3) d Research Experience in Electrical Engineering; APSC 107 (0) Introduction to Engineering Co-op; MANU 400 (1-9) d Topics in Manufacturing Engineering; MANU 465 (3) AI and Machine Learning Applications in Manufacturing; MECH 453 (6) Aerospace Design Project; MTRL 320 (3) Management of Engineering Design

Revised degree parchments

Master of Engineering in Mechanical Engineering; Master of Engineering in Mechatronics Design; Master of Engineering in Naval Architecture and Marine Engineering

FACULTY OF ARTS

Revised program

French Language, Literatures and Cultures

New courses

FREN 496 (3) Research Seminar in French Language and Linguistics; FREN 485 (3) Early Encounters: Travel Literature and Colonial Writing in French; FREN 428 (3) Francophone Cinema; FREN 440 (3) Francophonie: History and Current Debates; FREN 441 (3) Francophone Literatures and Cultures of North America; FREN 442 (3) Cultures of the Francophone World; FREN 443 (3) Postcolonial Studies; FREN 476 (3) French Language and Societies; FREN 477 (3) Contemporary Varieties of French; ANTH 309 (3) Ethnography of the Himalaya: Diversity & Development; CENS 315 (3) Becoming Multilingual: Experience, Aesthetics, Community; CNRS 333 (3) Art and the Christian Transformation of the Roman Empire; CRWR 420 (3-6) d Indigenous Writing; SOCI 204 (3) Global Population Dynamics

FACULTY OF COMMERCE AND BUSINESS ADMINISTRATION

New courses

COMM 110 (0) Dual Degree Year 1 at University of Hong Kong; COMM 410 (0) Dual Degree Year 4 at University of Hong Kong



Revised degree parchment
Bachelor of Commerce

FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

Arts

New course
CRWR 521 (3-6) d Indigenous Writing

Commerce and Business Administration

Revised program
Doctor of Philosophy in Business Administration

New courses
BAEN 540 (1.5) Strategy and Innovation; BAFI 508 (1.5) Data-driven Investments; BAMA 519 (1.5) Building Brands with Purpose

Medicine

New course
MEDI 504 (1.5-3) d Emerging Topics in Experimental Medicine

FACULTY OF MEDICINE

Revised courses
PATH 305 (3) Modern Microscopy; PATH 408 (3) Research and Career Skills

PETER A. ALLARD SCHOOL OF LAW

New courses
LAW 427 (3-12) d International Justice and Human Rights Clinic Practicum; LAW 428 (3-6) d International Justice and Human Rights Clinical Seminar



UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: APSC Department: CHBE Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): W Effective Academic Year: 2021W</p>	<p>Date: January 22, 2021 Contact Person: Louise Creagh Phone: 604-827-5210 Email: alcreagh@mail.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>CHBE 478 (3) Polymer Science and Processing. Introduction to polymer chemistry, polymer properties, polymer processing and technological applications. <i>This course is not eligible for Credit/D/Fail grading.</i> [3-0-0]</p> <p>Prerequisite: CHEM 260, CHBE 251 or equivalent.</p>	<p>URL: n/a</p> <p>Present Calendar Entry: n/a</p> <p>Type of Action: Create new course.</p> <p>Rationale for Proposed Change: The polymer industry employs a large number of Chemical and Biological Engineers. The addition of this technical elective course to the CHBE curriculum provides the opportunity for students to be exposed to this technology, better preparing them for industry.</p> <p>X Not available for Cr/D/F grading (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: This is a technical elective course for the Chemical Engineering and Chemical & Biological Engineering programs.</p>



UBC Curriculum Proposal Form Change to Course or Program

Category: 1

Faculty: APSC Department: CHBE Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): W Effective Academic Year: 2021W	Date: January 22, 2021 Contact Person: Louise Creagh Phone: 604-827-5210 Email: alcreagh@mail.ubc.ca
<div style="background-color: yellow; padding: 5px; margin-bottom: 10px;"> Proposed Calendar Entry: </div> <div style="background-color: yellow; padding: 5px;"> CHBE 497 (1-6) d Topics in Chemical and Biological Engineering. Seminar or lecture. </div>	URL: n/a Present Calendar Entry: n/a Type of Action: Create new course. Rationale for Proposed Change: The creation of a Topics course in CHBE provides a flexible platform with which to introduce students to emerging technologies in the field. <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> X Not available for Cr/D/F grading (undergraduate courses only) <small>(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</small> </div> Rationale for not being available for Cr/D/F: This is a technical elective course for the Chemical Engineering and Chemical & Biological Engineering programs.

THE UNIVERSITY OF BRITISH COLUMBIA
FACULTY OF APPLIED SCIENCE (Engineering)

Category: 1

<p>Faculty: Applied Science</p> <p>Department: Electrical and Computer Engineering</p> <p>Faculty Approval Date: Mar 4, 2021</p>	<p>Date: January 28, 2021</p> <p>Contact Person: Nick Jaeger</p> <p>Phone: 2-5673</p> <p>Email: nickj@ece.ubc.ca</p>
<p>Effective Date for Change: 2021W</p> <p>Proposed Calendar Entry:</p> <p>CPEN 212 (4) Computing Systems II</p> <p>Computer architecture and the hardware-software interface: pipelining; caches; virtual memory; memory management; linking; concurrency; introduction to compilers. [3-2-0]</p> <p>Prerequisites: CPEN 211, and one of CPEN 221, CPEN 223, CPSC 259.</p>	<p>Present Calendar Entry: None</p> <p>Action: Create new course.</p> <p>Rationale:</p> <p>This new course starts with some of the material that is currently covered in CPEN 211. CPEN 211 has a heavy workload and is common to students in Computer Engineering and Electrical Engineering but not all the material needs to be required in the EE program as well. This change reduces the workload in CPEN 211 and the material in CPEN 212 is of greater relevance of Computer Engineering students. Note that the analysis of workload in CPEN 211 (a 5-credit course) would have made that course comparable to a 6.5 credit course, so these changes do not alter the credit value associated with CPEN 211 but will now allow CPEN 211 to de-emphasize certain topics that are now covered by CPEN 212.</p> <p>This course also replaces CPSC 261 in the Computer Engineering program, with two additional goals:</p> <ul style="list-style-type: none"> - An emphasis on realizing approaches such as pipelining on a hardware platform; - The need to have this course taught by a faculty member with a P.Eng. license so as to meet accreditation requirements and to free up space for students to take electives that can be taught by instructors without a P.Eng. license. <p>[x] Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: Courses that affect the accreditation pathway for engineering students are not eligible for Cr/D/F.</p> <p>Pass/Fail or Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>

THE UNIVERSITY OF BRITISH COLUMBIA
FACULTY OF APPLIED SCIENCE (Engineering)

Category: 1

<p>Effective Date for Change: 2021W</p> <p>Faculty Approval Date: Mar 4, 2021</p> <p>Proposed Calendar Entry:</p> <p>CPEN 322 (4) Software Construction II</p> <p>Contemporary concepts and techniques for developing interactive software applications: client-server architectures; session-oriented systems; security and scalability; models of application deployment. [3-2-0]</p> <p>Prerequisites: CPEN 221 and CPSC 221.</p>	<p>Present Calendar Entry: None</p> <p>Action: Create new course.</p> <p>Rationale: Given the rapid changes in the landscape of software development, students require more than one course in the practices of software development to gain conceptual and hands-on understanding of modern systems.</p> <p>Software engineers today are less likely to design data structures and algorithms from scratch and more likely to build systems from library and framework components. In this course, students engage with concepts related to the construction of software systems at scale, building on their understanding of the basic building blocks of data structures, algorithms, program structures, and computer structures. Student assignments involve engagement with and development of complex software.</p> <p>The purpose of this course is to create student engagement and experience with contemporary ideas and practices in developing software applications. Specific technologies will change for different offerings of the course, but the early offerings will focus on web applications.</p> <p>[x] Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: Courses that affect the accreditation pathway for engineering students are not eligible for Cr/D/F.</p> <p>Pass/Fail or Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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THE UNIVERSITY OF BRITISH COLUMBIA
FACULTY OF APPLIED SCIENCE (Engineering)

Category: 1

<p>Effective Date for Change: 2021W</p> <p>Proposed Calendar Entry:</p> <p>Faculty Approval Date: Mar 4, 2021</p> <p>CPEN 497 (1-3) d Research Experience in Computer Engineering</p> <p>Directed research experience. Communication of research ideas.</p> <p>Prerequisites: Third-year standing.</p>	<p>URL:</p> <p>Present Calendar Entry: None</p> <p>Action: Create new course.</p> <p>Rationale: This course is being created to allow undergraduate students to gain preliminary research experience before embarking on an undergraduate student research assistantship (USRA) or an undergraduate thesis (CPEN 499). This course will be graded on a pass/fail basis. The course will be offered for 1 credit in a term, and students may be able to repeat the course in up to 3 terms for purposes of rotation through research groups.</p> <p><input type="checkbox"/> Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: Courses that affect the accreditation pathway for engineering students are not eligible for Cr/D/F.</p> <p><input checked="" type="checkbox"/> Pass/Fail or Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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THE UNIVERSITY OF BRITISH COLUMBIA
FACULTY OF APPLIED SCIENCE (Engineering)

Category: 1

Effective Date for Change: 2021W

Faculty Approval Date: Mar 4,

2021

Proposed Calendar Entry:

ELEC 497 (1-3) d Research Experience in Electrical Engineering

Directed research experience. Communication of research ideas.

Prerequisites: Third-year standing.

URL:

Present Calendar Entry: None

Action: Create new course.

Rationale:

This course is being created to allow undergraduate students to gain preliminary research experience before embarking on an undergraduate student research assistantship (USRA) or an undergraduate thesis (ELEC 499). This course will be graded on a pass/fail basis. The course will be offered for 1 credit in a term, and students may be able to repeat the course in up to 3 terms for purposes of rotation through research groups.

☐ Not available for Cr/D/F grading.

(Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)

Rationale for not being available for Cr/D/F: Courses that affect the accreditation pathway for engineering students are not eligible for Cr/D/F.

☒ Pass/Fail or Honours/Pass/Fail grading


(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)



UBC Curriculum Proposal Form Change to Course or Program

Category: (1 ~~or~~ 2)

<p>Faculty: APSC Department: Engineering Co-op Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: February 1, 2021 Contact Person: Sara Buse Phone: 604-833-3324 Email: sara.buse@ubc.ca</p>
<p>Proposed Calendar Entry: (40 word limit for course descriptions)</p> <p>APSC 107 (0) - Introduction to Engineering Co-op –</p> <p>An introduction to Engineering Co-op including: completion of preemployment workshops, career skills toolkits, networking opportunities, interview training, individual coaching sessions, and job search skills. Restricted to students meeting the requirements of the Faculty of Applied Science Co-operative Education Program. This course is not available for Credit/D/Fail Grading. [0-0-0]</p>	<p>URL: n/a</p> <p>Present Calendar Entry: n/a</p> <p>Type of Action: n/a</p> <p>Rationale for Proposed Change: The Engineering co-op program is hoping to develop a 0 credit course for newly admitted co-op students that they participate in prior to their first work term. One reason for this change is to be able to meet FIPPA requirements for a resume checking software called VMock, and having students be registered for the course allows for us to use CWL integration. This change is being done in collaboration with both the Arts and Sauder co-op programs who also use this software. The creation of this course also allows the co-op program to formalize the pre-job search curriculum that has been well established and is a requirement of participation of the program as per our accreditation guidelines. This will allow for a stronger student experience for newly admitted students and better understanding of what is expected when they are admitted to the program.</p> <p>The co-op program currently has a workshop fee as part of their program structure, and newly admitted students need to successfully complete a number of modules before being eligible for placement. The fee for the workshops and associated activities are approved by the Board of Governors, have been in place for many years, and would be difficult to change. It would not be appropriate to create a course with a non-zero credit value as that would also have a tuition implication (and one that would have differential fees for international students, whereas the co-op workshop fee is the same across all faculties and the same for international and domestic students alike). However, by not being in the format of a course, the co-op workshops and onboarding activities currently sit outside of our learning</p>

	<p>management system (Canvas). As described above, we have been advised if we create a course we can have CWL integration and the full functionality of Canvas to track students through the necessary activities, as well as meeting FIPPA requirements. As such, the activities and learning outcomes are already in place and students already do all of these things, but now they would do them as a 0-credit course (with P/F for a grading scheme). This conversion of the workshop activities to a Canvas course will have benefits to students as it will be easier for them to track their progress in Canvas as opposed to having to manage the activities independently.</p> <p>X Not available for Cr/D/F grading (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p>X Pass/Fail or Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is</p> <p></p>
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UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Applied Science Department: Materials Engineering Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): S Effective Academic Year: 2021</p>	<p>Date: Contact Person: Casey Keulen Phone: 778-839-7991 Email: casey.keulen@ubc.ca</p>
<p>Proposed Calendar Entry: (40 word limit.)</p> <p>MANU 400 (1-9) d Topics in Manufacturing Engineering <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: None yet</p> <p>Present Calendar Entry: None yet</p> <p>Type of Action: Proposal for new course</p> <p>Rationale for Proposed Change: <input type="checkbox"/></p> <p>X Not available for Cr/D/F grading (undergraduate courses only)</p> <p>Rationale for not being available for Cr/D/F: Applied Science does not allow Cr/D/F grading. <input type="checkbox"/> <input type="checkbox"/></p> <p>Pass/Fail or Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Applied Science Department: Manufacturing Engineering Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: January 28, 2020 Contact Person: Casey Keulen Phone: 778-839-7991 Email: casey.keulen@ubc.ca</p>
<p>Proposed Calendar Entry: (40 word limit for course descriptions)</p> <p>MANU 465 (3) AI and Machine Learning Applications in Manufacturing Artificial intelligence, machine learning techniques, deep learning, Python libraries for machine learning, basic signal processing techniques, data acquisition, applications in manufacturing, use of sound to evaluate operation of CNC machinery, use of AE sensor to evaluate metal 3D printing. [3-0-1-]</p>	<p>URL: (URL from the current web Calendar – not the draft calendar. This URL is not needed if you are only making changes to individual courses - for course entries simply list the course number.)</p> <p>Present Calendar Entry: (Cut and paste from the current web Calendar.)</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: When you have supporting documents for Category 1 proposals please label each document with the course number, or the name of the program, being proposed.</p> <p>We would like to introduce a new technical elective course to the MANU program. This course covers cutting edge topics that are currently being developed and applied to manufacturing engineering. These represent what many see as a major theme in the future of manufacturing engineering.</p> <p>Note: After consultation with the other departments, it was decided to change the name of the course from 'Intelligent Manufacturing' to 'AI and Machine Learning Applications in Manufacturing'. This new name has been updated on all the forms aside from the Library Consult form, in an attempt to reduce unnecessary work. No changes that would affect the library were made after they were consulted. The code, MANU 465, has remained the same.</p> <div style="border: 1px solid black; width: 20px; height: 15px; margin: 5px auto;"></div> <p style="text-align: center;">Not available for Cr/D/F grading (undergraduate courses only)</p> <p>(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: Applied Science does not allow Cr/D/F grading.</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <input type="checkbox"/> </div> <div style="text-align: center;"> <input type="checkbox"/> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Pass/Fail or Honours/Pass/Fail grading </div>



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

Faculty: Applied Science Department: Mechanical Engineering Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): S Effective Academic Year: 2021	Date: February 1, 2021 Contact Person: Dr. Boris Stoeber Phone: (604) 827-5907 Email: stoeber@mech.ubc.ca
<div style="border: 1px solid black; height: 100px; margin-bottom: 10px;"></div> <p>Mechanical Engineering</p> <p>In addition to the regular Mechanical Engineering program...</p> <p style="text-align: center;">.. . . .</p> <p>Mechanical Engineering</p> <p>Students who completed Mech 2 in 2017W and are on a co-op schedule, or students who completed Mech 2 in 2018W and are on a non-co-op schedule, or earlier, should follow the following course schedule:</p> <div style="background-color: #d9e1f2; padding: 5px; margin-bottom: 10px;">Second Year</div> <p style="text-align: center;">.. . . .</p> <p>Students who completed Mech 2 in 2018W and are on a co-op schedule, and onward, should follow the following course schedule:</p> <div style="background-color: #d9e1f2; padding: 5px; margin-bottom: 10px;">Third Year</div> <p style="text-align: center;">.. . . .</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12.195.272.43</p> <p>Present Calendar Entry:</p> <p>Mechanical Engineering</p> <p>In addition to the regular Mechanical Engineering program...</p> <p style="text-align: center;">.. . . .</p> <p>Mechanical Engineering</p> <p>Students who completed Mech 2 in 2017W and are on a co-op schedule, or students who completed Mech 2 in 2018W and are on a non-co-op schedule, or earlier, should follow the following course schedule:</p> <div style="background-color: #d9e1f2; padding: 5px; margin-bottom: 10px;">Second Year</div> <p style="text-align: center;">.. . . .</p> <p>Students who completed Mech 2 in 2018W and are on a co-op schedule, and onward, should follow the following course schedule:</p> <div style="background-color: #d9e1f2; padding: 5px; margin-bottom: 10px;">Third Year</div> <p style="text-align: center;">.. . . .</p>



¹ Taken prior to Term 1 of second year.

² MECH 227 is taken in the summer after Second Year.

³ Department approval required for APSC 496.

⁴ To be chosen from a course list available on the Department website.

⁵ See [Complementary Studies Courses](#)

Aerospace Option

The Aerospace Option in Mechanical Engineering allows students interested in aircraft, spacecraft, and related systems to have a course and project concentration in these areas.

Students will be admitted to the option at the end of second year by permission of the option coordinator, based on academic achievement and a demonstrated interest in aerospace engineering.

To complete this option, students will modify the standard Mechanical Engineering third- and fourth-year programs.

Note: Some students will not take courses in the order below, depending on their Co-op schedule. Please refer to the Department website for recommended course sequences.

Mechanical Engineering Aerospace Option

Third Year

ELEC 344 3

MECH 305 6

MECH 327 3

MECH 328 3

MECH 358 3

¹ Taken prior to Term 1 of second year.

² MECH 227 is taken in the summer after Second Year.

³ Department approval required for APSC 496.

⁴ To be chosen from a course list available on the Department website.

⁵ See [Complementary Studies Courses](#)

Type of Action:

New Program Option

Rationale for Proposed Change:

Please see the full proposal and documentation included with our submission for background and rationale for creation of this new option.

☐

Not available for Cr/D/F grading (undergraduate courses only)

(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)

Rationale for not being available for

Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.

☐
☐

Pass/Fail or

Honours/Pass/Fail grading

(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)



MECH 360	3
MECH 375	3
MECH 380	3
MECH 426	3
MECH 466	4
MECH 481	3
Complementary Studies electives¹	3
Total Credits	40
APSC 450	2
MECH 431	3
MECH 453 or APSC 496²	6
MECH 462	3
MECH 463	4
MECH 477	3
MECH 479	3
MECH 484	3
MECH 485	3
MECH 489	4
MTRL 494	3
Complementary Studies electives¹	3
Total Credits	40
¹ See Complementary Studies Courses .	
² Department approval required for APSC 496.	

**Proposed Calendar Entry:**

(40 word limit for course descriptions)

MECH 453 (6) Aerospace Design Project

A capstone course to provide students experience in the design/development of practical mechanical and aerospace devices. Projects are provided by local industry and engineering research laboratories. Credit will be granted for only one of MECH 453, MECH 454, MECH 457, MECH 458, MECH 459, or APSC 496. This course is not eligible for Credit/D/Fail grading. [1-2-2; 1-2-2]

Prerequisite: All of MECH 327, MECH 328, MECH 360 and fourth-year standing in the Aerospace Option.

URL:

<http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&code=MECH>

Present Calendar Entry:

N/A

Type of Action:

New course

Rationale for Proposed Change:

The new option will require its students to take a specialized version of their capstone design project, consistent with all other options in our BASc program.

☒

Not available for Cr/D/F grading
(undergraduate courses only)

Rationale for not being available for Cr/D/F:

Courses in the Faculty of Applied Science are not permitted to be taken for Cr/D/F.

☐ Pass/Fail or ☐ Honours/Pass/Fail grading

(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

Aerospace Option
Mechanical Engineering
February 1, 2021

Executive Summary

The Department of Mechanical Engineering within the Faculty of Applied Science seeks to offer an option in Aerospace engineering as part of its BAsC program in Mechanical Engineering. Students would be required to complete 157-159 credits (4 more credits than the standard MECH degree). Within the Mechanical Engineering standard BAsC framework students are able to select their own technical electives, and complete the general Mechanical Engineering program. If students would like to access a coordinated set of technical electives in a specific area, students would apply for entry into one of the current three options (biomedical, thermofluids, mechatronics). Options also allow students to have a focused 4th year Capstone experience, where design projects are specifically tailored to the area of interest.

We are proposing to offer a new Aerospace option for students enrolled in the in Mechanical Engineering program. Students would be expected to complete the Option in the same time as students in the general Mechanical Engineering BAsC stream. Students typically apply for options as they complete their 2nd year in our program. We anticipate being able to offer to this option to existing 2nd year Mechanical Engineering students going into the 3rd year of their program in September 2021.

The aims of the new option are :

- to open new doors in career advancement and earnings for UBC students;
- to create a steady flow of competent engineers in BC, equipped for more than research, promoting a product safety culture and ensuring graduates have the competency to effectively and efficiently face aerospace industry challenges and accelerated business growth in any organization;
- to maintain and expand UBC's international reputation in the provision of a unique, reputable education to meet the highest possible aerospace standards; and
- to support the short-, medium- and long-term aerospace cluster development in BC and in particular, growth with a significant engineering value-added component.

Learning Outcomes for Aerospace Option:

In addition to the outcomes expected for the standard Mechanical Engineering degree, upon completion of the requirement for the new option, students will be able to:

- Apply the principles of mechanical engineering and engineering science to analyze air- and space-craft systems;
- Identify opportunities to optimize the design of current and future air- and space-craft systems;
- Address engineering problems in a variety of industries by applying theories of aerodynamics, fluid mechanics, propulsion and composite material.

Rationale

Every year, potential new undergraduate students ask if they can study Aerospace Engineering at UBC. All that we can currently suggest is that they can take Mechanical Engineering and apply to the “Thermofluids” option, in which they would be able to take up to three technical electives related to Aerospace Engineering. For most students, this is an unsatisfying answer. Students that are particularly keen on Aerospace Engineering look elsewhere and UBC loses the opportunity to train some very capable and driven students. At the same time, the Aerospace industry in BC is burgeoning with several new initiatives; the expectation is that we are on the verge of a significant upswing in the industry.

A 2019 occupational review of the Aerospace Engineering suggests that between 2016 – 2026 BC is expected to see a 20.6% increase in demand for engineers with aerospace skills, compared to the national average of 7.4%. In order to help BC meet the demand it is important to find a way to graduate students in a timely manner. The attached 2021 occupational review shows that there is a modest, but significant demand for Aerospace engineers, even with the challenges of the current pandemic. While the demand for engineers is modest, the salary expectations for these positions tend to be high relative to other areas of engineering, which is evidence of a clear need for a niche offering in Aerospace. There are enough Aerospace Engineering jobs in BC to support an Option. Furthermore, there will be excellent opportunities for our aerospace graduates in related areas of engineering. The additional skills and knowledge aerospace option students gain will have broad application in transportation systems, and of course the students will have the full Mechanical Engineering skill set to draw from in their careers.

APSC has several faculty members with Aerospace expertise and research focus, with around 25% of the faculty members in MECH either actively engaged in Aerospace-related research or having a formal background in Aerospace Engineering (or both). Because options are accredited by the Canadian Engineering Accreditation Board, it is imperative that they be aligned with the programs. At present we are proposing the Aerospace Option for Mechanical Engineering, while we are aware of interest from Materials and Manufacturing to determine if a similar option will be developed for students in these programs.

The proposed option can be efficiently delivered by grouping existing courses together and creating a new Capstone Design Course. Students will take 40 credits per year, which is, overall, four credits more than the standard Mechanical Engineering degree, and two to three credits more than our existing Mechatronics Option and two credits more than our Biomedical Option.

Most importantly, creation of a formalized Aerospace Option will allow students to complete Aerospace-specific design courses, important for both students and employers. Students in the option will also take courses in materials and computational methods that are typically found in an undergraduate Aerospace Engineering degree. Thanks to the considerable overlap between standard Mechanical Engineering and Aerospace Engineering, students taking the proposed option would be exposed to roughly 90% of the material they would expect to see in a typical Aerospace Engineering Program.

Option Structure

Students will apply to enter the Option in their second year to the Option Coordinator and will be admitted based on academic achievement (evaluated using their grades from courses completed in 1st and 2nd year) and an application that will include a letter outlining their demonstrated interest in aerospace. This is consistent with the admission requirements and procedure for all of our current Options in Mechanical Engineering. All students in the Option will be expected to enroll in the Co-op program, and students who

are unable to do so will be provided with assistance in alternative course planning by an academic advisor, consistent with what is done for students from other Options who are in a similar situation. . We expect to admit approximately 20 students per year into the Option; we can accommodate more – the only complication with more would be finding appropriate design projects – and can run the Option with less (since all of the courses included are taken as technical electives by other students, both in MECH and from other Departments). As such, the number of students in the Option will largely only be limited by student interest.

The proposed curriculum for the Option is given in Table 1. Courses that appear in the standard MECH program but have been taken out of the Aerospace Option are shown in red and courses that are added to the standard curriculum in order to achieve the option are shown in green. Ten Aerospace-specific courses have been added to the standard curriculum. The resulting curriculum bears a strong resemblance to what one sees in other Aerospace Engineering undergraduate programs, with only a course in avionics missing. UBC does not offer a course in avionics, and students taking the proposed option would already be taking a very heavy load. Since we are only proposing an *Option*, and not a full *Program*, this seems an acceptable compromise. In every case, courses that are dropped from the regular MECH program are effectively replaced with an (often only approximate) equivalent course that has a more Aerospace take on similar material. The structure is consistent with the rest of the existing accredited Mechanical Engineering options offered at this time.

Table 1: Aerospace Option

Code	Title	Credits
Third Year		
ELEC 344	Applied Electronics and Electromechanics	3
MECH 305	Data Analysis and Mechanical Engineering Laboratories	6
MECH 325	Machine Design	4
MECH 327	Thermodynamics II	3
MECH 328	Mechanical Engineering Design Project	3
MECH 329	Materials for Mechanical Design	3
MECH 358	Engineering Analysis	3
MECH 360	Mechanics of Materials	3
MECH 368	Engineering Measurements and Instrumentation	3
MECH 375	Heat Transfer	3
MECH 380	Fluid Dynamics	3
MECH 392	Manufacturing Processes	2
MECH 426	Mechanical Design	3
MECH 481	Aerodynamics of Aircraft I	3
MECH 466	Automatic Control	4
	Complementary Studies electives	3
Total Credits		40
Fourth Year		
APSC 450	Professional Engineering Practice	2
MECH 431	Engineering Economics	3
MECH 453	Aerospace Design Project	6
MECH 457 or APSC 496	Mechanical Engineering Design Project	6
MECH 462	Finite Element Analysis	3
MECH 463	Mechanical Vibrations	4
MECH 477	Aerospace Propulsion	3
MECH 479	Introduction to Computational Fluid Dynamics	3
MECH 484	Aircraft Design: Aerodynamics	3
MECH 485	Aircraft Design: Structures	3
MECH 489	Experimental Thermofluids	4
MTRL 494	Composite Materials	3
	Technical electives	9
	Complementary Studies electives	3
Total Credits		40

Courses in **green** are added to the program and specifically aerospace-related; courses in **red** are deletions from the general MECH stream.

The Aerospace Option is very similar in structure to existing Options offered in Mechanical Engineering. Indeed, it follows the form of the Mechatronics Option, expanding on the Thermofluids Option. This will draw some students away from the Thermofluids Option. We are considering offering two new options that would substantially take up the remaining demand in Thermofluids to replace the Thermofluids Option entirely. These proposals are not yet ready to proceed to approval, so the Thermofluids Option will continue for at least another year while we prepare the other two replacements.

Comparison to similar programs

There are no Canadian programs in Western Canada that would compete with the proposed Option. BCIT does offer courses on Aerospace technology, but these are not part of an accredited engineering program, so it has a very different target student population and is neither in competition with the proposed Option, nor a feeder for it. Ryerson does offer an Aerospace Engineering Program, as do York and Concordia. The proposed curriculum quite closely replicates existing the aerospace engineering curriculums at Ryerson, York and Concordia. The aerospace stream in U of T's engineering science program has fewer aerospace courses. This is all evidence of the appropriateness of the curriculum and also suggests that UBC may be able to capture some potential students who may have otherwise rejected UBC in favour of one of those other schools. Graduates of this proposed UBC option will have the added and unique advantage of being qualified mechanical engineers from an accredited mechanical engineering program.

Evidence of Student demand

Student demand for an aerospace option is high. Surveys of 2nd year engineering students conducted over the last 10 years have indicated great student interest in pursuing aerospace studies in engineering. In January, 2021, we received input from over 200 undergraduate students (34% Year 2, 38% Year 3 and 28% Year 4). The table below summarizes some questions and their responses :

Question	Mean Response*
Regardless of my interest in aerospace, I think that having an Aerospace Option is a good idea.	9.20
I am interested in aerospace as a field of study in general.	8.30
I am interested in taking one or more technical electives in aerospace.	8.50
I would be interested in enrolling in an Aerospace Option within Mech.	7.54

*scale 1-10. One representing 'low' and ten representing 'high'

Most students who reported not being interested in enrolling in aerospace were approaching the end of their program and would likely not entertain enrolling in any new option.

Only 4% of respondents said that our current Thermofluids Option meets the demand for Aerospace content "very well." The remaining responses were:

- "Somewhat" = 57%
- "Minimally" = 32%
- "Does not meet" = 6%.

This suggests that students believe that while the existing Thermofluids Option does meet some of the demand, it alone is insufficient to adequately meet the demand by students and industry, that could be met by a dedicated aerospace option.

Students in the survey were highly supportive of UBC offering an aerospace option. Some of their comments include:

- “Adding this option would make mechanical engineering program more attractive to potential candidate from all over the country and abroad, as many top-notch universities have this option either as a sub or an independent program in their engineering faculties.”
- “Would love to have more aerospace courses added to the curriculum. The number of mech students in design teams such as AeroDesign and Rocket should speak volumes for the interest in the aerospace industry.”
- “Had the option been available, I would have pursued an aerospace option rather than mechatronics.”
- “Although the aerospace option seems interesting, Thermofluids did not seem appealing to me. If it was a 4th option which we could enter separately. That would have made me more likely to apply for the program.”
- “Adding an aerospace option would be a very good idea in my opinion because of the huge success of UBC's rocket team, It is also a very popular option in other schools and UBC not having it is turning talent away.”

Clearly, there is very strong demand for this Option among our current undergraduate class and there is further anecdotal evidence that we are presently losing good potential students to universities in Eastern Canada for lack of an offering in Aerospace.

Resources Required

We will commit to offering certain technical elective courses on a yearly basis, and our financial modeling has accounted for that. We will appoint an Option Coordinator, and we have the appropriate faculty resources and budget to do this. The Option Coordinator will work with the existing Capstone Coordinator to identify potential projects (preferably in concert with local industry) for the new aerospace capstone design course. This will not require extra resources since the option does not increase the overall number of MECH students in the program, and the new aerospace capstone design course will be cross-listed with the other Mechanical Engineering 4th year capstone design courses (consistent with how the other option-specific capstone design courses are run).

We foresee no other additional resources required with the launch of the option.

Consultations

Prior to the onset of the pandemic, we had been meeting almost weekly with colleagues in the School of Engineering at UBC-O coordinating plans to put together parallel Aerospace offerings. We also met several times with the leadership of the Materials Engineering and Manufacturing Engineering programs; the individuals and School/departments are supportive of the aerospace option in MECH and we continue to engage with them to explore how and if an aerospace option should be added to their programs. We anticipate opportunities for several fruitful interdisciplinary collaborations including the sharing of several courses and projects between different Options.

Leaders of other Options in our Department have also been consulted and are supportive. None of the other Options in the Department are expected to be significantly negatively affected by the new Option.

We are not adding seats in MECH, merely offering an alternate path to complete the Mechanical Engineering degree, such that the new Option will not have any significant impact on the resource allocation in the Department.

The main adjustment made to the proposed Option that has come as a result of these consultations has been the inclusion of MTRL 494, the course on Composites. This is presently a technical elective that current MECH students are eligible to take.

We have circulated the proposed curriculum to several different industry partners: MTU Maintenance Canada, Viking, KF Aerospace, ASCO Industries and Avcorp Industries. All of these have indicated support for the proposal, with some even providing letters of support to that effect.

Attachments

- 2021 Industry Overview for Aerospace Products and Parts Manufacturing in British Columbia
- Complete student survey results
- Industry letter of support – KF Aerospace

Industry Overview

Emsi Q3 2020 Data

Set January 2021

Parameters

Industries:

Code	Description
3364	Aerospace product and parts manufacturing

Regions:

Code	Description
59	British Columbia

Timeframe: 2018 - 2028**Datarun:** 2020.3 – Employees and Self-Employed

Aerospace product and parts manufacturing in British Columbia

Industry Summary for Aerospace product and parts manufacturing

1,810

Jobs (2019)

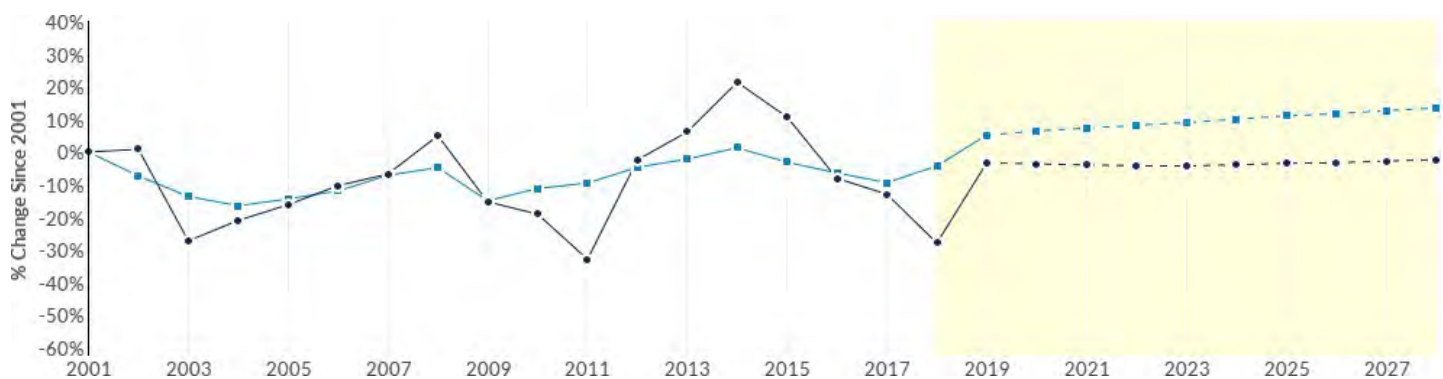
75% below National average

+35.4
%

% Change (2018-2028)

Nation: +18.5%

Regional Trends



Region	2018 Job	2028 Jobs	Change	% Change
• Region	1,350	1,828	478	35.4%
• Nation	47,004	55,711	8,707	18.5%

Occupations Employed by this Industry

Description	Employed in Industry (2019)	% of Total Jobs in Industry (2019)
Supervisors, other mechanical and metal products manufacturing	302	16.7%
Aircraft assemblers and aircraft assembly inspectors	281	15.5%
Aircraft mechanics and aircraft inspectors	142	7.8%
Machinists and machining and tooling inspectors	110	6.1%
Aerospace engineers	108	6.0%

Industry Requirements

Purchases from	In-region Purchases	Imported Purchases	Total Purchases
Aerospace product and parts manufacturing	\$36,338,220	\$112,934,869	\$149,273,089
Architectural and structural metals manufacturing	\$4,667,161	\$0	\$4,667,161
Architectural, engineering and related services	\$3,545,858	\$0	\$3,545,858
Depository credit intermediation	\$3,046,714	\$0	\$3,046,714

Non-ferrous metal (except aluminum) production and processing	\$2,972,946	\$0	\$2,972,946
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Appendix A - Data Sources and Calculations

Industry Data

In order to capture a complete picture of industry employment, Emsi combines employment data from Survey of Employment, Payrolls and Hours (SEPH) with data from the Labour Force Survey (LFS), Census, and Canadian Business Patterns (CBP) to form detailed geographic estimates of employment. Projections are based on the latest available Emsi industry data, 10-year past local trends in each industry and growth rates from national industry projections from the Canadian Occupational Projection System (COPS) produced by Human Resources and Skills Development Canada.

Staffing Patterns Data

The staffing patterns data in this report is compiled from several sources using a specialized process. Sources include the Labour Force Survey (LFS) and the Census. Emsi uses ratios from the Census and inputs regional jobs by industry, converting these to jobs by occupation. The ratios derived from this are adjusted to equal actual regional data, resulting in a unique regional staffing pattern.

Input-Output Data

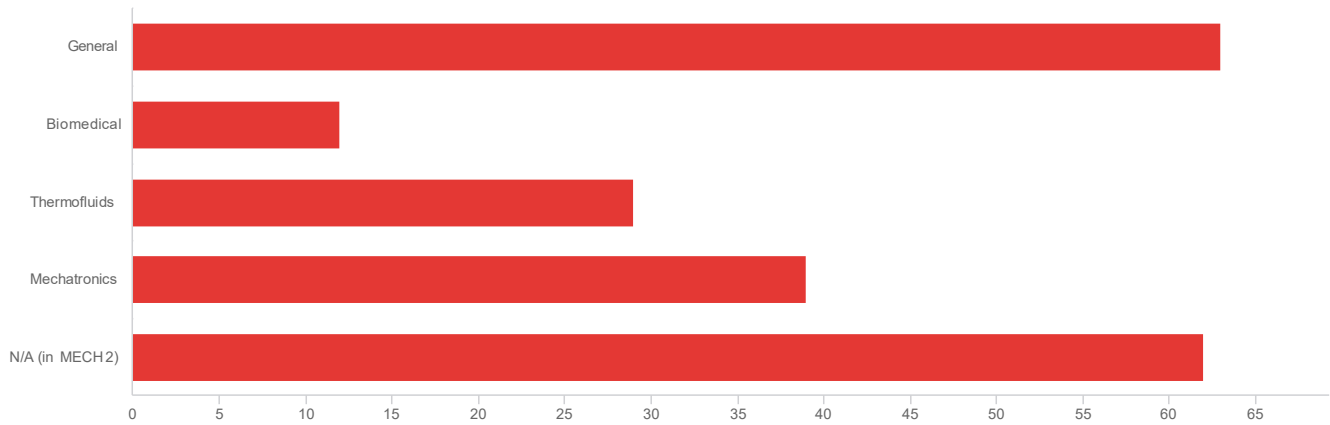
This report contains data from Emsi's Input-Output model. It is based on data from StatCan's National Symmetric Input-Output table, National Household Survey commuting flows, Canadian Business Patterns, and several Emsi in-house data sets.

Default Report

Aerospace Option

January 21, 2021 2:36 PM MST

Q5 - Please select which MECH option you are currently in:

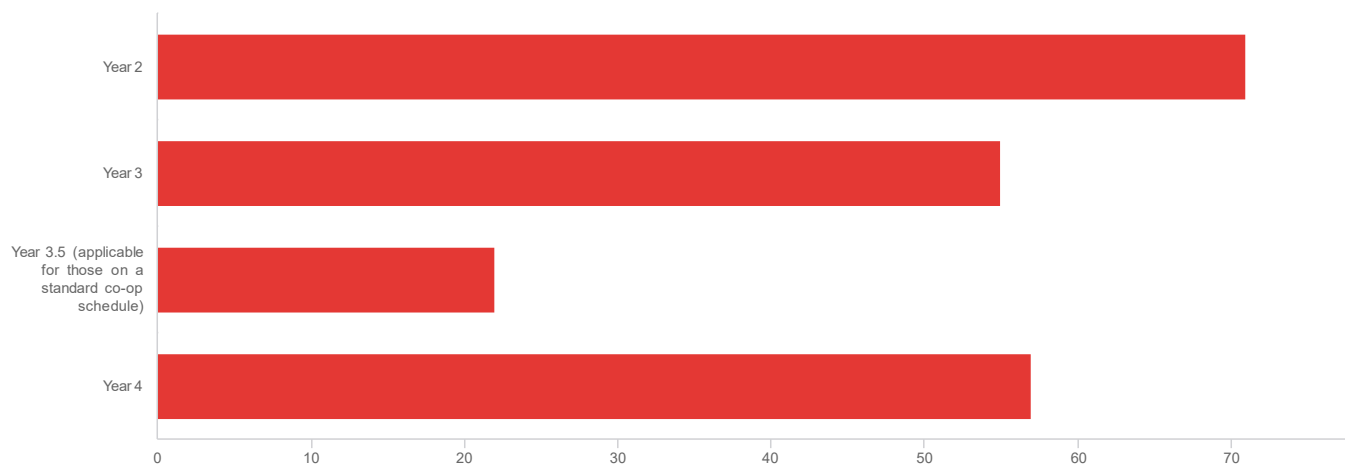


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select which MECH option you are currently in:	1.00	5.00	3.12	1.63	2.67	205

#	Field	Choice Count
1	General	30.73% 63
2	Biomedical	5.85% 12
3	Thermofluids	14.15% 29
4	Mechatronics	19.02% 39
5	N/A (in MECH 2)	30.24% 62
		205

Showing rows 1 - 6 of 6

Q6 - Please select which year level you are currently in:



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Please select which year level you are currently in:	1.00	4.00	2.32	1.21	1.47	205

#	Field	Choice Count
1	Year 2	34.63% 71
2	Year 3	26.83% 55
3	Year 3.5 (applicable for those on a standard co-op schedule)	10.73% 22
4	Year 4	27.80% 57

205

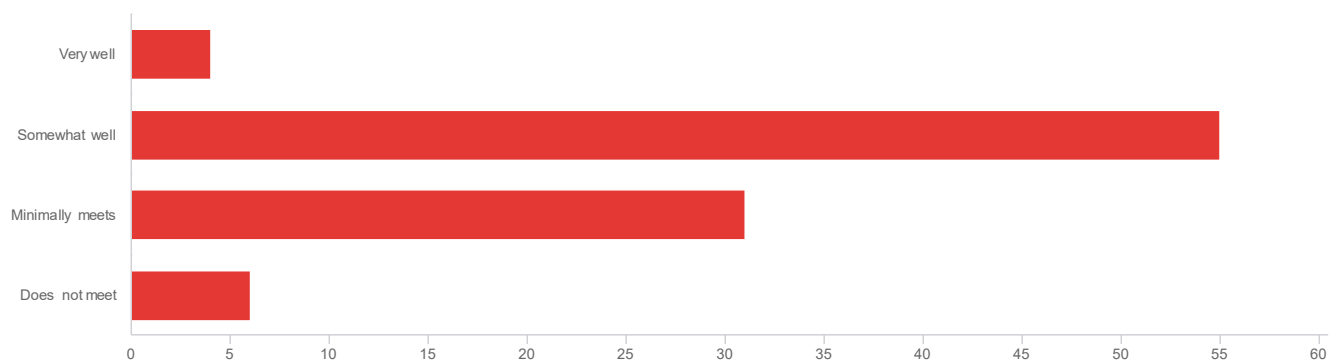
Showing rows 1 - 5 of 5

Q2 - Please rate your level of agreement with each of these items.

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Regardless of my interest in aerospace, I think that having an Aerospace Option is a good idea.	3.00	10.00	9.20	1.42	2.00	204
2	I am interested in aerospace as a field of study in general.	2.00	10.00	8.30	1.92	3.68	202
3	I am interested in taking one or more technical electives in aerospace.	0.00	10.00	8.50	2.07	4.27	202
4	I would be interested in enrolling in an Aerospace Option within Mech.	0.00	10.00	7.54	2.63	6.94	199

Q3 - Students interested in aerospace are currently encouraged to join the Thermofluids

Option. How well does the Thermofluids Option meet the needs of students interested in aerospace?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Students interested in aerospace are currently encouraged to join the Thermofluids Option. How well does the Thermofluids Option meet the needs of students interested in aerospace?	1.00	4.00	2.41	0.67	0.45	96

#	Field	Choice Count
1	Very well	4.17% 4
2	Somewhat well	57.29% 55
3	Minimally meets	32.29% 31
4	Does not meet	6.25% 6

96

Showing rows 1 - 5 of 5

Q4 - Please comment on the above or provide any other information you think would be helpful for the Department and the UBC Senate in considering adding an Option in Aerospace.

Please comment on the above or provide any other information you think would...

Many other big universities have an aerospace option, I think UBC shouldn't fall behind and add one itself.

adding more aerospace-related courses to our technical elective list would be cool.

The more options open for students to specialize the better.

Adding this option would make mechanical engineering program more attractive to potential candidate from all over the country and abroad, as many top-notch universities have this option either as a sub or an independent program in their engineering faculties.

Although the aerospace option seems interesting, thermofluids did not seem appealing to me. If it was a 4th option which we could enter separately. That would have made me more likely to apply for the program.

Aerospace would be cool. I think it would be good for UBC to have more specialization options or even tech electives on the subject (and other subjects, such as automotive, racing, etc.)

1) Hell yes 2) Have had many conversations with friends wishing this was an option. I believe the number of students in one of the 'aerospace' design teams is >200. I think there is a large number of people that would be interested in this. 3) My interest in aerospace is a bit skewed to 'space' here but there's a lot of recent work by companies in industry in the past decade (SpaceX, Rocketlab, Blue Origin, Nasa's launch of the Artemis program, Canada deciding to become a launching state and the beginnings of a spaceport starting on the east coast, many more) that would inspire a lot of people to take this option. 4) I've heard nothing but great reviews from friends that took the new Aerospace Propulsion tech elec this past term. 5) I understand these courses take time to set up but I will personally take as many of the Aerospace tech elects as possible that are rolled out in the next 3 years I'll be in school. 6) Dr Thomas Mattison in the physics department has been talking recently about creating a course along the lines of 'Intro to Orbital Mechanics for Engineers' that would be super cool to have in this option. I think an Aerospace option is an excellent idea that UBC Mech should have, thank you very much for your time!

Please provide more information about aerospace engineering such as career opportunities and whether the instructors have experience in teaching the Aerospace Engineering option. I had tried to do research about whether UBC has offered the Aerospace Engineering courses before but unfortunately no. Furthermore, it would be great if we could know more about the difference between the thermofluid and Aerospace Engineering options.

Have specific connections to the industry that can easily help students transition from school to a job that they are interested in.

If there are resources available, take the opportunity immediately. The perceived anecdotal interest within MECH alone is supremely high.

Although I will not be joining this option, I see it as highly valuable for future students and UBC in general.

Would love to have more aerospace courses added to the curriculum. The number of mech students in design teams such as AeroDesign and Rocket should speak volumes for the interest in the aerospace industry.

I think it is a good idea

Please comment on the above or provide any other information you think would...

I don't really know too much about Aerospace, but I'm sure it's an interesting and engaging field of study. I think I would have stayed with the General option had I been given the choice. I don't know what are the pros vs cons of having more options within the Department. I would mostly be concerned if there would be less resources available to the other options, but I suspect the impact is not huge. I suspect the majority of the benefit would be coming from being able to appeal to more students, and to be able to offer more specific direction. Seems to me to be a mostly positive move forward.

It would be helpful to look at aerospace options in universities that are currently running it.

I think it depends on how you differentiate the aerospace option from the thermofluids option. Or perhaps you can explicitly change the thermofluids option into: marine, aero, and HVAC??

I came to UBC mechanical engineering to begin my career in the aerospace industry. I dream to one day be a test pilot in the US airforce. From my understanding, the thermofluids option is best suited for me to do so starting next year but if there was an aerospace option available I would apply without any hesitation. I am currently completing my private pilots license during my mech2 studies so it would be fantastic to have the ability to study in an aerospace focused program next year.

mech 477 was wonderful and I would love to see more courses like it available at UBC

If UBC was to offer an aerospace program, I would want to see more faculty in that area. I would also want to see UBC making choices that reflect that it is providing resources in that area such as actually repairing wind tunnels and perhaps other supporting lab spaces. I have enjoyed the aerospace related elective I have taken so far, however I don't see any career opportunity within Canada to pursue aerospace. Perhaps UBC joining in would better facilitate local aerospace industry.

It would be nice to have the option

Had the option been available, I would have pursued an aerospace option rather than mechatronics.

Maybe a small section of mech 2 could be dedicated to introducing topics in aerospace then add the option in aerospace after.

If there had been an aerospace option when I finished mech 2 I definitely would have taken it. I find fluids and mechanical systems to be very interesting (thermo less so, hence why I didn't go into thermofluids), and am a big fan of the aerospace industry.

When I was volunteering for UBC Women's Engineering Day, I met a local high school student who was extremely passionate about Aerospace. She kept me intrigued with all of her aerospace and astronauts stories throughout the campus tour. Because UBC did not have an aerospace option, her tendency was leaning towards other universities. I honestly believe that UBC should have an aerospace option so that aspiring students like her are able to hone their talents in the comfort of their hometown as well as attract other bright students from around the world.

I am interested in knowing if the Aerospace Option would include topics about mechanics in space. This is something that would be very different from the Thermofluids Option.

I think Aerospace is an important industry going forward, so having the option will allow students to go into those fields in the future.

I would love to have an option for aerospace, I was planning to apply to a masters degree in aerospace so this would be perfect.

An aerospace option at UBC has long been needed. There are very few institutions in Western Canada that offer this program.

I would recommend adding the Aerospace option if partnerships are first developed with companies/startups which are in the Aerospace industry so that students have more & easier access to those jobs once they have graduated and/or go on co-op. The issue with this is that a lot of Aerospace companies are located in the USA which requires students to be US citizens, however, I think then the university and other universities should consult the Canadian and US government to make it easier for students from either country to work at Aerospace companies, collaborate across borders within the Aerospace industry, and create more joint Aerospace programs for Canadian and United States students.

Please comment on the above or provide any other information you think would...

I actually did a bit job search in the aerospace engineering field before I selected my msjor. It's not promising in the current job market with a degree in aerospace engineering.. I am hoping that will change one day so that students who are interested in this filed can be confident to join in the program.

Most universities with engineering courses have an aerospace engineering stream - it's high time that UBC does as well. If only I wasn't graduating this year, this is the stream I would have loved to do. I was able to take some aerospace courses during a CIE exchange term but it would be ideal for UBC to offer its own courses on aerostructures and aeroelasticity, rotorcraft, aircraft propulsion systems, aircraft control systems, space craft design and propulsion, high speed and hypersonic aerodynamics, etc. Having worked at an aerospace company for a co-op work term, I saw that having more specialized knowledge in the aerospace area would have definitely an asset there, and likely in the industry more generally.

Joining Aerospace is a dream!! And being able to do so without having to go to Toronto or out east for it would make it 100000 times better!! Please Please Please create the Aerospace option

I was interested in aerospace before coming to UBC but then found out they didn't have an aerospace program so i was kind of disappointed. I actually considered going to the university of Toronto instead.

I think having an Aersooace designation can help provide a greater focus in to building the foundations that bridge the gap in to that industry. I would also argue that this could be somewhat combined in to Automotive specializations where courses are catered towards EV's, Autonomous driving etc... The thermofluids options does not contain, in my opinion, relevant materials courses that would be critical for aerospace. This also would mean that students could be more involved with FEA and combine this with materials courses within an aerospace option.

Aerospace is a highly innovative and evolving field, and I have met many, many students who want to go into aerospace. It is a very popular dream.

I was quite interested in aerospace, but due to my coop jobs, I'm working more on marine engineering related projects. I think it would be great for future mech students to have the option of specializing in aerospace. I think many students will be interested in it.

Aerospace is very different compared to the current options and I think it will be quite popular.

I have not looked into the thermofluids option much yet, but I think it would be great to have an Aerospace option. I would love to learn about the materials and design used in the aerospace industry, which I don't think thermofluids would offer.

This sounds like an awesome option which I would be very interested in learning more details about. I think many of my fellow classmates would also be interested.

make it as an optional course

Aerospace might be too specific of a option. It might be better to have that as a concentration within thermofluids if needed. I believe its too specific because of the various areas within aerospace. For example, I want to end up in aerospace and for that reason I chose mechatronics as my specialisation

It may also be good to have options for how much one wants to be specialized in aerospace (e.g. fully specialized, semi, or partially)

My capstone sponsor is the Canadian Space Agency who does a lot of work with aerospace undergrad programs from universities out East. I would like to see that kind of partnership come to UBC if a mech aerospace option was added.

Adding an aerospace option would be a very good idea in my opinion because of the huge success of UBC's rocket team, It is also a very popular option in other schools and UBC not having it is turning talent away

Are there many aerospace companies to work for in BC? I like biomed because there are many biotech companies around here but I'm not sure if there is the same demand for aerospace?

I think Aerespace dep will be a great idea!

Please comment on the above or provide any other information you think would...

I am a current MECH 2 student and chose MECH to pursue thermofluids as a route to an aerospace career. Adding an aerospace option within the MECH department would allow me (and several other students I know who have similar aspirations) to directly study the content we find so very interesting. I am a member of UBC AeroDesign, and am certain that several of my design colleagues would appreciate this option immensely. Thank you for seeking our interest!

May take from an already very small thermofluids group

Unfortunately I'm already in my third year so I can no longer switch, but the reason I entered mechanical engineering was due to my fascination with aerospace technology. I am confident several other students would be interested in an Aerospace option

Aerospace program is something U of T has over UBC, represents significant competitive advantage when looking to attract people in the field. Also worth noting that UBC Rocket is one of UBC APSC's most successful and popular teams and falls firmly into the aerospace field.

I would have loved to have an Aerospace option during my degree. I hope to work in Aerospace design, specifically in structures. In my opinion, the thermofluids option does cover some relevant material, but a specific Aerospace option will have students better off in their job search and their careers afterwards.

I would be good to see if BC job market has demands for aerospace undergrads. I heard a bunch of BMEs have a hard time finding a BME job.

n/a

A great addition to the current specializations

There are currently several aerospace design teams at UBC (AeroDesign, Rocket, etc.), and many of the students in those teams are interested in the aerospace industry. It is a rapidly growing industry, and an aerospace option within Mechanical Engineering would be attractive to many prospective students. There are many universities that offer a similar option/program.

This is a fantastic way of filling the Aerospace "void" that seems to exist in the Canadian West. Sounds interesting, this will likely see a decline in thermo students, but will likely attract more students to mech if the class size is expanded.

I transferred from TRU for second year and I wish when I applied for second year placement there was more information on what the benefits of mech specializations would be. I applied for general and wish I would have applied for the thermofluids specialization. In second year I had a family tragedy which caused my grades to suffer and therefore I was unable to apply for thermofluids after second year.

Currently, there are only a handful of tech electives directly related to aerospace - otherwise, Thermofluids only gives general thermodynamics/fluids knowledge, and it's left up to the student to apply the knowledge. An aerospace option would allow UBC to create more in depth electives/core courses that are centered around aerospace applications. Also, there are non-thermofluid subjects that are useful/important in aerospace, that currently thermofluids students must take as electives because they aren't core courses beyond second/third year (eg, advanced materials [composites etc.], FEA, dynamics)

I would like to enter aerospace after 2nd year (without taking thermofluids) or through general mech

I am not personally interested in aerospace engineering, but I have a few friends in Mech who have expressed interest in this field. I think there are enough students who are interested in this area that having an aerospace option is a good idea.

Currently in thermo fluids, I heard that about half the students in Thermo fluids want to go into aerospace but most end up going into HVAC. I personally want to go into energy and alternative energy

I personally know 2 friends who dropped out of UBC when they discovered their interest to be aerospace in first year and realized mech didn't offer any option. As space is becoming more and more popular among young people through figures like Elon Musk, I believe such a division will be a preparation for the future.

Great idea! Wish it was an option sooner.

Please comment on the above or provide any other information you think would...

I think an aerospace section would be a very nice addition to the mech program. I am not sure how quickly it would be implemented and if there's a chance current students can still make it.

Having Canadian universities offer aerospace programs could help expand the struggling (but formerly prominent) Canadian aerospace industry.

Having a distinct aerospace option would be a fantastic thing to have for students interested in pursuing a career in the aerospace industry.

seemsGood

NA

Canada's space industry seems heavily focused on robotics and satellites, not thermofluids, which is something to keep in mind. Don't know about aero industry.

Graduating this year so my interest in enrolling is obviously low, but if it was an available specialty during my time here I would have strongly considered it (I took multiple aerospace technical electives)

Considering that there are already aerospace courses available as electives, maybe students studying in thermofluids could receive a certificate or note on their diploma for taking a certain amount of aero courses. The same could be applied to other options for other subjects

I came into the thermofluids program with the intention of moving towards an aerospace career (specifically rocket design). While the thermofluids option does give some important information for this, it really doesn't prepare for aerospace specific courses. Given the option, I would move into an aerospace option without hesitation.

pls shed some light on seamlessness for people who have already started in thermofluids option ??

Specializing in aerospace is going to be very useful for those who are in thermo or even others who would like to choose their elective courses. I'm in mechatronics however, I'm also interested to learn more about aerospace and I would love to take some electives. Overall I believe it's a really good idea

This is a great idea

A lot of students are very interested in the aerospace option abs resort to Thermo but it's not an ideal situation.

Considering the number of aerospace related design teams at UBC (Rocket, AeroDesign, Orbit, among others), I think it would be helpful and enriching to have the option to pursue Aerospace within Mech as well - the various design teams that are aerospace based suggests that quite a few people would be interested.

Consult student design teams like Rocket and Aerodesign for feedback on the type of content that they would see as valuable - and how they can possibly integrate it with their work on their design team.

The thermofluids option does not have many differences in it compared to the general option. The different tech electives that students are able to take make more of a difference, in my opinion.

End of Report

**AEROSPACE****KF Aerospace**5655 AIRPORT WAY
KELOWNA, BC CANADA
V1V 1S1

January 29, 2021

P: 250.491.5500

Professor Kendal Bushe
Department of Mechanical Engineering
University of British Columbia
6250 Applied Science Lane
Vancouver, B.C.
V6T 1Z4

Re: Aerospace Option in Mechanical Engineering at UBC

Dear Professor Bushe,

I am writing you to express our interest in and support for the newly proposed Aerospace Option in Mechanical Engineering at UBC. As the aerospace industry in BC continues to grow there has and will continue to be a need for engineering graduates with the kinds of skills and deep knowledge of aerospace systems and leadership that the proposed program will provide. Graduates from the proposed program would be highly attractive to our company as potential future hires. KF Aerospace has been an active participant in the Carleton Aerospace Engineering Co-op program since 2001 and a majority of our engineers have come out of that program. It would be a significant benefit for KF Aerospace to be able to have a more local (western) Aerospace Engineering program to participate in the development of new engineers and draw upon for future KF Aerospace employees. KF Aerospace expects to work closely with students in the new Aerospace Option by offering them co-op positions and design projects for their Capstone design course.

We also would like to express our desire to become involved with research at UBC in aerospace, and our hope that there could soon be a new graduate program at UBC in which graduate students would take courses not only at a higher technical level with respect to aerospace engineering, but could include engineering management, aircraft certification, space, and defence. Ideally, these graduate students' competencies would align with the Industry expectations, addressing aerospace-specific technology trends and business.

Sincerely,

Vice President, Maintenance and Engineering
KF Aerospace



THE UNIVERSITY OF BRITISH COLUMBIA

UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Applied Science Department: Materials Engineering Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: Contact Person: Daan Maijer Phone: 604-822-6013 Email: daan.maijer@ubc.ca</p>
<p>Proposed Calendar Entry: (40 word limit.)</p> <p>MTRL 320 (3) Management of Engineering Design</p> <p>Fundamental communication and interpersonal skills, as well as operational processes, that engineers require to effectively work in design teams. Concepts and best practices around project management tools and techniques, team dynamics, planning, and organization. [2-2-0]</p> <p>Pre-requisite: MTRL 201</p>	<p>URL: http://www.calendar.ubc.ca/Vancouver/courses.cfm?code=MTRL</p> <p>Present Calendar Entry:</p> <p>Type of Action:</p> <p>Create new course</p> <p>Rationale for Proposed Change:</p> <p>New course to provide MTRL students with fundamental communication and interpersonal skills to effectively work in design teams.</p> <div style="border: 1px solid black; width: 30px; height: 20px; margin: 5px 0;"></div> <p>X Not available for Cr/D/F grading (undergraduate courses only)</p> <p>Rationale for not being available for Cr/D/F:</p> <p>Applied Science does not allow Cr/D/F grading. <input type="checkbox"/></p> <p style="text-align: center;"> <input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.) </p>



THE UNIVERSITY OF BRITISH COLUMBIA

Category: (2)

Faculty: Applied Science Department: Materials Engineering Faculty Approval Date: Mar 4, 2021 Effective Session (W or S): W Effective Academic Year: 2021	Date: Contact Person: Daan Maijer Phone: 604-822-6013 Email: daan.maijer@ubc.ca																																																														
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...	Type of Action: Add new course to MTRL program Delete (2) courses from MTRL program Rationale for Proposed Change: Add new course (MTRL 320) to MTRL program to replace stand-alone technical communications courses (MTRL 392 and MTRL 398)																																																														



To: APSC and Senate Curriculum Committees

From: Dr. Boris Stoeber, Department of Mechanical Engineering

Date: February 1, 2021

Re: Change to UBC degree parchment for students in the Master of Engineering program specializing in Mechanical Engineering, Mechatronics Design, and Naval Architecture and Marine Engineering

The following proposal was approved on January 28, 2021 at the Department of Mechanical Engineering formal meeting.

Background & Rationale

Currently the parchment for the Master of Engineering (M.Eng) degree uses only one of three possible lines to describe the degree and states only "Master of Engineering". Other degree programs provide more descriptive information about the program of study on the parchment. Engineering is a rich and diverse field of study, and both students and faculty have expressed an interest in seeing more detailed information on the parchment.

Therefore, whereas Senate allows for a department seeking changes to the parchment for an existing degree to make a proposal to the Senate Curriculum Committee for consideration and approval by Senate,

and whereas Senate has allowed for "inclusion of information about the field of study" on the second line of the parchment (recommendation #8 of the report on Degree Names and Parchments, approved by Senate on October 15, 1997),

Proposal

The Department of Mechanical Engineering respectfully requests approval to use the first two available lines on the parchment for the three (3) Master of Engineering programs it delivers, as follows:

Line 1: "Master of Engineering" (unchanged)
Line 2: Field of Study, as described below



Explanation

Line 2: Field of Study

The Faculty of Applied Science offers 9 different Master of Engineering programs, across 7 different departments or schools. Each M.Eng student will have a primary subject based on the program that they are enrolled in, and each program has its own unique curriculum and degree requirements. For several years, we have received requests from students to have the program subject detail included on their parchment to better delineate what area of engineering they have received their degree in, as it would be beneficial to them as they pursue either further academic studies or a career in industry. Our program directors and faculty members support including this information on the degree parchment, as it would make it consistent with the other undergraduate and graduate degree programs that our department offers, which all currently specify on the degree parchment which subject or specialization the degree is in (eg. our other graduate degrees specify “Master of Applied Science in Mechanical Engineering” or “Doctor of Philosophy in Mechanical Engineering”).

We are proposing to add the primary subject to line 2 of the degree parchment for the three (3) M.Eng degree programs that are currently offered by the Department of Mechanical Engineering, as outlined in the table below:

Primary Subject (Field of Study)	Appearance on Parchment Line 2
Mechanical Engineering	In Mechanical Engineering
Mechatronics Design	In Mechatronics Design
Naval Architecture and Marine Engineering	In Naval Architecture and Marine Engineering

UNDERGRADUATE PROGRAMS

FREN – Department of French, Hispanic, and Italian Studies (FHIS)

French program update and Program name change from “French” to “French Language, Literatures and Cultures”

<p>Category: 1 Faculty: Arts Department: French, Hispanic and Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: September 10, 2020 Contact Person: Min Ji Kang Phone: Email: fhis.undergrad@ubc.ca</p>
<p>Calendar Navigation: Homepage Faculties, Colleges, and Schools The Faculty of Arts Bachelor of Arts French</p> <p>Proposed Calendar Entry:</p> <p>French Language, Literatures and Cultures</p> <p>The Minor, Major, and Honours programs in French Language, Literatures and Cultures are designed for students with intermediate or higher fluency in French language to develop their appreciation of Francophone literatures and cultures from around the world.</p> <p>Visit the department website {hyperlink: www.fhis.ubc.ca} for details on current offerings.</p> <p>For information on advanced degrees, see graduate French.</p> <p>Major in French Language, Literatures and Cultures</p> <p>Students who wish to pursue this program of study must have completed FREN 302 or demonstrated a proficiency level of B1 on the Common European Framework of Reference for Languages.</p> <p>Upper-level Requirements</p> <p>18 credits of required courses:</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,197,282,77</p> <p>Present Calendar Entry:</p> <p>French</p> <p>The Department of French, Hispanic, and Italian Studies offers programs of study in French that lead to the degrees of Bachelor of Arts, Master of Arts, and Doctor of Philosophy.</p> <p>For information on advanced degrees, see graduate French.</p> <p>Major in French</p> <p>Lower-level Requirements Students must take: FREN 122, 123, 220, 221, 222, and 223⁺.</p> <p>Upper-level Requirements Students must complete:</p> <ul style="list-style-type: none"> • FREN 353 • One of FREN 370 or 371

- FREN 311 (3) Introduction to Literature in French
- FREN 321 (3) Critical Writing
- FREN 352 (3) French Grammar
- FREN 353 (3) Advanced French Grammar
- FREN 401 (3) Upper-Intermediate French I¹
- FREN 402 (3) Upper-Intermediate French II¹

¹ If you are a native or heritage French speaker, or have a proficiency level above B2, you may be exempt from FREN 401 and FREN 402. Please contact FHIS Student Programs Coordinator.

24 credits from the lists of approved courses below, of which at least 3 credits must be taken from each of the Clusters A-B-C-D:

Cluster A -- French Literature and Culture from the Middle Ages to the Revolution

FREN 331 (3) Arts, Cultures and Society from the Middle Ages to the Revolution
 FREN 407 (3) Medieval French Literature
 FREN 408 (3) Renaissance: Studies in 16th-century French Literature
 FREN 409 (3) Ancients and Moderns: Studies in 17th-century French Literature
 FREN 410 (3) Enlightenment and Revolution: Studies in 18th-century French Literature
 FREN 450 (3) Old French
 FREN 484 (3) History of the Book
 FREN 485 (3) Early Encounters: Travel Literature and Colonial Writing in French

Cluster B -- French Literature and Culture since the Revolution

FREN 341 (3) Arts, Cultures and Society from Romanticism to the Present Day
 FREN 413 (3) Tradition and Modernity: Studies in 19th-century French Literature
 FREN 414 (3) The Modern and Contemporary French Novel
 FREN 415 (3) French Digital Culture
 FREN 416 (3) Contemporary French Literature and Culture
 FREN 417 (3) Popular Fiction
 FREN 427 (3) French Cinema

- ~~One of FREN 328 or 329 or 330~~
- ~~15 additional credits of French courses at the 400-level~~
- ~~6 additional credits of French courses at the 300 or the 400-level (excluding FREN 341-344, 346, 348-349, 380).~~

<p>FREN 480 (3) French Theory</p> <p>Cluster C -- Francophone Literatures and Cultures FREN 330 (3) Introduction to Quebec Literature FREN 418 (3) African and Caribbean Francophone Literatures FREN 428 (3) Francophone Cinema FREN 430 (3) Quebec Literature and Culture FREN 440 (3) Francophonie: History and Current Debates FREN 441 (3) Francophone Literatures and Cultures of North America FREN 442 (3) Cultures of the Francophone World FREN 443 (3) Postcolonial Studies</p> <p>Cluster D -- Language and Linguistics FREN 357 (3) Translation FREN 370 (3) Introduction to French Linguistics FREN 451 (3) French Phonetics FREN 457 (3) Advanced Translation FREN 460 (3) History of the French Language FREN 470 (3) Studies in Modern French Linguistics FREN 472 (3) Morphology and Syntax of the French Language FREN 474 (3) Lexicology and Semantics of the French Language FREN 476 (3) French Language and Societies FREN 477 (3) Contemporary Varieties of French FREN 496 (3) Research Seminar in French Language and Linguistics</p> <p>Special Topics FREN 419 (3) Women's Writing FREN 420 (3) Selected Topics in French Literature and Culture FREN 455 (3) Creative Writing in French FREN 495 (3) Research Seminar in French Literature and Culture FREN 498 (3) Directed Reading</p> <p>Honours in French Language, Literatures and Cultures<\b></p> <p>Students wishing to enter the Honours program must apply directly to the Major and Honours Advisor in French. Applicants must have:</p>	<p>Honours in French</p> <p>Lower-level Requirements As for the Major.</p>
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- at least third-year standing, or be entering Year 3,
- a B+ average in both their French courses and their overall degree program,
- completed FREN 311 and 352,
- completed FREN 401 and 402, or demonstrated a proficiency level of B2 on the Common European Framework of Reference for Languages.

Upper-level Requirements

6 credits of required courses:

- FREN (3) 321 Critical Writing
- FREN (3) 353 Advanced French Grammar

39 credits from the lists of approved courses in the Major description above, of which at least 6 credits must be taken from each of the Clusters A-B-C-D.

3 credits:

- FREN 499 (3) Honours Essay

Minor in French Language, Literatures and Cultures

Students who wish to pursue this program of study must have completed FREN 302 or demonstrated a proficiency level of B1 on the Common European Framework of Reference for Languages.

Upper-Level Requirements

18 credits of required courses:

- FREN 311 (3) Introduction to Literature in French
- FREN 321 (3) Critical Writing
- FREN 352 (3) French Grammar
- FREN 353 (3) Advanced French Grammar
- FREN 401 (3) Upper-Intermediate French I¹

Upper-level Requirements

~~Students must complete:~~

- ~~• FREN 353~~
- ~~• One of FREN 370 or 371~~
- ~~• One of FREN 328 or 329 or 330~~
- ~~• FREN 495~~
- ~~• FREN 499~~
- ~~• 18 additional credits of French courses at the 400-level~~
- ~~• 15 additional credits of French courses at the 300- or the 400-level (excluding FREN 341-349, 380)~~

Minor in French

~~Lower-level Requirements~~

~~As for the Major:~~

Upper-level Requirements

~~Students must complete:~~

- ~~• FREN 353~~
- ~~• One of FREN 355 or 370 or 371~~
- ~~• One of FREN 328 or 329 or 330~~
- ~~• 9 additional credits of 300- or 400-level French courses (excluding FREN 341-343, 345-349, 380)²~~

¹Native French speakers who received their secondary education in French in a French speaking society are exempt from FREN 122 and 123. Depending on their background in literature and in formal grammar, they may also be exempt from FREN 220 and 221, from FREN 222 and 223, or from all these courses, but only after discussing this question with the Major and

• **FREN 402 (3) Upper-Intermediate French II¹**

¹ If you are a native or heritage French speaker, or have a proficiency level above B2, you may be exempt from FREN 401 and FREN 402. Please contact FHIS Student Programs Coordinator.

12 credits from the lists of approved courses in the Major description above.

-

~~Honours Advisor in French:~~

~~Other students seeking advanced placement should also speak with a departmental advisor and should take an appropriate placement test if they are advised to do so.~~

~~² 300 and 400 level courses may be taken by students in any year of their program, provided that the prerequisites for individual courses have been satisfied.~~

Type of Action:

Update program language and requirements for the current Minor, Major, and Honours. Replace old course numbers for renumbered courses with newly approved course numbers. Add newly-created courses to programs. Change program names. Clarify level of language proficiency necessary for each program.

Rationale for Proposed Change:

This proposal aims to:

- 1) update the program requirements and program structure
- 2) change the name of the Minor, Major, and Honours in *French* to *French Language, Literatures and Cultures*

Over the past few years the Department of French, Hispanic and Italian Studies (FHIS) has been working on updates to our French program that reflect important changes in the discipline and respond to student enrollment and student needs. The committee undertook a review of all undergraduate FREN courses listed in the calendar, determined those which were no longer taught or aligned with the pedagogical goals of the program, and simplified the progression pathway from lower to upper level course work. Many of our changes at the course level, including renumbering our language-acquisition course sequence, were approved by Senate in February. With this proposal, we now wish to turn our attention to updating and refreshing our Minor, Major and Honours programs in French, in part to incorporate the renumbered and newly-developed courses. The requirements have been redesigned so that students with intermediate proficiency in French as well as native speakers may access the programs at the appropriate level.

	<p>The proposed updates to our Minor, Major, and Honours in French reflect important changes in the discipline while also clarifying the existing learning outcomes. The proposed modifications intend to better meet the students' needs and demands by increasing the variety of courses available to them, and providing them with both more flexibility in their course selection and transparency in their program requirements. For example, this program update includes the addition of 19 new courses to the Calendar, and the elimination of 25 courses that have not been offered for more than four years or that have been made redundant, in whole or part, by the redistribution of their learning outcomes into new courses. See the notes below for the list of all related Category 1 and Category 2 proposals.</p> <p>The current proposal includes a change in the name of the current Minor, Major, and Honours in <i>French</i> to <i>French Language, Literatures and Cultures</i>. This change better reflects the variety of skills and areas of knowledge that students enrolled in these programs are exposed to. It also allows for a clearer distinction from our proposed new Minor in French Language (approved by UBC Senate in February 2021, and pending Ministry approval) that we wish to offer in parallel, and which is intended primarily for students with no or a limited background in French. The new Minor will serve a group of students who were not previously served by our current Major and Minor intended for students with intermediate or higher fluency in French.</p> <p>Please see Program Summary below for more details.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>Category 1 proposals to create FREN 428, 440, 441, 442, 443, 476, 477, 485 and 496 are included in this Arts Curriculum Report.</i> • <i>Category 1 proposals to create FREN 480 and 415 were included in the December 2020 Arts Curriculum Report.</i> • <i>Category 1 proposals to create FREN 414, 417 and 455 were included in the January 2021 Arts Curriculum Report.</i> • <i>Category 1 proposals to create FREN 311, 321, 331, 341, 352 and Minor in French</i>
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	<p><i>Language were included in the November 2020 Arts Curriculum Report and approved in February 2021.</i></p> <ul style="list-style-type: none"> • <i>Category 2 proposals to renumber language-acquisition courses were included in the November 2020 Arts Curriculum Report and approved in February 2021.</i>
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Program Summary

Program Summary

Proposal for Program Updates for French

Objective

- Program Name Change from “French” to “French Language, Literatures and Cultures”
- Program Updates to Minor, Major, and Honours in French

Context

The program updates we have been working on over the past few years include:

- 1) renumbering our language courses to fit the *Common European Framework of Reference for Languages* (CEFR) proficiency scale (approved in February; see below for CEFR scale),
- 2) developing a second Minor in French Language that is designed to attract French language beginners (approved in February), and
- 3) changing the name of our current Minor, Major, and Honours programs from *French* to *French Language, Literatures and Cultures* (a component of this proposal)

In 2018 and 2019, FHIS updated its French, Spanish and Italian language courses descriptions to include reference to the proficiency levels described in the CEFR. The CEFR is a reference tool developed by the Council of Europe to provide a common basis for the development of modern-language curriculum guidelines, examinations, textbooks, etc. It describes in a comprehensive way what language learners have to learn in order to use a language for communication and what knowledge and skills they have to develop so as to be able to do so effectively. Since 2010, the use of the CEFR has become so widespread globally that students routinely ask what the CEFR levels of our various courses are.

Within the context of UBC, the CEFR equivalencies facilitate credit transfers, student placement (from immersion as well as from regular programs) and align our course sequence with a scale of progression - from A1 level to B2 level - that is recognized internationally and suits our students' and our programs' needs. Students will first take courses that proceed through the A1, A2, B1 and B2 sequence. After the completion of B2 level, students will then take courses at the C level.

In addition to including reference to the CEFR proficiency levels, FHIS has renumbered French language courses to make the scale of progression clear and legible in the course numbers. The French language course sequence is also now aligned with the numbering strategy that has already been in use for many years in our Spanish and Italian programs.

Program Structure

While our current programs certainly have structure, designed to meet our learning objectives, we have found that students struggle to understand and explain how the program sequences and requirements build on one another and how the courses combine to provide them with a breadth of experience and exposure to French language, literatures and cultures. The program renewal seeks to both simplify and clarify program requirements, while also updating offerings and creating space for curricular decolonization.

We began the program renewal by creating a clear 18-credit introductory course sequence, providing students with the opportunity to improve their textual analysis and critical writing skills, increase their cultural literacy and language proficiency, and strengthen their active understanding of French grammar. Part of this work involved redeveloping and renaming two of our existing foundational skills courses (now FREN 311 and 321, which serve as prerequisites to many of our upper-level courses) to better help students prepare for success in the upper-level requirements; we also included some renumbered foundational courses and added a newly-developed course to deepen engagement with grammar. This mandatory 18-credit gateway intends to prepare students for the upper-level courses which have been regrouped into four main clusters on the basis of the skills, areas, periods and methods that the students are expected to master at the end of their program. The upper-level requirements have been designed to provide students with a solid basis and comprehensive overview of the field of French studies, while giving them the possibility to build a concentration around one (or more) of the 3 areas represented in our program (language, literatures, cultures).

The number of credits required for the proposed Minor and Major in French Language, Literatures and Cultures (30 and 42 credits) aligns with those currently required (36 and 48 credits). The only change is that we have removed 6 credits from the requirements in order to recognize that students come to this program with differing language proficiency. A student who is a native French speaker need not take the FREN 301 and 302 sequence (formerly FREN 122 and 123 before renumbering) to demonstrate their CEFR B1 level proficiency. By removing those two courses and positioning them as prerequisites to the program (rather than program requirements), we are better able to accommodate our students while minimizing administrative burden of creating exceptions. Students who wish to declare the Minor, Major, or Honours in French Language, Literatures and Cultures will first be required to demonstrate a proficiency level of B1 on the CEFR; one route to this demonstration is successful completion of FREN 301 and 302.

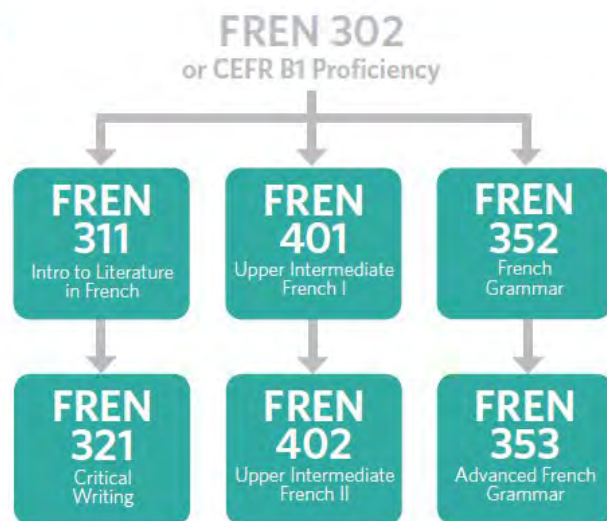
The program name “French Language, Literatures and Cultures” will better reflect the variety of skills and areas of knowledge that students enrolled in these programs will be exposed to. It also allows for a clearer distinction from our new proposed Minor in French Language that we wish to offer in parallel and which is intended primarily for students with no or a limited background in French.

Please see the visual diagrams on the following pages that illustrate the pathway through each of the Minor, Major, and Honours.

Diagrams for Minor, Major, and Honours
See next 3 pages

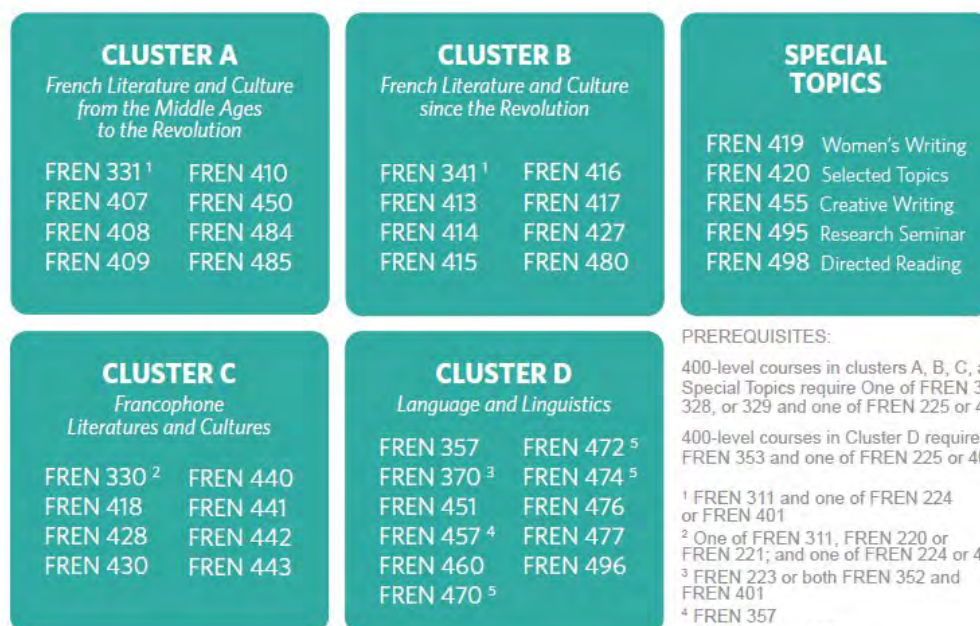
MINOR IN FRENCH LANGUAGE, LITERATURES & CULTURES

18 CREDITS:



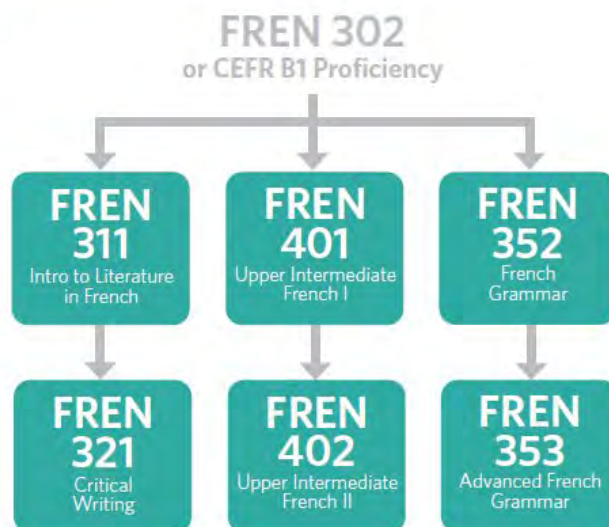
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12 CREDITS:



MAJOR IN FRENCH LANGUAGE, LITERATURES & CULTURES

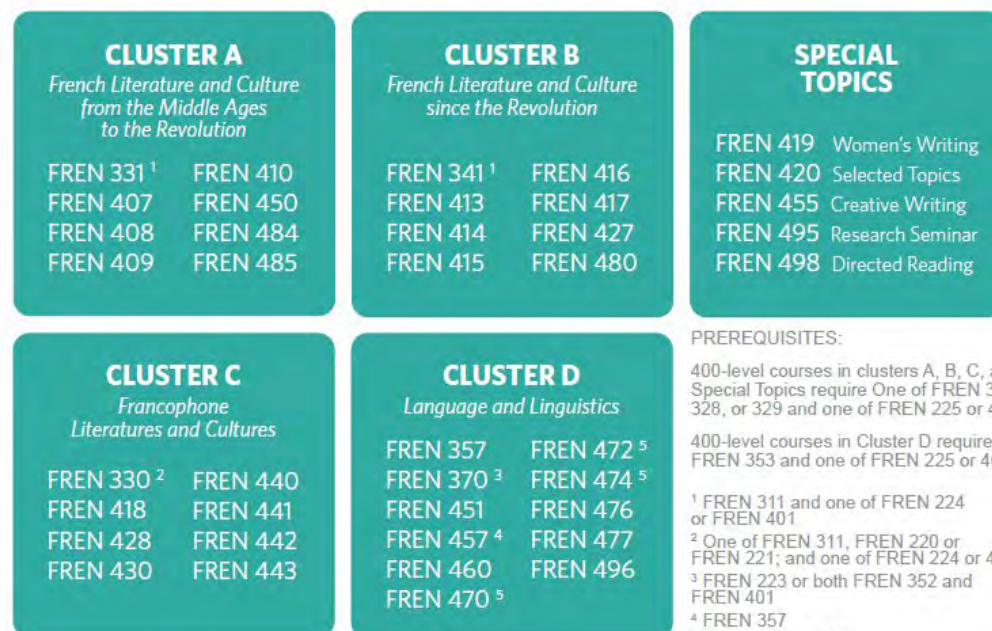
18 CREDITS:



+

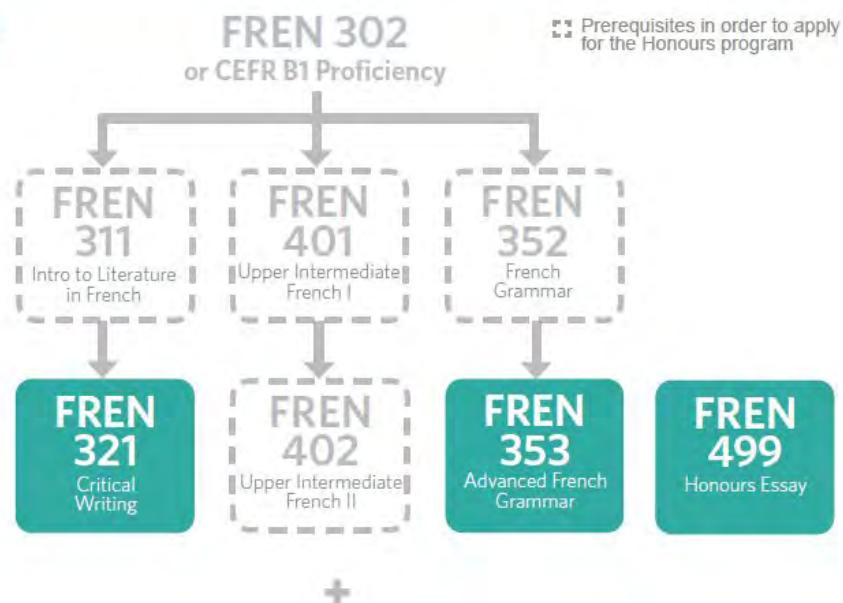
24 CREDITS:

At least 1 course must be taken from each of the Clusters A-B-C-D



HONOURS IN FRENCH LANGUAGE, LITERATURES & CULTURES

9 CREDITS:



39 CREDITS:

At least 2 courses must be taken from each of the Clusters A-B-C-D

CLUSTER A <i>French Literature and Culture from the Middle Ages to the Revolution</i> FREN 331 ¹ FREN 410 FREN 407 FREN 450 FREN 408 FREN 484 FREN 409 FREN 485	CLUSTER B <i>French Literature and Culture since the Revolution</i> FREN 341 ¹ FREN 416 FREN 413 FREN 417 FREN 414 FREN 427 FREN 415 FREN 480	SPECIAL TOPICS FREN 419 Women's Writing FREN 420 Selected Topics FREN 455 Creative Writing FREN 495 Research Seminar FREN 498 Directed Reading
CLUSTER C <i>Francophone Literatures and Cultures</i> FREN 330 ² FREN 440 FREN 418 FREN 441 FREN 428 FREN 442 FREN 430 FREN 443	CLUSTER D <i>Language and Linguistics</i> FREN 357 FREN 472 ⁵ FREN 370 ³ FREN 474 ⁵ FREN 451 FREN 476 FREN 457 ⁴ FREN 477 FREN 460 FREN 496 FREN 470 ⁵	PREREQUISITES: 400-level courses in clusters A, B, C, and Special Topics require One of FREN 321, 328, or 329 and one of FREN 225 or 402. 400-level courses in Cluster D require FREN 353 and one of FREN 225 or 402. ¹ FREN 311 and one of FREN 224 or FREN 401 ² One of FREN 311, FREN 220 or FREN 221; and one of FREN 224 or 401 ³ FREN 223 or both FREN 352 and FREN 401 ⁴ FREN 357 ⁵ FREN 353 and 370

UNDERGRADUATE – NEW COURSES

FREN – Department of French, Hispanic, and Italian Studies (FHIS)

FREN 496 (3) Research Seminar in French Language and Linguistics

<p>Category: 1 Faculty: Arts Department: French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: January 27, 2021 Contact Person: Min Ji Kang Phone: Email: minji.kang@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 496 (3) Research Seminar in French Language and Linguistics Research on critical topics related to French language and linguistics. Consult the Department for this year's offerings. <i>Prerequisite:</i> FREN 353 and FREN 370.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=fren</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: The Department of French, Hispanic and Italian Studies currently offers FREN 495 as a fourth-year seminar, designed for students with a high proficiency in the language and an interest to further improve their research skills in literary studies. There is, however, no designated seminar for the students interested in linguistics. The current proposal seeks to address this absence in our program.</p> <p>FREN 496 is intended to help students sharpen their research skills and enable them to design and complete their own research project, in an area of French language and linguistics of their choosing. The instructor will guide students through issues in research design, from choosing a topic, through selecting methodologies, to conducting research and analysis, and writing the results in a formal academic format. The course will also act as a forum in which students can present and discuss their work and consider various approaches to research in French language and linguistics.</p> <p>The readings for the seminar will provide a better understanding of research design in the field as well as</p>

	<p>facilitate the development of the research project. In addition to its aim of guiding students through the process of designing and implementing original research, the seminar will also include a focus on professionalization and academic work skills, which will benefit senior students as they begin to transition into work or graduate study. Students will be expected to give presentations related to research design as well as their individual projects.</p> <p>Establishing a second research seminar (in parallel to the existing FREN 495 – Research Seminar in French Literature) will provide students with more opportunities to gain undergraduate research experience, and will give us the flexibility to cover methodologies that reflects the diversity of their interests towards literature and linguistics.</p> <p>Decisions to schedule the course will be based on student demand (evaluated by the program chair), faculty input, and budgetary constraints. Students will be able to visit our Department’s website or speak to an Advisor for details on scheduled offerings.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change from <i>French</i> to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students’ needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>This Category 1 proposal for a new research seminar course is being submitted without a sample syllabus as per the newly approved policy described on p. 27-19 of the recently updated (Oct 9, 2019) curriculum guidelines for Special Topics/ Directed Study Courses.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i>
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	<p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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Preamble – contextual information for the following proposed courses: FREN 485, 428, 440, 441, 442, 443, 476, and 477

The following proposed courses are part of a major program renewal designed to reflect current changes in the discipline, showcase the diversity of the francophone literatures and cultures, and the varieties of French spoken around the world. Our renewed program intends to be inclusive and to adequately prepare students to understand and question the lasting impacts of French colonial history. Students will engage with the multiplicity of social classes, races, genders, nationalities, sexualities, religions, educations, disabilities, and linguistic variations that comprise the francophone world. History, literature, arts, ideas and current social issues will be approached from perspectives that take these various aspects into account, and include the voices of those who have been traditionally marginalized.

In an effort to begin the ongoing process of decolonizing our curriculum, focus will be shifted from a centralized Eurocentric perspective to one that embraces the variety of francophone voices and identities, and an improved contextualization of the colonial and postcolonial histories of the Francophonie. No less than 8 new courses have been created with this objective in mind, which doubles the number of courses on and about the francophone world that our program currently offers. In addition to providing more space to the often-overlooked cultures and voices of the French-speaking minorities in Canada, this new program will also offer more opportunities to engage with the experiences of Indigenous Peoples living in francophone-dominant contexts.

1. PROGRAM NAME

The first visible sign of this change of focus will be the new name given to our Minor, Major and Honours program. *French Language, Literatures and Cultures* will replace the previous formulation of “French”. By pluralizing the words *LiteratureS* and *CultureS*, we hope to better expose that the French language is spoken in many regions of the world, brings together a variety of cultures, and conveys multiple worldviews.

2. NEW COURSES

The variety of the francophone cultures, the power relations at play in French colonial history, and the structures of domination and discrimination that francophone populations themselves have sometimes been subjected to, will be at the center of 8 new courses created in the wake of this program renewal:

FREN 485 Early Encounters: Travel Literature and Colonial Writing
 FREN 428 Francophone Cinema
 FREN 440 Francophonie: History and Current Debates
 FREN 441 Francophone Literatures and Cultures of North America
 FREN 442 Cultures of the Francophone World
 FREN 443 Postcolonial Studies
 FREN 476 French Language and Societies
 FREN 477 Contemporary Varieties of French

These 8 new courses will be added to our current offerings, which already include opportunities to study various national corpuses outside France (Québec, Africa and the Caribbean).

As with any academic program, the list of our courses is not intended to be definitive or fixed once and for all. It will continue to evolve over time and it will be supplemented by new courses, as needed, in order to reflect the transformations of our field and the hire of faculty members who will bring new expertise and new experience to our department. In the short term, for instance, we are planning to hire a specialist of Québec literature with a demonstrated expertise on literature from francophone Indigenous writers from Québec.

3. PROGRAM REQUIREMENTS

In order to clarify the pathway through our program and ensure a comprehensive coverage of periods and specializations, courses have been aggregated in various « clusters ». These clusters will ensure that all students, in order to graduate with a Minor, Major or Honours in *French Language, Literatures and Cultures*, will have to take credits from both a selection of courses about French literature and culture (i.e. from France) and courses about francophone literatures and cultures (i.e. Québec, Caribbean, Africa, etc.). Shockingly, our students can currently graduate without having taken a single course on francophone literatures and cultures outside metropolitan France. This is clearly unacceptable; the proposed changes in our requirements and in our course offerings were designed to address this issue.

Students majoring in *French Language, Literatures and Cultures* will have to take at least 24 credits from the following list of courses, of which at least 3 credits will have to be taken from each of the clusters A-B-C-D. Every year, a selection of 3 to 4 courses will be drawn from *Cluster C – Francophone Literatures and Cultures* and presented as options to students who still need the credits from this cluster to fulfil their program requirements, or who wish to further deepen their engagement with non-Eurocentric material. More options to engage with colonial history, race and identity are also available to students in clusters A and D, and will add historical and linguistic perspectives.

*note: courses that specifically engage with colonial history, race and identity appear in **blue text**

Cluster A -- French Literature and Culture from the Middle Ages to the Revolution

FREN 331 (3) Arts, Cultures and Society from the Middle Ages to the Revolution
 FREN 407 (3) Medieval French Literature
 FREN 408 (3) Renaissance: Studies in 16th-century French Literature
 FREN 409 (3) Ancients and Moderns: Studies in 17th-century French Literature
 FREN 410 (3) Enlightenment and Revolution: Studies in 18th-century French Literature
 FREN 450 (3) Old French
 FREN 484 (3) History of the Book
FREN 485 (3) Early Encounters: Travel Literature and Colonial Writing in French

Cluster B -- French Literature and Culture since the Revolution

FREN 341 (3) Arts, Cultures and Society from Romanticism to the Present Day
 FREN 413 (3) Tradition and Modernity: Studies in 19th-century French Literature
 FREN 414 (3) The Modern and Contemporary French Novel
 FREN 415 (3) French Digital Culture
 FREN 416 (3) Contemporary French Literature and Culture
 FREN 417 (3) Popular Fiction
 FREN 427 (3) French Cinema
 FREN 480 (3) French Theory

Cluster C -- Francophone Literatures and Cultures

FREN 330 (3) Introduction to Quebec Literature
FREN 418 (3) African and Caribbean Francophone Literatures
FREN 428 (3) Francophone Cinema
FREN 430 (3) Quebec Literature and Culture
FREN 440 (3) Francophonie: History and Current Debates
FREN 441 (3) Francophone Literatures and Cultures of North America
FREN 442 (3) Cultures of the Francophone World
FREN 443 (3) Postcolonial Studies

Cluster D -- Language and Linguistics

FREN 357 (3) Translation
 FREN 370 (3) Introduction to French Linguistics
 FREN 451 (3) French Phonetics
 FREN 457 (3) Advanced Translation
 FREN 460 (3) History of the French Language
 FREN 470 (3) Studies in Modern French Linguistics
 FREN 472 (3) Morphology and Syntax of the French Language
 FREN 474 (3) Lexicology and Semantics of the French Language
FREN 476 (3) French Language and Societies
FREN 477 (3) Contemporary Varieties of French
 FREN 496 (3) Research Seminar in French Language and Linguistics

Special Topics

FREN 419 (3) Women's Writing
 FREN 420 (3) Selected Topics in French Literature and Culture
 FREN 455 (3) Creative Writing in French
 FREN 495 (3) Research Seminar in French Literature and Culture
 FREN 498 (3) Directed Reading

4. DECOLONIZING THE CURRICULUM: OTHER INITIATIVES UNDERWAY

In addition to the upcoming search for an Assistant Professor of Québec literature with a demonstrated expertise on literature from francophone Indigenous writers, our department is about to engage in an important reflection on the decolonization of our French language courses (in addition to the work in progress, as begun with these and other proposals, on our literature and culture courses). To our knowledge, this will be the first time that our instructors teaching French will be invited to reflect collectively and propose concrete and durable solutions in order to diversify our teaching material in all 4 levels of our language courses (100, 200, 300 and 400). Modules with content

about and *from* all continents where French is spoken will be added to our current teaching material, along with a specific module *about* and *from* French-speaking Indigenous communities from Québec.

Given the strategic importance of these courses in our programs -- they attract by far the highest number of students, and the 300 and 400 levels are requirements for all students enrolled in the Minor, Major and Honours -- we expect this initiative to have the most consequential and enduring impact of all our efforts to decolonize our curriculum.

FREN 485 (3) Early Encounters: Travel Literature and Colonial Writing in French

<p>Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: September 24, 2020 Contact Person: Min Ji Kang (Course author: Joël Castonguay-Bélanger) Phone: Email: fhis.undergrad@ubc.ca and joel.cb@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 485 (3) Early Encounters: Travel Literature and Colonial Writing in French Narratives of travel and exploration in French before 1800 and their relationship to colonization, knowledge production and representations of the self and others. <i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329, and one of FREN 402 or FREN 225</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: FREN 485 is a new course proposed as part an update to our French programs. This will be an optional course for all students enrolled in the Major, Minor and Honours programs (proposal in this report). As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French.</p> <p>FREN 485 proposes to study travel writing left by French explorers of the 17th and 18th centuries. The French colonial empire left its mark on the North American territory in a variety of ways, including in naming and representing the land and its first inhabitants, and often silencing them in order to impose their domination. The French colonization generated many types of written documents, including travel narratives, missionary accounts, maps, prints, and drawings. In this course, students will learn how to approach these documents critically, how to observe the particularities of their form and content, and examine issues related to the poetics and politics of travel writing. This course aims to equip students with the vocabulary and</p>

	<p>concepts necessary to study travel literature as a literary genre, understand the history of the French colonial presence in North America and its impact on Indigenous populations, and reflect on the specific modes of production of knowledge through documents that are composed of impressionistic ethnographical accounts, factual descriptions but also fiction.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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FREN 428 (3) Francophone Cinema

<p>Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: September 24, 2020 Contact Person: Min Ji Kang (Course author: Farid Laroussi) Phone: Email: fhis.undergrad@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 428 (3) Francophone Cinema Study of major past and contemporary film productions from around the Francophone world. <i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329 and one of FREN 402 or FREN 225.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: FREN 428 is a new course proposed as part an update to our French programs. This will be an optional course for all students enrolled in the Major, Minor and Honours programs (proposal in this report). As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French.</p> <p>FREN 428 will be one of several courses offered within our programs in the <i>Francophone Literatures and Cultures</i> cluster. It is intended to be a counterpart to our current FREN 427 – French Cinema, which focuses exclusively on films from France.</p> <p>The objective of FREN 428 is to introduce students to some of the extensive and diverse production of Francophone cinema outside France (Belgium, North Africa, Lebanon, Senegal, Caribbean, Indian Ocean, Québec, etc.). Students will discover Francophone culture through the prism of cinema, a dynamic and sometimes intimate visual art form that permits a glimpse, through the eyes of the filmmaker, into the aspirations and transformations of the French-Speaking world. Special attention will be given to cinema as a form of social and political discourse in a postcolonial context: how do visual narratives produce relational terms between viewers, culture,</p>

	<p>and history? Students will develop their ability to analyze and communicate a critical discourse in French, while examining a range of films and readings from the Francophone world.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) includes a name change to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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FREN 440 (3) Francophonie: History and Current Debates

<p>Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W</p>	<p>Date: September 24, 2020 Contact Person: Min Ji Kang (Course Author: Robert Miller) Phone:</p>
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Effective Academic Year: 2021-22	Email: fhis.undergrad@ubc.ca , robert.amiller@ubc.ca
Proposed Calendar Entry: FREN 440 (3) Francophonie: History and Current Debates Historical origins, cultural and linguistic paradoxes of Francophonie. <i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329 and one of FREN 402 or FREN 225	URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN Present Calendar Entry: None Type of Action: New Course Rationale for Proposed Change: FREN 440 is a new course proposed as part of an update to our French programs . This will be an optional course for all students enrolled in the Major, Minor and Honours programs. FREN 440 will be offered every year. As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French. The term Francophonie appeared for the first time around 1880, when a French geographer, Onesime Reclus, used it to designate all people and countries speaking French. We now speak of Francophonie with a lowercase "f" to designate French-speaking people and Francophonie with a capital "F" to represent the institutional mechanism organizing relations between Francophone countries. This course proposal is one part of a broader curriculum renewal initiative. The program updates (proposal in this report) include a name change to <i>French Language, Literatures and Cultures</i> . The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection. <i>Notes:</i> <ul style="list-style-type: none"> • <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i>

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FREN 441 (3) Francophone Literatures and Cultures of North America

Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2020-21	Date: September 24, 2020 Contact Person: Min Ji Kang (Course author: Joël Castonguay-Bélanger) Phone: Email: fhis.undergrad@ubc.ca and joel.cb@ubc.ca
Proposed Calendar Entry: FREN 441 (3) Francophone Literatures and Cultures of North America Forms of French language cultural expression in North America in their historical context. Discussion of issues around minority linguistic and cultural rights. <i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329 and one of FREN 402 or FREN 225	URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN Present Calendar Entry: None Type of Action: New Course Rationale for Proposed Change: FREN 441 is a new course proposed as part of an update to our French programs. This will be an optional course for all students enrolled in the Major, Minor and Honours programs (proposal in this report). FREN 441 will be offered every other year. As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French. FREN 441 offers an overview of the history and various forms of cultural expression of the francophone presence in North America. French is present not only in Quebec and Acadia but throughout the whole continent, from east to west and north to south. In this course, students will be introduced to the literatures and cultures of the French-Canadian communities (Ontario, Acadia, Manitoba), the cultural heritage of the Franco-American communities in the United States (Louisiana, New England), and the history of discrimination and the battles that some of these communities had to fight for their legal recognition and survival. One module will be devoted to the study of the various forms of cultural expression of the Francophone Indigenous communities. Topics covered in this course may include: language policy and revitalization;

	<p>languages in contact; identity; acculturation; immigration and diaspora; history and memory; linguistic discrimination; minority language rights; current political and social issues relevant to these communities today and as depicted in novels, theatre, film, songs and poetry.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i>
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FREN 442 (3) Cultures of the Francophone World

<p>Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: September 24, 2020 Contact Person: Min Ji Kang (Course Author: Antje Ziethen) Phone: Email: fhis.undergrad@ubc.ca, antje.ziethen@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 442 (3) Cultures of the Francophone World Forms of cultural expression of the Francophone world studied in their context. Regions may include the Americas, Africa, East Asia, Europe, Indian Ocean, Middle East, and/or the Pacific.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change:</p>

<p><i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329, and one of FREN 402 or FREN 225</p>	<p>FREN 442 is a new course proposed as part of an update to our French programs. This will be an optional course for all students enrolled in the Major, Minor and Honours programs (proposal in this report). FREN 442 will be offered every year. As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French.</p> <p>FREN 442 introduces students to Francophone communities that are often less visible or have been traditionally marginalized in the academic curriculum. Geographically this may include communities from Americas, Africa, East Asia, Europe, Indian Ocean, Middle East, and/or the Pacific. We will analyze a variety of materials (fictional and non-fictional texts, art, comics, music, documentaries) to get insights into the historical, linguistic, and social specificities of these regions. Moreover, students will study some of the key concepts related to identity, nation, colonialism, and linguistic discrimination. There will also be an opportunity to discuss and interact with visiting speakers from Francophone regions.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> ● <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> ● <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i>
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<p>Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: September 24, 2020 Contact Person: Min Ji Kang (Course author: Farid Laroussi) Phone: Email: fhis.undergrad@ubc.ca and Farid.Laroussi@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 443 (3) Postcolonial Studies Interdisciplinary approaches to Postcolonial Studies through francophone literature and theory. <i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329, and one of FREN 402 or FREN 225</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: FREN 443 is a new course proposed as part an update to our French programs. This will be an optional course for all students enrolled in the Major, Minor and Honours programs (proposal in this report). As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French.</p> <p>FREN 443 explores the development of francophone postcolonial thought since the late 1940s through the study of a number of seminal works of theory and literature. It traces the origins of postcolonial thought and offers an overview of the central themes and preoccupations associated with thinking about colonial and postcolonial questions in the francophone context. In taking up topics like language, decolonization, migration, knowledge production, and self-representation, postcolonial studies approaches the study of literature in ways that intersect with fields such as critical race theory, feminism, trauma, and transnational studies. Questions to be addressed include the following: What conceptual backgrounds inform particular ways of understanding, representing and colonizing a culture? How do complex social, political, and philosophical ideas contribute to the ways in which colonizers perceived and defined the so-called 'other'? How does understanding colonialism and past and present struggles against colonialism help us</p>

	<p>to understand contemporary national and international struggles over cultural and political identities, norms and practices? The assigned readings will allow students to grapple with and critique the heterogeneous meanings that have emerged from the many discourses of postcolonial theory in the francophone world.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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FREN 476 (3) French Language and Societies

Category: 1 Faculty: Arts	Date: September 24, 2020
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<p>Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Contact Person: Min Ji Kang (Course author: Marie-Eve Bouchard) Phone: Email: fhis.undergrad@ubc.ca and me.bouchard@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 476 (3) French Language and Societies Study of language in its social context, covering aspects of sociolinguistics within and across the French-speaking communities of the world. <i>Prerequisite:</i> One of FREN 321, FREN 328 or FREN 329, and one of FREN 402 or FREN 225</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: FREN 476 is a new course proposed as part of an update to our French programs. This will be an optional course for all students enrolled in the Major, Minor and Honours programs (proposal in this report). As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French.</p> <p>FREN 476 is an introduction to sociolinguistics, with a focus on French-speaking societies. The course will define basic concepts in sociolinguistics and address main topics in the field, including language variation, language contact and its possible outcomes, standardization, multilingualism, identity questions, and language attitudes and ideologies. This course aims to enable students to analyse, understand and discuss the links between language and society by providing students with the knowledge of sociolinguistic theory, research methods, main concepts and terminology along with developing the relevant application skills.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change to <i>French Language, Literature and Culture</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered</p>

	<p>and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>Prerequisite note: A Category 1 proposal for FREN 321 was approved by Senate in February 2021.</i> • <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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FREN 477 (3) Contemporary Varieties of French

<p>Category: 1 Faculty: Arts Department: Dept of French, Hispanic & Italian Studies Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: September 24, 2020 Contact Person: Min Ji Kang (Course author: Marie-Eve Bouchard) Phone: Email: fhis.undergrad@ubc.ca and me.bouchard@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>FREN 477 (3) Contemporary Varieties of French Study of the different varieties (or dialects) of contemporary French and issues related to French-speaking communities around the world. <i>Prerequisite:</i> FREN 353 and one of FREN 402 or FREN 225</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=FREN</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: FREN 477 is a new course proposed as part an update to our French programs. This will be an</p>

	<p>optional course for all students enrolled in the Minor, Major and Honours programs (proposal in this report). As with the majority of FREN courses, this course will be taught in French and all course work will be completed in French.</p> <p>FREN 477 explores different varieties of French and the societies that speak them. Its main objective is to develop awareness and appreciation of the different varieties of French around the world, situating them in their respective contemporary and historical contexts. Students will expand their knowledge on different issues related to French (e.g., globalization of the French language, French minorities, hierarchization of the French varieties, French in contact), and learn about some varieties of French spoken in the Americas, Africa, Oceania, and Europe.</p> <p>This course proposal is one part of a broader curriculum renewal initiative. The proposed program updates (proposal in this report) include a name change to <i>French Language, Literatures and Cultures</i>. The updates are designed to reflect important changes in the discipline. In addition, these changes intend to better meet the students' needs and demands by increasing the variety of courses offered and providing students with more flexibility in their course selection.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> ● <i>Prerequisite note: A Category 2 proposal for FREN 402 (renumbering the existing course FREN 225) was approved by Senate in December 2020.</i> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p>
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	<input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)
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ANTH – Department of Anthropology

ANTH 309 (3) Ethnography of the Himalaya: Diversity & Development

Category: 1 Faculty: Arts Department: Anthropology Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22	Date: October 30, 2020 Contact Person: Sara Shneiderman Phone: 604-671-6541 Email: sara.shneiderman@ubc.ca ; sabina.magliocco@ubc.ca
Proposed Calendar Entry: ANTH 309 (3) Ethnography of the Himalaya: Diversity & Development Ethnographic engagement with lives of people in and from the Himalayan region: including parts of Bhutan, China, India, Nepal, Pakistan; Tibetan cultural zones traversing these countries; and diasporas.	URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=anth Present Calendar Entry: None Type of Action: New course Rationale for Proposed Change: This proposed course will add to the Anthropology Department's 300-level "Ethnography" course series by offering an introduction to a key and understudied world region. ANTH 309 examines themes of diversity and development in a manner that bridges global and local engagement. Topics will include ethnographic approaches to contemporary issues such as diversity, development, conflict, disaster, environmental change, health, and migration. Students will be provided with opportunities for engagement with members of Himalayan community organizations here in BC, as well as with guest faculty speakers from diverse disciplinary backgrounds. This expands our department's community-engagement and international offerings at the undergraduate level and emphasizes new thematic approaches. This course builds upon the work of the UBC Himalaya Program, a transdisciplinary hub for sharing scholarly insights about the Himalayan

	<p>region, described at https://himalaya.arts.ubc.ca. ANTH 309 complements existing offerings from the Department of Asian Studies such as ASIA 311 Tibetan Buddhism and ASIA 313 Tibetan and Himalayan Culture and Society.</p> <p><input type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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CENES – Department of Central, Eastern, and Northern European Studies

CENS 315 (3) Becoming Multilingual: Experience, Aesthetics, Community

<p>Category: 1 Faculty: Arts Department: CENES Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: November, 2020 Contact Person: Caroline Rieger (Course Author: David Gramling) Phone: (home office, please use email) Email: carolin@mail.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>CENS 315 (3) Becoming Multilingual: Experience, Aesthetics, Community Practice, theory, history, aesthetics, and poetics of the multilingual experience in its diverse contexts in Central, Eastern, and Northern Europe.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CENS</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New course</p> <p>Rationale for Proposed Change: Multilingualism is a majority experience throughout the world, but modern institutions are often framed in monolingual ways. This course introduces students to the briskly changing ways multilingualism is being shaped, practiced, and represented in the twenty-first century around the world. No additional languages are</p>

	<p>required, and the focus is on the continuous work of “becoming multilingual,” regardless of whether one already speaks and uses multiple languages. Literary, poetic, and filmic representations of the multilingual experience help clarify for students how they see their own subjectivity in the world of languages and symbolic systems. While other courses in CENES highlight the practice of literary translation, this course adds a complementary awareness of the lived experience of multilingualism, with all of its practical, social, aesthetic, and political aspects. This explicitly includes Indigenous perspectives as a modest contribution to UBC’s commitment to Indigenizing our curriculum. Students are welcome in the course to hone, treasure, and practice all of their various varieties of languages, to study the meaning and value of those languages for themselves and their communities, and to share those languages with other participants in the course. By the close of the course, students will have developed their own plan for life-long multilingualism befitting their futures and backgrounds. This course will attract students interested in the historical and literary aspects of language as well as specifically students of Danish, German, Polish, Russian and Swedish.</p> <p>CENS 315 is designed to:</p> <ul style="list-style-type: none"> • highlight the multilingual nature of Central, Eastern, and Northern Europe with its over 33 official languages, and hundreds of additional languages and literatures; • develop community and programming synergies between various languages, literatures, majors, and minors offered by the CENES Department; • offer students a setting to reflect deeply on their own multilingual experience its aesthetic and cultural ramifications, and its role in their education more broadly; • expand students’ repertoires for confidently accounting for the value of their own subjectivity in language, mono- or multilingual as it may be;
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	<ul style="list-style-type: none"> • help students critically evaluate the nature and impact of monolingualism in various environments of knowledge, learning, literature, culture, and social relations; • help students grow more comfortable being in multilingual practical settings, particularly when they may not command all of the languages being used; • explore the relevance of accent, race, whiteness, ethnicity, Indigeneity, gender, sexuality, ideologies, and class in broader discourses of multilingualism. <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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CNERS – Department of Classical, Near Eastern, and Religious Studies

CNRS 333 (3) Art and the Christian Transformation of the Roman Empire – to be cross-listed with existing course ARTH 310

Category: 1 Faculty: Arts Department: CNERS Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22	Date: 11/24/20 Contact Person: Matthew McCarty Phone: 6-5613 Email: matthew.mccarty@ubc.ca
Proposed Calendar Entry: CNRS 333 (3) Art and the Christian Transformation of the Roman Empire	URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=CNRS Present Calendar Entry: None

<p>Visual culture and the rise of Christianity; social, political and religious contexts of art, including diverse viewing practices and cultural frameworks. <i>Equivalency:</i> ARTH 310.</p>	<p>Type of Action: Add new CNRS course that will cover the same learning outcomes as existing course ARTH 310, and add equivalency with ARTH 310</p> <p>Rationale for Proposed Change: The Department of Classical, Near Eastern and Religious Studies (CNERS) has recently worked to redefine our program outcomes and is in the process of curricular redesign. ARTH 310, “Art and the Christian Transformation of the Roman Empire” is a course in the Department of Art History, Visual Art and Theory (AHVA) that is equally relevant to students taking Art History and to students in several streams of the BA in CNERS. It builds directly towards several of the new Program Outcomes adopted by CNERS, and complements existing offerings.</p> <p>CNRS 333 will be identical to ARTH 310. Cross-listing ARTH 310 with a newly created course code CNRS 333 signals to students that ARTH 310 is thematically, methodologically, and in subject-matter a continuation of the CNRS curriculum. CNRS 333 course content will cover the same calendar entry, course learning outcomes, and syllabus as the existing ARTH 310. We have attached a syllabus for the previously approved ARTH 310 course as required by the Senate office.</p> <p>Current cross-listings between other ARTH and CNRS courses have been successful in drawing students from both programs (more so than when they are listed separately) and it allows us to maintain a student-centered and accessible interdisciplinarity in our undergraduate program. Such interdisciplinarity was specifically highlighted in our department discussion of program outcomes; establishing this course will help build towards that goal.</p> <p>The course will simultaneously be offered under both codes, as is currently the case for ARTH 331/CLST 331 and ARTH 332/CLST 332.</p>
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	<p>A signed consultation form from AHVA accompanies this proposal, along with a signed budget impact form from CNERS.</p> <p><i>Note: This Category 1 proposal is linked to a corresponding Category 2 proposal for ARTH 310 to include "Equivalency: CNRS 333." The two should be processed together.</i></p> <p><input type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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CRWR – School of Creative Writing

CRWR 420 (3) Indigenous Writing

<p>Category: 1 Faculty: Arts Department: School of Creative Writing Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: November 17, 2020 Contact Person: Billy-Ray Belcourt Phone: 17805079771 Email: billyray.belcourt@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>CRWR 420 (3-6) d Indigenous Writing Advanced study of contemporary Indigenous writing in North America across genres focusing on the production of critical and creative writing about coloniality, race, history, and identity. A maximum of 6 credits is permitted from CRWR 420, CRWR 521. <i>Prerequisite:</i> Restricted to Majors in Creative Writing.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=crwr</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New course</p> <p>Rationale for Proposed Change: There are currently no advanced courses in Indigenous writing for BFA students in the School of Creative Writing. The unit, which continues to expand, seeks to diversify its course offerings as its student body continues to grow and the University</p>

	<p>of British Columbia carries out its Indigenous strategic plan. This course, aimed at the study of contemporary Indigenous literature and the production of original writing about Indigenous life and corollary topics, will also address larger shifts in Canadian literature and publishing around Indigenous writing (i.e., ethics, community-based practice, ever-increasing number of Indigenous books being published). Further, it will take seriously the concerns about the cultural sovereignty of Indigenous nations and writers.</p> <p>A maximum of 6 credits is permitted from CRWR 420, CRWR 521.</p> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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SOCI – Department of Sociology

SOCI 204 (3) Global Population Dynamics

<p>Category: 1 Faculty: Arts Department: Sociology Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: October 1, 2020 Contact Person: Silvia Bartolic for Course Author Guy Stecklov Phone: 604-827-0684 Email: bartolic@mail.ubc.ca</p>
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<p>Proposed Calendar Entry:</p> <p>SOCI 204 (3) Global Population Dynamics Core processes that influence world population patterns and trends.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=SOCI</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New Course</p> <p>Rationale for Proposed Change: There are a number of benefits that come from the introduction of this course. Demographic methods are key to understanding many processes in Sociology including family, migration, ethnic and racial composition, gender and inequality. Sociology students currently learn quantitative and qualitative research methods, but typically complete their studies with relatively little knowledge of the underlying processes that produce the societies we investigate. For our students, this course will be of interest and will also be useful for their employment and success upon graduation.</p> <p>For students across the Faculty and university, this course will add a 200-level course to course offerings, and may help to track students into various directions within Sociology. We anticipate high levels of interest for this class as there are no other courses devoted entirely to this topic currently available to Arts students or more broadly within UBC. We expect this course will open up a highly relevant social science offering to students in the arts but also in the applied sciences and sciences.</p> <p>Not available for Cr/D/F grading <input type="checkbox"/> (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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UBC Curriculum Proposal Form

Change to Course or Program

Category: (1)

Faculty: Commerce Faculty Approval Date: 2021 Mar 25 Effective Session (W or S): W Effective Academic Year: 2021	Date: December 3, 2020 Contact Person: Ann Gilray Phone: 604-822-9518 Email: ann.gilray@sauder.ubc.ca
Proposed Calendar Entry: COMM 110 (0) Dual Degree Year 1 at University of Hong Kong Notes to academic record: This student is registered in the Dual Degree Bachelor of Commerce program with the University of British Columbia (UBC) and the University of Hong Kong (HKU). For complete details please see the University of Hong Kong academic record. Note: This course will not visible in the published calendar.	URL: n/a Present Calendar Entry: n/a Type of Action: Create new course. Rationale for Proposed Change: Students admitted to the Dual Degree program between UBC Sauder and the University of Hong Kong must be recognized as a UBC BCom student while attending years 1 and 4 at HKU. Similar courses currently exist for the dual degree with UBC Sauder and Sciences Po (COMM 115 and COMM 215), as well as for the Dual Degree between UBC Arts and Sciences Po (ASTU 190 and ASTU 290). Students will be registered in a “course” created for administrative reasons. There will be no credits or curriculum attached to the course. By registering the students in this new course a number of administrative issues are resolved. 1. Students will show as registered UBC students throughout their program. 2. This “registered” status will permit students access to UBC services, such as online library resources while at HKU. When students arrive at UBC for second year they will be eligible for services available to any continuing student. 3. The presence of this “course” on the record will permit the quick and easy creation of registration eligibility in the subsequent year. 4. The “course” will ensure the student’s academic record accurately reflects their status during the years spent at HKU. Not only will they show registration in this course but special notes will be added to the academic record to better explains the student’s situation. 5. Should a student withdraw from the Dual Degree a W (withdrawn) standing can be posted against this “course” to reflect the withdrawal and maintain the accuracy of the academic record. Should that



student continue at UBC the credit earned at HKU can then be posted as transfer credit.

☒ **Not available for Cr/D/F grading
(undergraduate courses only)**

(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)

**Rationale for not being available for
Cr/D/F:** This course has no credits attached.

☐ **Pass/Fail or** ☐ **Honours/Pass/Fail
grading**

(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Commerce Faculty Approval Date: 2021 Mar 25 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: December 3, 2020 Contact Person: Ann Gilray Phone: 604-822-9518 Email: ann.gilray@sauder.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>COMM 410 (0) Dual Degree Year 4 at University of Hong Kong</p> <p><u>Notes to academic record:</u> This student is registered in the Dual Degree Bachelor of Commerce program with the University of British Columbia (UBC) and the University of Hong Kong (HKU). For complete details please see the University of Hong Kong academic record.</p> <p>Note: This course will not be visible in the published calendar.</p>	<p>URL: n/a</p> <p>Present Calendar Entry: None</p> <p>Type of Action: Create new course.</p> <p>Rationale for Proposed Change: Students admitted to the Dual Degree program between UBC Sauder and the University of Hong Kong must be recognized as a UBC BCom student while attending years 1 and 4 at HKU. Similar courses currently exist for the dual degree with UBC Sauder and Sciences Po (COMM 115 and COMM 215), as well as for the Dual Degree between UBC Arts and Sciences Po (ASTU 190 and ASTU 290).</p> <p>Students will be registered in a “course” created for administrative reasons. There will be no credits or curriculum attached to the course.</p> <p>By registering the students in this new course a number of administrative issues are resolved.</p> <ol style="list-style-type: none"> 1. Students will show as registered UBC students throughout their program. 2. This “registered” status will permit students to maintain access to UBC services, such as online library resources while at HKU. 3. The presence of this “course” on the record will permit the quick and easy maintenance of registration eligibility in the subsequent year. 4. The “course” will ensure the student’s academic record accurately reflects their status during the years spent at HKU. Not only will they show registration in this course but special notes will be added to the academic record to better explain the student’s situation. 5. Should a student withdraw from the Dual Degree a W (withdrawn) standing can be posted against this “course” to reflect the withdrawal and maintain the accuracy of the academic record. Should that



student continue at UBC the credit earned at HKU can then be posted as transfer credit.

☒ **Not available for Cr/D/F grading
(undergraduate courses only)**

(Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)

**Rationale for not being available for
Cr/D/F:** This course has no credits attached.

☐ **Pass/Fail or** ☐ **Honours/Pass/Fail
grading**

(Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)

Memorandum

To: Sauder APTL and Faculty Caucus; Senate Curriculum Committee
From: Kin Lo - Senior Associate Dean, Students
Re: Update wording on UBC Sauder degree parchment starting for November 2021 graduates

The following proposal was approved on April 14, 2021 at the meeting of the Caucus of the Faculty of Commerce.

Background & Rationale

Currently, the graduation parchment for the UBC Bachelor of Commerce degree only uses lines one and three and states, “Bachelor of Commerce” and “with Honours” (if applicable).¹

We have learned that Commerce is the only UBC-V Faculty that does not add “Co-operative Education Program” to students’ graduation degrees. The programs in Science, Engineering, Arts, Forestry, and Kinesiology add this for about 900-1,000 Co-op students each year. Commerce has about 150 Co-op students graduate each year without this wording. Please see below for samples of current UBC Kinesiology and UBC Sauder degrees of Co-op students.

Sauder Co-op is a long-standing program at UBC that started in 1997, and students have expressed interest for years to see more detailed information similar to their Co-op peers in other UBC faculties to showcase the same achievements on their parchment.

Therefore, whereas Senate allows for a Faculty seeking changes to the parchment for an existing degree to make a proposal to the Senate Curriculum Committee for consideration and approval by Senate, we would like to apply recommendation #9 on page 9 of the report [Degree Names and Parchments, approved by Senate on October 15, 1997](#), which states:

“If Senate approves the inclusion of information in addition to the degree name and field of study (e.g. “Co-operative Education Program”) this should generally appear on the next line, together with any information about the standing achieved (e.g. “Co-operative Education Program, with Distinction”).”

Proposed Changes

The Faculty of Commerce & Business Administration respectfully requests approval to use lines one, three, and four on the parchment, as follows:

- Line 1: “Bachelor of Commerce” (unchanged)
- Line 3: Other information, “with Honours” (unchanged)
- Line 4: Other information, **specifically “Co-operative Education Program” (as described below)**

¹ A concurrent change is being submitted to the Academic Policy Committee to change “with Honours” to “with Distinction” or “with High Distinction.”

Explanation

Line 4: Other Information, Co-operative Education Program

“Co-operative Education Program” acknowledges a significant component of a UBC graduate’s educational experience which amounts to completing three or more semesters of Work Integrated Learning (WIL) work terms in addition to the academic credits required for the Bachelor of Commerce degree. The Sauder Co-op office and Sauder Undergraduate Office determine when the requirements for the Co-op designation have been met. We respectfully request this change to be in effect in time for the November 2021 graduates and continue for all Sauder graduates going forward.

Sample degrees for UBC Co-op students:

1. UBC Kinesiology degree with “Co-operative Education Program” on parchment for a graduating Co-op student



2. UBC Sauder degree that does not have "Co-operative Education Program" on parchment for graduating Co-op students





UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Arts Department: Creative Writing Faculty Approval Date: March 18, 2021 Effective Session (W or S): W Effective Academic Year: 2021-22</p>	<p>Date: November 17, 2020 Contact Person: Billy-Ray Belcourt Phone: 17805079771 Email: billyray.belcourt@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>CRWR 521 (3-6) d Indigenous Writing Advanced study of contemporary Indigenous writing in North America across genres focusing on the production of critical and creative writing about coloniality, race, history, and identity. A maximum of 6 credits is permitted from CRWR 420, CRWR 521.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?code=crwr</p> <p>Present Calendar Entry: None</p> <p>Type of Action: New course</p> <p>Rationale for Proposed Change: There are currently no advanced courses in Indigenous writing for MFA students in the School of Creative Writing. The unit, which continues to expand, seeks to diversify its course offerings as its student body continues to grow and the University of British Columbia carries out its Indigenous strategic plan. This course, aimed at the study of contemporary Indigenous literature and the production of original writing about Indigenous life and corollary topics, will also address larger shifts in Canadian literature and publishing around Indigenous writing (i.e., ethics, community-based practice, ever-increasing number of Indigenous books being published). Further, it will take seriously the concerns about the cultural sovereignty of Indigenous nations and writers.</p> <p>A maximum of 6 credits is permitted from CRWR 420, CRWR 521.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Commerce Faculty Approval Date: 2021 Mar 25 Effective Session: W Effective Academic Year: 2021</p>	<p>Date: 2021 Feb 5 Contact Person: Kin Lo Phone: 2-8430 Email: kin.lo@sauder.ubc.ca</p>
<p>Proposed Calendar Entry: Program Overview The Faculty of Commerce and Business Administration¹ is considered the one of the top research business schools in Canada. It offers courses of instruction leading to both the Master of Science in Business Administration (M.Sc.B.) and Doctor of Philosophy (Ph.D.). ¹Otherwise known as the Sauder School of Business.</p> <p>The areas of study for the Ph.D. program include the fields of accounting, finance, management information systems, management science, marketing and behavioural science, organizational behaviour and human resources, strategy and business economics, and urban land economics. In addition, a student may pursue a cross-field program within the Faculty in such areas as transportation and logistics or international business.</p> <p>The areas of study for the M.Sc.B. program include finance, management information systems, and transportation and logistics.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,1131</p> <p>Present Calendar Entry: Program Overview The Faculty of Commerce and Business Administration¹ is considered the one of the top research business schools in Canada. It offers courses of instruction leading to both the Master of Science in Business Administration (M.Sc.B.) and Doctor of Philosophy (Ph.D.). ¹Otherwise known as the Sauder School of Business.</p> <p>The areas of study for the Ph.D. program include the fields of accounting, finance, management information systems, management science, marketing, organizational behaviour and human resources, strategy and business economics, and urban land economics. In addition, a student may pursue a cross-field program within the Faculty in such areas as transportation and logistics or international business.</p> <p>The areas of study for the M.Sc.B. program include finance, management information systems, and transportation and logistics.</p> <p>Type of Action: Update specialization from “marketing” to “marketing and behavioural science”</p> <p>Rationale for Proposed Change:</p>



	<p>To reflect the broadening of the field and for consistency with the name of the Marketing and Behavioural Science Division in the Sauder School. The specialization name is marked on students' transcripts.</p>
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UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Commerce</p> <p>Department:</p> <p>Faculty Approval Date: 2021 Mar 25</p> <p>Effective Session (W or S): W</p> <p>Effective Academic Year: 2021</p>	<p>Date: January 18, 2021</p> <p>Contact Person: Jenny Chan/ Kin Lo</p> <p>Phone: 604 827 1731/604 822 8430</p> <p>Email: jenny.chan@sauder.ubc.ca kin.lo@sauder.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>BAEN 540 (1.5) Strategy & Innovation</p> <p><i>This course is not eligible for Credit/D/Fail grading</i></p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&code=BAEN</p> <p>Current Calendar Entry: None</p> <p>Type of Action: Create new course</p> <p>Rationale for Proposed Change: This course has been piloted for several years as BA 580B Topics in Business, and offered to students in the Master of Engineering Leadership program in Applied Science. The program would like the Sauder School to continue to deliver this course.</p> <p><input checked="" type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only) (Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Commerce</p> <p>Faculty Approval Date: 2021 Mar 25</p> <p>Effective Session (W or S): W</p> <p>Effective Academic Year: 2021</p>	<p>Date: February 23 2021</p> <p>Contact Person: Jenny Chan/ Kin Lo</p> <p>Phone: 604 827 1731/604 822 8430</p> <p>Email: jenny.chan@sauder.ubc.ca kin.lo@sauder.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>BAFI 508 (1.5) Data-driven Investments</p> <p><i>This course is not eligible for Credit/D/Fail grading</i></p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&code=BAFI</p> <p>Present Calendar Entry: None</p> <p>Type of Action: Create new course.</p> <p>Rationale for Proposed Change: This course has been successfully piloted in 2020 as a Special Topics Course - BAFI 580C Quantitative Investments. This course is being offered in the Master of Business Analytics (MBAN) program in response to student interest in applying data analytics to the financial field.</p> <p>The name has been modified to be more marketable but also descriptive of the course content.</p> <p><input checked="" type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only) (Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



UBC Curriculum Proposal Form Change to Course or Program

Category: (1)

<p>Faculty: Commerce</p> <p>Department:</p> <p>Faculty Approval Date: 2021 Mar 25</p> <p>Effective Session (W or S): W</p> <p>Effective Academic Year: 2021</p>	<p>Date: January 18, 2021</p> <p>Contact Person: Jenny Chan/ Kin Lo</p> <p>Phone: 604 827 1731/604 822 8430</p> <p>Email: jenny.chan@sauder.ubc.ca kin.lo@sauder.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>BAMA 519 (1.5) Building Brands with Purpose</p> <p><i>This course is not eligible for Credit/D/Fail grading</i></p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name&code=BAMA</p> <p>Current Calendar Entry: None</p> <p>Type of Action: Create new course.</p> <p>Rationale for Proposed Change: This course has been piloted for several years as BAMA 580A Topics in Marketing and offered to students in the Master of Engineering Leadership and Master of Health Leadership and Policy programs. The programs would like the Sauder School to continue to deliver this course.</p> <p><input checked="" type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only) (Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>



Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Medicine Department: Medicine Faculty Approval Date: Jan 19, 2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: Sep. 2020, Updated: Mar. 2021 Contact Person: Dr. Anita Palepu Phone: 778-239-1218 Email: apalepu@hivnet.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>MEDI 504 (1.5-3) d Emerging Topics in Experimental Medicine Restricted to students in one of: Master of Science in Experimental Medicine or Doctor of Philosophy in Experimental Medicine</p> <p>This course is not eligible for Credit/D/Fail grading.</p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create New Course</p> <p>Rationale for Proposed Change: The Experimental Medicine Program is intended for individuals seeking a career in health research. The Department of Medicine offers opportunities and facilities for advanced studies in Experimental Medicine, leading toward the MSc. and PhD degrees. Members of the Department direct research programs in a wide range of basic and clinically relevant areas. There are a variety of special interest areas of national and international stature. Specialties within the Experimental Medicine Program include: Cardiology, Endocrinology, Gastroenterology, Hematology, Infectious Diseases, Medical Immunology, Medical Oncology, Molecular Biology, Nephrology, Neurology and Respiratory Medicine. The M.Sc. degree consists of a total of 30 credits with 12 course credits completed in Year 1 and the remaining 18 thesis credits to be completed within 5 years. The PhD program consists of 12 course credits, a research project with thesis approval and passing the comprehensive exam to advance to candidacy. Students have 6 years to defend their thesis.</p>



Currently, there is no Special Topic course for the Masters or PhD in Experimental Medicine programs that would allow for the piloting of new courses or to offer courses that address short-term needs and opportunities. However, the need to address Special Topics does arise in both graduate degrees.

The Emerging Topics in Experimental Medicine course will provide flexibility to provide a variety of topics as technologies and UBC expertise continues to evolve. With the use of version codes, we will be able to pilot new courses with a range of credit assignment to match the version with appropriate credit level.

**Not available for Cr/D/F grading
(undergraduate courses only)**

Rationale for not being available for Cr/D/F: Not applicable to graduate-level courses.



UBC Curriculum Proposal Form

Change to Course or Program

Category: 1

<p>Faculty: Medicine Department: Pathology and Laboratory Medicine Faculty Approval Date: 03/16/2021 Effective Session (W or S): W Effective Academic Year: 2021</p>	<p>Date: November 16, 2020 Contact Person: Amanda Bradley Phone: 604-822-8159 Email: abradley@pathology.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>PATH 305 (3) Modern Microscopy Theoretical and practical application of widely used microscopy techniques.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&code=PATH</p> <p>Present Calendar Entry:</p> <p>PATH 305 (4) Modern Microscopy A lecture and laboratory course in the theoretical and practical application of modern biological microscopes—compound, dissecting, comparison, dark ground, fluorescent, phase contrast, interference, and electron microscopes.</p> <p>Type of Action: Update course description, decrease credits.</p> <p>Rationale for Proposed Change: PATH 305 course is part of the curriculum of the BMLSc Program, which began in 1981. Since course inception, the use of microscopy in clinical and foundational research has shifted. The proposed course changes better reflect widely used microscopy techniques and their application. The use of general terms in the description and course schedule allows the technical focus and applicability of the course to be continually updated which is critical in ensuring the course content remains current.</p> <p>Several sessions have been removed from the course as these sessions were deemed by the steering committee to be not widely</p>

	<p>used or were highly specialized. This resulted in reduction of PATH 305 to a one term course. Completion of the course in one term will minimize disruption to students' program should events occur during a full year course.</p> <p>In the updated course, emphasis is placed on the utility of microscopy in the current research landscape. The course retains the combination of weekly didactic and hands on laboratory sessions that are critical for experiential learning. The student project, where students develop and curate a collection of photomicrographs, has been maintained with an overall reduction in the number of figures required. Taken together with the reduction to one semester, the number of credits has been reduced from (4) to (3). Aside from changing the credits, the updates to the course have no direct impact on other courses or specializations either within or outside of the BMLSc program.</p> <p>X Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.)</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Medicine Department: Pathology & Laboratory Medicine Faculty Approval Date: 03/16/2021 Effective Session W Effective Academic Year 2021</p>	<p>Date: November 16, 2020 Contact Person: Amanda Bradley Phone: 604-822-8159 Email: abradley@pathology.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>PATH 408 (3) Research and Career Skills Overall operation of research laboratories including roles of personnel and funding; communication of scientific research; career skills and pathways; communication, collaboration, presentations and peer-assessment skills.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&code=PATH</p> <p>Present Calendar Entry: PATH 408 (3) Laboratory Administration Personnel management, staff management relationships, stock control, record keeping, etc. Medicolegal aspects of medical laboratory science. Theory and practice of quality control. Use of computers in the medical laboratory.</p> <p>Type of Action: Update course title and course description</p> <p>Rationale for Proposed Change: This course was a core part of the BMLSc Program when the program was developed in 1981. When the curriculum for PATH 408 was first established, the focus was on administrative aspects of a medical laboratory and was directed primarily at laboratory technologists who were expected to return to the medical laboratory. For more than a decade, the majority of incoming students have been science undergraduate students, with 0-10% laboratory technologists. The majority of contemporary BMLSc graduates (from both the science and laboratory technology backgrounds) pursue graduate studies or careers related to research. The course aims to prepare students for career paths related to research and to aid students in the development of their general career-searching, professional communication and</p>

	<p>peer-assessment skills (useful for a variety of careers). The updated course description better reflects how the course supports students to achieve their future career goals. Changes to the course description have no negative impact on courses either within or outside of the BMLSc program. Certain elements of PATH 408 (e.g. presentations, professional writing) complement and reinforce students' learning in other BMLSc courses, particularly PATH 405. This change will not impact students who have previously taken PATH 408, as the proposed version of this course has been offered for at least 5 years. These title and course description updates bring the Calendar in line with current practice</p> <p>X Not available for Cr/D/F grading. (Check the box if the course is NOT eligible for Cr/D/F grading. Note: Not applicable to graduate-level courses.) Pass/Fail or Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>
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UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Law Department: Faculty Approval Date: March 11, 2021 Effective Session (W or S): W and S Effective Academic Year: 2021-22</p>	<p>Date: February 11, 2021 Contact Person: Ljiljana Biukovic (course author Nicole Barrett) Phone: 604-822-0312 Email: biukovic@allard.ubc.ca and barrett@allard.ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>Law 427 (3 - 12) d International Justice and Human Rights Clinic Practicum</p> <p>The Clinic Practicum is a collaborative effort where clinicians work in teams of two to four on cases and projects that respond to human rights violations and/or global injustice.</p> <p>Corequisite: Law 428</p>	<p>URL:</p> <p>http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&code=LAW</p> <p>Present Calendar Entry: None</p> <p>Type of Action: Create new course.</p> <p>Rationale for Proposed Change: This course has been offered for seven years under general course number LAW 379 (1-11) d Externship, which is used for new courses. The proposed change is consistent with the faculty practice to assign an individual course number to courses that show strong and consistent student enrollment for several years.</p> <p>The new offering reflects more accurately the nature of experiential learning work undertaken by students in the clinical program. Students in the International Justice and Human Rights Clinic do not work in outside institutions, as the current classification "Externship" suggests. The Clinic supervisors provide all of the student case and project supervision at Allard School of Law.</p> <p>Having the clinic name on student transcripts will also assist the Clinic students on the competitive public interest/human rights job market.</p> <p>The proposed change also seeks to establish greater flexibility in assigning course credits across both experiential and academic portions of clinical programs and across both winter and summer sessions.</p> <p><input type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only)</p> <p>Rationale for not being available for Cr/D/F:</p>



	<input checked="" type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)
<p>Proposed Calendar Entry:</p> <p>Law 428 (3 - 6) d International Justice and Human Rights Clinical Seminar (40 word limit.)</p> <p>The seminar explores foundational texts and treaties in international human rights, international humanitarian and international criminal law necessary to undertake the IJHR Clinic case and project work in the Fall and Spring Practicum.</p> <p>Corequisite: Law 427.</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code&code=LAW</p> <p>Present Calendar Entry: (Cut and paste from the current web Calendar.) None.</p> <p>Type of Action: (e.g., new course, delete course, etc.)</p> <p>Create a new course.</p> <p>Rationale for Proposed Change:</p> <p>This seminar has been offered for seven years as Law 380 (2-6) d Externship Reflection. The new course is necessary to more accurately describe the clinic seminar, which provides the foundational materials required to carry out the LAW 427 IJHR Clinic Practicum.</p> <p><input type="checkbox"/> Not available for Cr/D/F grading (undergraduate courses only) (Check the box if the course is NOT eligible for Cr/D/F grading and provide the rationale for this below. Note: Not applicable to graduate-level courses.)</p> <p>Rationale for not being available for Cr/D/F: The default is that undergraduate courses are offered for Cr/D/F unless there is a significant reason as to why it should not be so.</p> <p><input type="checkbox"/> Pass/Fail or <input type="checkbox"/> Honours/Pass/Fail grading (Check one of the above boxes if the course will be graded on a P/F or H/P/F basis. Default grading is percentage.)</p>

19 May 2021

To: Vancouver Senate

From: Senate Curriculum Committee

Re: Variable Credit Courses – c, d, / (approval)

The Okanagan and Vancouver Senate Curriculum Committees met jointly to consider a proposal from the IRP Student, Records & Advising Team, with respect to variable credit courses. Currently, variable credit courses indicate whether the credit is decided by the department (*d*) or in consultation with the student (*c*). Additionally, - or / indicates whether the minimum and maximum credit values form a range of possible credit values for a given course offering, or if a course will be offered for either the minimum or the maximum credit value.

Workday Student does not supply a field to indicate whether a variable credit course is *c* or *d*, nor does it interpret the concept of either/or credit values (/). Accordingly, the Committees were asked to consider the ongoing notions and use of *c*, *d*, and /, and how else to communicate course credit details to students.

The Committees were advised that *c* or *d* are not intrinsically-required elements of a course and there are other means for conveying the same credit details (course descriptions could contain guiding information) and creating the same tailored learning experiences (like directed studies). The Committees first considered only discontinuing the use of *c*; however, discontinuing one notation would render the other unnecessary, and thus they considered discontinuing both.

The following is recommended to Senate:

Motion: *“That the use of ‘c’ and ‘d’ designation for variable credit courses not continue when Workday Student is implemented.”*

AND

“That the use of ‘/’ designation for variable credit courses not continue when Workday Student is implemented and that the course credit details be visible to students via other course information sources.”

Respectfully submitted,

Dr. Claudia Krebs, Chair
Senate Curriculum Committee



THE UNIVERSITY OF BRITISH COLUMBIA

8 February 2021

To: Okanagan & Vancouver Senate Curriculum Committees

From: IRP Student, Records & Advising Team

Re: *Variable Credit Courses – ‘c’ and ‘/’*

All current variable credit courses indicate whether the credit is decided by the department (‘d’) or in consultation with the student (‘c’). In addition, a ‘-’ or ‘/’ is used to indicate whether the minimum and maximum credit values form a range of possible credit values for a given course offering, or if a course will be offered for *either* the minimum or the maximum credit value. These attributes of variable credit courses are contained within separate fields in the current curriculum management system, and when extracted display as ASIA 270 (3/6) d, for example.

Workday does not supply a field to indicate whether a variable credit course is ‘c’ or ‘d’. In addition, Workday does not have a concept of ‘either/or’ credit values (‘/’); the minimum and maximum credit values always represent the low and high ends of a range of possible credit values for a course.

A small group of timetable representatives were consulted to begin to explore the potential impact of not being able to indicate the above in Workday as is currently done. The feedback included that the concept of ‘c’ and ‘d’ is not always well understood by faculty, staff, and students. There is a possibility that this has led to inaccurate tagging of some courses. In terms of variable credit courses only being a range of credits, some concern arose around the possibility of choosing a credit value for a course that would not fit well with student programs (i.e., leaving a student 1 credit short for graduation).

The IRP Student team has identified possibilities of continuing to have these notions in Workday and proposes the following options:

1. Regarding ‘c’ and ‘d’ credits, the assumption will be that all variable credit courses are ‘d’ – credit value is determined by the department – unless otherwise noted in the course description. Where the desire is to have the student consulted on the credit value of a particular course offering, the following sentence will be included at the end of the course description: “The credit value for this course will be determined in consultation with the student prior to registration.”
2. For courses that are intended to have a “/” credit value, a note will be included in the Private Notes field so that timetable reps would know the intent and could ensure that the credit value matches that intent. However, there would not be a way to enforce this notion in the system and the full credit range could always be chosen.

The Senate Curriculum Committees are asked to consider:

- Should the notion of ‘c’ continue to be indicated in some way on the course and in the Academic Calendars?
 - For courses that are eligible to be offered in 2020W, there are 304 courses on the Vancouver Campus that use ‘c’ and 30 on the Okanagan Campus.
- The wording of the proposed sentence to be included in course descriptions to represent the notion of ‘c’.
- Should the faculties be asked to review their variable credit courses to confirm that the current ‘c’ and ‘d’ operators are accurate and so that the data could be cleaned up prior to going live with Workday?

- Whether the notion of the '/' is still needed.
 - If so, is indicating this in the private notes enough? Or, should students be made aware if the intent is to only offer the course at the minimum or maximum credit value, and therefore a statement should be included in the course description.
 - How great is the concern that a course could be scheduled for a credit value that could negatively impact a student's program? (Note: it may be possible to set up a report in Workday that could identify, for example, any courses that do not have a credit value of 3 or 6 (the most common credit values) in an attempt to catch such situations).
- How to move forward with messaging to the UBC community around the changes to the attributes of variable credit courses in Workday:
 - Timing (changes could be implemented in the current system)
 - Academic Calendar changes (including the Introduction section to the Course Description sections)
 - Curriculum Guideline updates



19 May 2021

To: Vancouver Senate

From: Senate Admissions and Curriculum Committees

Re: May Joint Admissions and Curriculum Proposals (approval)

The Senate Admissions and Curriculum Committees have reviewed the material forwarded to them by the Faculties and encloses those proposals they deem as ready for approval.

The following is recommended to Senate:

Motion: *“That the new Master of Education in Indigenous Education degree program brought forward by the Faculty of Graduate and Postdoctoral Studies (Education), and the new Doctor of Philosophy and Master of Science in Women+ and Children’s Health Sciences degree programs, related new courses and course code brought forward by the Faculty of Graduate and Postdoctoral Studies (Medicine), be approved.”*

Respectfully submitted,

Prof. Carol Jaeger, Chair
Senate Admissions Committee

Dr. Claudia Krebs, Chair
Senate Curriculum Committee



FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

Education

New program

Master of Education in Indigenous Education

Medicine

New programs

Doctor of Philosophy in Women+ and Children's Health Sciences; Master of Science in Women+ and Children's Health Sciences

New courses

WACH 501 (3) Women+ and Children's Health; WACH 502 (3) Seminars in Women+ and Children's Health; WACH 503 (3) Perinatal Epidemiology; WACH 511 (3) Women+ Health Research; WACH 521 (3) Child Health Research; WACH 522 (3) Pediatric Nutrition; WACH 531 (3) Reproductive Endocrinology, WACH 532 (3) Physiology of the Mother, Fetus and Newborn; WACH 533 (3) Fetal and Perinatal Metabolism; WACH 548 (1.5-6) c Directed Studies in Women+ and Children's Health; WACH 549 (18) MSc Thesis; WACH 649 (0) PhD Dissertation

New course code

WACH: Women+ and Children's Health Sciences



UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Education Department: Faculty of Education Faculty Approval Date: March 9, 2021 Effective Session: Summer Year: 2022</p>	<p>Date: February, 2020 Contact Person: Dr. Jan Hare Email: indigenous.education@ubc.ca</p>
<p>Proposed Calendar Entry:</p> <p>IndigenousEducation</p> <p>Degree Offered: M.Ed.</p> <p>Program Overview This graduate program in Indigenous Education recognizes the need for transformative change. It is intended for teachers, educational administrators and leaders, Indigenous community members, or other professionals in formal and informal education settings who want in-depth preparation on K-12 Indigenous educational frameworks, theories, policies, curricular approaches, and community or parental relationships that build upon Indigenous knowledge systems.</p> <p>Admission Requirements In addition to the Faculty of Graduate and Postdoctoral Studies requirements, the program normally requires a completed four-year bachelor's degree with a minimum overall average of B+ (at UBC 76%) in third- and fourth-year courses. Preference is given to those with two years of teaching or equivalent experience working with Indigenous communities, non-governmental organizations, or other education-oriented environments.</p> <p>Program Requirements The Master of Education in Indigenous Education consists of a minimum of 30</p>	<p>URL: New page required</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create new program</p> <p>Rationale for Proposed Change: The Indigenous education landscape is rapidly changing in the province of British Columbia with many new and exciting opportunities in K-12 First Nation, public, and independent schools and communities. Some of these initiatives include curriculum reform from kindergarten to grade 12, where each grade level includes content. This revised provincial curriculum with required Indigenous content became mandatory in 2016-17. In addition, the number of Indigenous courses in secondary schools have increased. These courses include English First Peoples 10, 11, 12; Math First Peoples 8, 9, 10; and First Nations Studies 12.</p> <p>Indigenous focus-schools have been established in Prince George, Kelowna, Vancouver, and Nanaimo school districts. All of the 60 school districts in British Columbia either have or are developing an Aboriginal Education Enhancement Agreement (AEEA) with local Indigenous communities and groups. The AEEAs often include goals and strategies to include Indigenous curriculum, to work more</p>

credits, of which 24 credits must be at the 500-level. A maximum of 6 credits can be taken at the 300- or 400-level.

The program is offered through blended delivery normally takes 28 months of consecutive study.

The following 7 courses (21 credits) are required:

EDST 591: *Indigenous Epistemology and Curriculum* (3 credits)

LLED 513: *Indigenous Storytelling in Education* (3 credits)

EDCP 532: *Theories and Dimensions of Place-Based Education: Ecocultural, Critical, and Indigenous Lenses* (3 credits)

EDUC 500: *Research Methods in Education-Indigenous Emphasis* (3 credits)

EDST 545: *Indigenous Inquiry and Research* (3 credits)

ETEC 521: *Indigenity, Technology, and Education* (3 credits)

One of EDST 590, LLED 590, or EDCP 590: *Graduating Paper* (3 credits)

Recommended electives (9 credits) include the following:

EDCP 539: *Narrativity, Ecopedagogy and Indigenity* (3 credits)

EDST 505: *First Nations and Educational Change* (3 credits)

EDST 546: *Indigenous Methodology and Epistemology* (3 credits)

LLED 527: *Materials Development for Indigenous Language Learning & Teaching* (3 credits)

EDUC 440: *Aboriginal Education in Canada* (3 credits)

FNEL 480: *Endangered Language Documentation and Revitalization* (3-12 credits)

FNEL 380: *Technologies for Endangered Language Documentation and Revitalization* (3 credits)

EDUC 442: *Critical Issues in Indigenous Education* (1-3 credits)

Contact Information

Dr. Jan Hare

closely with Indigenous parents and communities, and to increase teachers' knowledge and skills to address Indigenous education more fully. In addition, there are 130 First Nation schools in BC which are not public schools; however, the provincial K-12 curriculum is used with a stronger emphasis on inclusion of Indigenous knowledge.

The recent release of the 2015 Truth and Reconciliation Canada report about Indian residential school impact includes Calls-to-Action for education. Inclusion of Indigenous history, culture, and residential school curriculum for all students and professional development for educators are recommendations. In addition, BC has legislated the United Nations Declaration of Indigenous Peoples conferring new ways of working with Indigenous families and communities. It is critical that educators are professionally equipped to respond to new initiatives and changing demands in Indigenous education in order to enhance support for Indigenous students and families, improve educational outcomes for Indigenous learners, and provide critical Indigenous educational experiences for all students. The proposed Master of Education in Indigenous Education will address policy, programmatic, curricular, pedagogical, and community/parental relationship needs as noted above.

The Master of Education in Indigenous Education recognizes the need for transformative change in Indigenous education. The program will focus on school and classroom processes and practices that support Indigenous learners, and amplify experiences for non-Indigenous students, using educational frameworks, theory and approaches that focus on Indigenous knowledge systems. The program will a) develop educators' knowledge, understanding and theory and pedagogic skills concerning Indigenous education and Indigenous knowledge; b) analyze existing curriculum frameworks and structures so that educators may better

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understand Indigenous worldviews and use Indigenous knowledge and pedagogies in respectful and responsible ways; and c) provide new professional development opportunities for learning about and practicing Indigenous pedagogies and ways of knowing and thoughtful and strategic ways to implement these in education curricula and programming.

The Master of Education in Indigenous Education will be a cooperative effort among three Faculty of Education departments: Educational Studies, Language and Literacy Education, and Curriculum and Pedagogy. Required coursework in Indigenous education theory is offered by departments that include EDST, LLED, and EDCP. Two required courses focused on Indigenous research methods will prepare educators to undertake their graduating paper/project. The course electives will provide an additional opportunity to add an Indigenous specialty through special topics courses such as Indigenous language revitalization; Eco-Justice, Sustainability & Indigeneity; Indigenous Educational Leadership; and Indigenous Health and Education.

An academic management committee with representatives from each participating department and chaired by the Associate Dean for Indigenous Education (ADIE) (or graduate advisor designate) will provide academic oversight for this program. The Office of Research in Education will provide structural programmatic oversight, assist with admissions, and contribute administrative staff support. The Office of Professional Development and Community Engagement will be responsible for financial management and assist with recruitment and communications. The ADIE (or graduate advisor designate) will also serve as the program coordinator.

Executive Summary
Master of Education in Indigenous Education
(Blended Delivery Cohort Model)
Faculty of Education
University of British Columbia
Feb 04, 2020

Overview of Indigenous Education in the Faculty of Education

The University of British Columbia is a comprehensive research-intensive university, consistently ranked among the 40 best universities in the world. It creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world. Since 1915, UBC's West Coast spirit has embraced innovation and challenged the status quo. Its entrepreneurial perspective encourages students, staff and faculty to challenge convention, lead discovery and explore new ways of learning.

The Faculty of Education has a comprehensive set of programmatic offerings at the baccalaureate, magisterial and doctoral levels. Academic units include the Department of Educational and Counselling Psychology, and Special Education; the Department of Curriculum and Pedagogy; the Department of Educational Studies; the Department of Language and Literacy Education; and the School of Kinesiology. In addition to a post-baccalaureate Teacher Education program, Faculty-wide graduate programs in early childhood education, educational technology and interdisciplinary studies are offered.

The Faculty, a leader in Indigenous Education, offers an Indigenous Teacher Education Program (NITEP)¹, graduate supports that includes SAGE – Supporting Aboriginal Graduate Enhancement and Ts'kel, and offers a broad range of courses in Indigenous Education. The Faculty is home to the Indigenous Education Institute, publishes an annual theme issue of the *Canadian Journal of Native Education*, and has an Associate Dean for Indigenous Education and two Canada Research Chair positions that focus on the Indigenous priorities of wellness and pedagogy. Many faculty members work with Indigenous communities and organizations on education and research projects. The Faculty has a growing cadre of excellent Indigenous faculty members. It has offered the innovative Massive Open Online Course (MOOC), *Reconciliation Through Indigenous Education*, to over 50,000 participants worldwide. The Faculty's Indigenous Education Program – NITEP is a leading program preparing Indigenous teachers through community-based delivery. It has graduated over 420 Indigenous teachers, many who go on to leadership roles that require a Master's degree.

The Office of Indigenous Education in the Faculty of Education advances Indigenous priorities across the Faculty's departments, supporting programs and services. It has partnered to deliver 5 community-based master's programs and an EdD Indigenous cohort (in partnership with NVIT) through face-to-face, online, and flexible modes of delivery. It has partnered with Indigenous communities and post-secondary institutions,

¹ NITEP was established in 1974 as the Native Indian Teacher Education Program. Since Indian is no longer a preferred term, the program uses the program name, Indigenous Teacher Education Program, but keeps the acronym NITEP given how well known the NITEP program is known locally, provincially, and nationally.

including the Nicola Valley Institute of Technology (NVIT), to build capacity in all areas of community and organization development and programming.

Rationale

The Indigenous education landscape is rapidly changing in the province of British Columbia with many new and exciting opportunities in K-12 First Nation, public, and independent schools and communities. Curriculum reform in K-12 has resulted in the integration of the First Peoples Principles of Learning (FPPL) across all areas of the curriculum and all grade levels. This revised provincial curriculum with required Indigenous content became mandatory in 2016-17. In addition, Indigenous-specific courses at high school have increased to include English First Peoples 10, 11, 12; Math First Peoples 8, 9, 10; Science First Peoples 5-9 and Secondary; and, First Nations Studies 12. Indigenous focus-schools have been established in Prince George, Vancouver, Okanagan, and Nanaimo school districts.

The courses planned for this proposed MEd in Indigenous Education support program participants to respond to the revised provincial K-12 curriculum that places new emphasis on Indigenous worldviews/histories/pedagogies through the FPPL. Courses are offered through the summer institutes will focus on land- and place-based learning and offer experiential and intensive experiences that enable students to link to the BC curriculum. Students in this degree program will be offered opportunities through course goals/objectives, activities, content, and assessment to learn and plan for how Indigenous knowledges, as expressed in the FPPL, can be incorporated in to practice.

All of the 60 school districts in British Columbia either have or are developing an Aboriginal Education Enhancement Agreement (AEEA) with local Indigenous communities and groups. The AEEAs often include goals and strategies to further Indigenous curriculum developments, to work more closely with Indigenous parents and communities, and to increase teachers' knowledge and skills to address Indigenous education more fully. In addition, there are 130 First Nation Schools in BC where the provincial K – 12 curriculums is used with a stronger emphasis on inclusion of Indigenous Knowledge. The proposed MEd promote relational accountabilities to Indigenous communities and organizations through planned coursework and design of the degree.

Canada's Truth and Reconciliation Commission Report released in 2015 identified 94 Calls-to-Action with specific recommendations for education. Preparing teachers to incorporate Indigenous histories and worldviews, developing Indigenous history curriculum, and identifying and sharing best practices for teaching Indigenous-settler histories and worldviews are among the Calls-to-Action. The BC Auditor General's Report on Indigenous Education, released in 2015 recommends much more policy and curriculum leadership from the Ministry of Education. Further, the province of British Columbia has approved legislation to implement the United Nations Declaration of the Rights of Indigenous Peoples through the Declaration on the Rights of Indigenous Peoples Act. This new provincial act places new demands on schools, districts, and communities to engage with Indigenous people's rights and priorities, which includes Indigenous education and engagement.

More recently, the BC teacher regulation body (BCTC) has introduced a 9th Standard for the profession that honors the TRC Calls-to-Action and the UNDRIP. It supports the expectation that BC educators will address truth, reconciliation and healing, acknowledge the history and contributions of Indigenous peoples in Canada in order to foster a deeper understanding of Indigenous ways of knowing and being, histories, and cultures of Indigenous peoples. The actualization of this new standard necessitates that educators have on-going professional learning opportunities to achieve these goals.

It is critical that educators are professionally equipped to respond to the aforementioned new initiatives, policies, and changing demands in Indigenous education in order to enhance support to Indigenous students and families, improve educational outcomes for indigenous learners, and provide critical Indigenous educational experiences for all students. The proposed Master of Indigenous Education degree will address policy, programmatic, curricular, and community/parental relationship priorities as noted above.

Credential

The credential awarded will be the Master of Education (MEd) in Indigenous Education.

Location

This program will be offered by the Faculty of Education, and where possible, will include cooperation or partnership with BC school districts, Indigenous organizations/institutions, and communities. The degree encompasses flexible learning modes and so will be offered on-campus in summer months within classroom and land-based settings, as well as online to support remote learning.

Faculty Offering Program

The program will be administered by the Faculty of Graduate and Postdoctoral Studies and delivered by the UBC Vancouver Faculty of Education.

Program Start Date

The program may be offered beginning in July 2022.

Program Completion Time

Anticipated time for completion of the program is 28 months.

Program Learning Objectives

The MEd is designed for teachers, administrators, community educators, early childhood educators, or students in other professions who wish to enhance their knowledge and professional practice in Indigenous education.

This will be a 30 credit degree program with the following objectives: a) deepen understanding of Indigenous knowledges, histories, worldviews in both theory and practice; b) strengthen instruction and leadership skills in using and supporting Indigenous education knowledge, practices, and pedagogies for classroom, school, and community-based programs and settings; c) analyze and adapt existing curriculum frameworks and structures in order to make them more culturally responsive to Indigenous worldviews and Indigenous knowledge systems; d) provide leadership in the development and revision of Indigenous educational policy, curricula and programming;

and e) develop knowledge and practices for engagement with Indigenous learners, people, and communities that advance TRC and UNDRIP commitments.

Contribution to UBC's Mandate and Strategic Plan

The proposed Master of Indigenous Education will fulfill some major goals and actions of the strategic plans of both UBC and the Faculty of Education. The 2019 version of *Shaping UBC's Next Century* sets a strategy for Indigenous Engagement (#17) which is to "Support the objectives and actions of the renewed Indigenous Strategic Plan continuing this work and represents our shared commitment as a university community. It also provides the framework for statements of faculty- and unit-level commitments that are forming UBC's response to the Calls to Action released in 2015 by the Truth and Reconciliation Commission of Canada".

Creating pathways to graduate education responds to UBC's newly launched Indigenous Strategic Plan that emphasizes the recruitment and retention of Indigenous students to graduate and undergraduate levels of study (Goal 6) and to partner with Indigenous communities to develop accredited post-secondary Indigenous knowledge programs that can be delivered in communities or on-campus (Action 18).

The Faculty of Education *Learning Transformed Strategic Plan 2019 -2024*, similarly notes the priority to "Foster sustainable relationships, collaborations, and partnerships with Indigenous communities". This strategic plan outlines a specific goal to "Advance Indigenous priorities in teaching, learning, research, and scholarship, while supporting Indigenous education opportunities for all (p15). Objectives include to:

1. Make Indigenous activities, programs and research more visible and accessible
2. Provide professional educational opportunities for students, faculty, and staff to deepen their understandings of Indigenous issues, histories, cultures, and research methodologies
3. Ensure that all students engage with Indigenous knowledge as part of their studies in the Faculty of Education
4. Expand existing collaborative teaching, research, and scholarly practices with Indigenous peoples, communities, and organizations
5. Enhance our recruitment and retention strategies to promote the enrolment of Indigenous learners to reflect changing demographics of Indigenous peoples

Delivery Methods

This 30 credit Master of Education in Indigenous Education will be offered as a cohort model, in cooperation with three departments: Language and Literacy Education, Educational Studies, and Curriculum and Pedagogy. The Office of Indigenous Education within the UBC Faculty of Education will provide administrative support and leadership as they have done with other Indigenous-focused programs. A sufficient number of students will need to be enrolled to ensure financial viability (approximately 18). The program consists of required coursework, electives, and a capstone experience that links theory and learning to practice.

It is important to note that the slate of courses offered in the MEd in Indigenous Education already exist and so there will not be a need to develop new courses for the program.

Students will take required courses together. The MEd will be blended delivery with courses offered face-to-face in summer 1-week intensives and through online learning to accommodate those who work as full-time teachers and in other related professions, as well as to create access to graduate studies for Indigenous students from communities beyond the lower mainland of BC. The online components will be offered during the academic year so that students do not have to travel to campus. The online courses will be offered in a blended format where students receive instruction both synchronously and asynchronously.

There are required courses from each of the three participating departments noted above (total of 12 credits). Two required Indigenous oriented research courses (6 credits) will prepare educators to undertake their capstone project or graduating paper (3 credits). The 3 course electives (9 credits) will provide an additional opportunity to develop expertise in the areas such as Indigenous language revitalization; Eco-Justice, Sustainability & Indigeneity; Indigenous Educational Leadership; and Indigenous Health and Education. Departments in the Faculty of Education already offer the required courses. Possible elective courses include special topic courses offered by the departments or courses offered by other UBC academic units.

Course Schedule	Credits	Year
EDCP 532: Theories and Dimensions of Place-based Learning: Ecohumanist, Critical and Indigenous Lenses	3	1 - July 1-week Intensive F2F
LLED 513: Indigenous Storytelling in Education and Research	3	1 – September
EDST 500: Research Methods (Indigenous emphasis)	3	1 - January
Elective 1	3	1 - May/June
EDST 591: Indigenous Epistemology and Curriculum	3	2 - July 1-week Intensive F2F
Elective 2	3	2 - July/August
EDST 545: Indigenous Inquiry and Research	3	2 - September
ETEC 521: Indigeneity, Technology, and Education	3	2 – January
Elective 3 (Indigenous Special Topics Course in Department)	3	2 - May/June
EDCP/EDST/LLED 590: Capstone Projects	3	2 - July 1 week intensive F2F

Program Oversight

An academic management committee with representatives from each of the three participating departments and chaired by the Associate Dean for Indigenous Education (ADIE) will provide academic oversight for this program. A faculty representative from one of the participating departments will serve as program coordinator/advisor and participate on the Faculty-wide graduate program advisory committee.

Linking Learning Outcomes and Curriculum Design, Optional Work terms

This Master of Education in Indigenous Education has three major components that familiarize and develop expertise: (1) Indigenous theory and practice; (2) Indigenous research; and (3) Indigenous specialty/theme. The first two components are required and the third component facilitates a themed specialty or Indigenous course electives.

The curriculum of the required and elective courses will address the major program objectives stated above through readings, experiential activities, guest speakers, assignments, and a capstone project or graduating paper. Students' graduating papers/projects will have research and professional components such as a literature review and application of knowledge they have gained from their program to their professional site of practice; thereby, contributing to some aspect of Indigenous education. Students may complete a small research study for their capstone requirement, which is consistent with existing capstone practices within the Faculty of Education.

Program Strengths

The UBC Vancouver Faculty of Education is a leader in Indigenous education amongst Faculties of Education in Canada. It has the largest number of tenure track/tenured Indigenous faculty, many Indigenous education and research courses, and many other faculty and graduate students engaged in Indigenous research. The Associate Dean for Indigenous Education within the Faculty of Education offers academic and student support. The UBC Vancouver campus also has the First Nations Longhouse and First Nations House of Learning that provides various Indigenous student services.

An Overview of the Level of Support and Recognition from Other Post-secondary Institutions

The distinctive focus of this MEd program will appeal to practicing educators in public school districts, First Nations schools, independent schools, and Indigenous educational organizations. The Faculty of Education's off campus cohort programs are often offered in partnership with school districts. Besides school districts, provincial organizations such as the First Nations Education Steering Committee, the First Nations Schools Association, and the Indigenous Adult and Higher Learning Association would be approached for partnership opportunities and for further input to the program in order to meet the educational needs of learners who work in these settings.

Letters of support have been received from:

- North Vancouver School District 44
- Nicola Valley Institute of Technology (NVIT is an Indigenous Post-Secondary Institute)
- Indigenous Education Department, University of Victoria

Related Programs at UBC or other BC post-secondary institutions

No other UBC Faculty offers an Indigenous Education M.Ed. or MA program. Two other BC universities offer masters' programs in specialized areas such as Indigenous language revitalization and counseling. The University of Victoria offers an MA or M.Ed. in Indigenous Language Revitalization and an MA in Indigenous Communities Counselling

Program. Simon Fraser University offers an occasional themed cohort in a topic related to Indigenous education using its existing M.Ed. in Curriculum and Instruction. It appears that no other BC university offers a Master of Education in Indigenous Education degree.

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a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Women+ and Children's Health Sciences (WACH)

Doctor of Philosophy (PhD) Program

New Program Proposal

Department of Pediatrics
Department of Obstetrics & Gynaecology
Faculty of Medicine
The University of British Columbia

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Executive Summary

The Departments of Obstetrics & Gynaecology and Pediatrics propose to offer a new Women+¹ and Children's Health Sciences (WACH) PhD program. This program will be a University of British Columbia (UBC), Faculty of Medicine PhD program jointly hosted by the Departments of Obstetrics & Gynaecology and Pediatrics and principally based on the Oak Street campus. WACH is an expansion and reconfiguration of the existing Reproductive and Developmental Sciences (RDS) PhD graduate program in the UBC Department of Obstetrics and Gynaecology. Faculty expertise and research interests include the health of women, maternal health, the overlapping and unique health considerations of transgender and non-binary individuals, neonates, and children (all genders). Transgender and non-binary individuals share some biological aspects of health with women (and children) and also have some unique biology and social determinants of health that fall within the clinical and research expertise of our Faculty.

The Oak Street campus, also known as the BC Children's and Women's Hospital campus, is a major site for the UBC Faculty of Medicine Departments of Obstetrics & Gynaecology and Pediatrics, as well as being the home of the BC Children's Hospital Research Institute (BCCHR), and the Women's Health Research Institute (WHRI). The focus of our collective research endeavours is women+ and children's health.

Students who enroll in the PhD program will be required to complete 12 credits, including 2 core courses (6 credits), and at least 2 elective courses (6 credits). The students will also complete a PhD dissertation. The program can be pursued either full-time or part-time. The expected time of completion is 5 years for a full-time program or 8 years for a part-time program. Students will choose 1 of 3 streams: Women+ Health, Child Health, or Reproductive and Developmental Sciences (RDS).

The delivery of training will be through didactic lectures, which will include case- and/or problem-based learning, seminars, and/or laboratory work in the required and elective coursework. Courses will be offered as a hybrid model of in-person and on-line learning, and will be recorded, with permission, to accommodate distance learning. Students will also complete supervised dissertation research. Finally, students are encouraged to fulfill the optional requirements of the Graduate Student Enhanced Scholar Program, which includes three components: an individual development plan (IDP), a competency passport, and formal mentorship. The Curriculum incorporates Competence by Design and emphasizes the enhanced scholar program.

Inclusion, and a specific focus on Indigeneity, are key components of the WACH program with the goal of achieving a faculty and student body that reflects the demographics of British Columbia. The goal is to cultivate a learning environment that embraces equity, diversity, and inclusion.

The program will recruit top graduates from MSc/MA degree specializations, including microbiology & immunology, nutritional science, biology, computer science, genetics, pathology

¹ Women+ embraces women, transgender, and non-binary individuals.

and laboratory science, pharmaceutical sciences, psychology, sociology, and others. The WACH program is not a professional program. It is a thesis-based research graduate program that is primarily designed for undergraduate students seeking a Masters or PhD degree aligned with one or more of the four CIHR pillars in women+’s or children’s health research (I biomedical, II clinical, III health services, and IV social, cultural, environmental, and population health research). It is conceivable some healthcare professionals who are interested in pursuing graduate-level thesis-based research training will choose to enroll in the WACH program but we anticipate that they will be limited to a small number seeking academic clinician scientist careers after graduation. People with professional undergraduate degrees, could include those with degrees in medicine (MD), dietetics (BSc/RD), nursing (BSN), pharmacy (PharmD), midwifery (BMw), and social work (BSW).

The program will enable students to:

- **Analyze, critique, and adjudicate** the current state of knowledge in the field;
- **Compare and contrast** unique factors that impact women+ and children’s health;
- **Apply** principles of equity, diversity, and inclusion to research, including Indigeneity;
- **Design and conduct** independent research **utilizing** appropriate and rigorous biological design and biostatistical analyses;
- **Create and communicate** new knowledge through an original scholarly contribution (i.e. a PhD dissertation), and a variety of methods including written manuscripts and oral presentations; and
- **Demonstrate career competencies** in optional extracurricular career development opportunities including seminars, workshops, networking, and experiential learning.

The WACH program intends to produce graduates, who will have the competencies for successful careers in academia, as well as in industry, government, consulting, and non-governmental organizations (NGOs). From a market analysis conducted in 2019 in conjunction with UBC Extended Learning focused on BC labour market trends, the types of positions our graduates could pursue upon graduation include: NOC² 4011 University Professors and Lecturers, NOC 4021 College and Other Vocational Instructors, NOC 2121 Biology and Related Scientists, NOC 2221 Biological Technologists and Technicians, NOC 4165 Health Policy Researchers, Consultants and Program Officers, and NOC 1254 Statistical Officers and Related Research Support Occupations.

² NOC refers to the National Occupational Classification code.

1.1 Credentials

Graduates from the PhD program will be awarded a PhD in Women+ and Children's Health Sciences (WACH).

1.2 Location

The UBC Oak Street campus is the primary location for education and administration. Other locations include the UBC Point Grey campus, St. Paul's Hospital, and Vancouver General Hospital, although, the embrace of distance learning opens the program to students at any of our provincial sites.

1.3 Faculty Offering Program

The Faculty of Medicine will offer the program, which will be jointly administered by the Departments of Pediatrics and Obstetrics & Gynaecology.

1.4 Program Start Date

The program is expected to start in September 2022.

1.5 Program Completion Time

The expected time to completion of the PhD program is 5 years of full-time academic study or 8 years of part-time study.

1.6 Program Overview

The goal of the PhD program in Women+ and Children's Health Sciences is to provide students with a broad knowledge of research in women+ and children's health sciences including biomedical, clinical, health services, and populations. Students will develop critical thinking skills to independently design, execute, and evaluate research experiments directly related to women+ and children's health sciences. Core concepts will include biomedical, patient- and public-oriented translational research with consideration of social determinants of health and cultural competence, including sex and gender, Indigenous health, and research methodologies. In addition, students will develop in depth expertise in at least one of the following areas of research that represent existing areas of faculty expertise within our departments:

- Acute or chronic diseases
- Brain development and function
- Implementation science
- Developmental origins of health and disease
- Placental, embryonic, foetal, perinatal, infant, child and/or youth: Development, physiology, and/or pathophysiology
- Reproductive biology
- Reproductive or childhood cancers
- Epidemiology specific to women+ or children
- Mental health specific to women+ or children
- Health services specific to women+ or children

1.7 Inclusion and Indigeneity

The WACH Program views inclusion as an essential requirement and interprets that goal as achieving a faculty and student body that reflects the demographics of British Columbia, and providing a learning environment that embraces equity, diversity, and inclusion. Our admissions committee will use a holistic approach when considering students for admission that includes consideration of achieving inclusion and representation of equity seeking groups.

Ethical research conduct and equity, diversity, and inclusion of under-represented, marginalized, and vulnerable populations represent core program values reflected in the curriculum. These values are also among the competencies that students will acquire through curricular requirements and extra-curricular activities. We also developed new core curriculum content to address cultural awareness and competency, both within the learning environment and in research studies designed to address important health inequities.

We recognize that at present, a major component of this aspiration is increasing the participation of Indigenous students and faculty in WACH.

Presently, faculty members affiliated with our program who are engaged in research with Indigenous communities in women+ and children's health research, include Drs. Laura Arbour, Mariana Brussoni, Lori d'Agincourt, Patti Janssen, Sheona Mitchell-Foster, Jenny Morgan, Patricia Spittal, and Ian Pike. These individuals will be teachers and research leaders within our program.

The WACH program will continue consultation efforts with Indigenous partners to identify new opportunities for the program to better support the objectives of the renewed Indigenous Strategic Plan and to effectively address the health inequities facing British Columbians and others across the globe. The program, working in partnership with BCCHRI and WHRI, will continue to work with Indigenous students, staff, and faculty members to implement new opportunities to increase the number of Indigenous students in our graduate program. In addition to our existing faculty conducting research in partnership with Indigenous communities, we have and will continue to establish relationships with education partners with expertise in Indigenous health. Our current partners include Dr. Nadine Caron (UBC Department of Surgery) and the Simon Fraser University (SFU) Faculty of Health Sciences.

In Appendix G, we outline key strategies that we have developed in partnership with Indigenous leaders to enhance Indigenous inclusion in the WACH program. In summary,

To recruit Indigenous students, we will:

1. partner with the award-winning BCCHRI research education program, "Mini Med School" to reach our future students in their grade 11 year. Recent program evolution has enhanced ties with UBC-Okanagan and Indigenous students there; on-line delivery and videotaping, necessitated by Covid-19, has provided the opportunity to develop a blended learning model for the program that we will maintain to reach out to remote communities that includes Indigenous students, who may not have been reached in previous years.

2. offer 8-week summer student research positions to a cohort of 3 Indigenous students to provide an opportunity to come and work in a research laboratory. A similar program exists at BCCHRI but is not specifically targeted to Indigenous students.
3. participate annually in the Longhouse lunches, where we will provide information about our program to prospective Indigenous students, who are currently undergraduates
4. participate in the Indigenous Undergraduate Research Mentorship Program to provide one on one mentorship to Indigenous undergraduate students, who may be interested in pursuing a research career
5. inform and advertise Indigenous undergraduate scholarships to program faculty and undergraduate students to ensure optimal uptake of prestigious nationally-funded awards (e.g. NSERC Indigenous student Ambassadors NISA)

To support and retain Indigenous students, we will:

1. provide tuition support for all Indigenous students at program launch (dedicated from GSI funds available in the program)
2. provide entrance awards for Indigenous students (\$5K/student dedicated from GSI funds).
3. provide scholarships for Indigenous students. We anticipate that the program will be operating with a budget surplus by year 5. As per established agreements between the host Departments of Pediatrics and Obstetrics & Gynaecology, surplus funds will be re-invested in the program to enhance student learning opportunities. A portion of these funds will be dedicated to a scholarship (\$30K per year for 4 years) for an Indigenous student. We will continue to seek additional partnerships to increase scholarship offerings for Indigenous students.
4. offer required courses and electives/selectives as blended learning models. Specifically, courses will be offered in-person, live on-line, or in taped sessions. This multi-delivery mode will enable learners in all remote communities (including Indigenous students and students studying in Indigenous communities) to participate in all course opportunities. This will remove geographical barriers and reduce financial barriers associated with travel and living in the Vancouver area for students, whenever possible.
5. facilitate formation of a student group for Indigenous students, providing them with appropriate meeting space (in partnership with the BCCH and BCCHRI) and budget for food and social events meetings (\$2.5K per year from GSI funds to start). Non-Indigenous students with interest in learning about Indigenous culture, ways of knowing, ways of being, may be included in this group if there are not sufficient numbers of Indigenous students in the community to create a cohort of students.
6. facilitate peer mentorship (as well as scholarly mentorship, which is part of our Enhanced Scholars Program for all students) for Indigenous students.

The majority of these impactful short-term goals are achievable at program launch. A graduate scholarship for an Indigenous student will be made available as soon as program funds permit, which we anticipate being within 5 years of program launch.

An additional medium- to long-term goal is to recruit new Indigenous educators and researchers as new faculty.

1.8 Delivery Methods

Training of PhD students in women+ and children's health sciences theory and topics, research methods and data analyses will be through didactic lectures, which will include case- and/or problem-based learning, seminars, and/or laboratory work in the required and elective coursework. Courses will be offered as a hybrid model of in-person and on-line learning, and will be recorded, with permission, to accommodate distance learning. This will enable students conducting research in communities outside the lower mainland to participate in the program, while conducting their research activities closer to home. Students will also complete supervised dissertation research (see Section 2.4 below for details on program requirements). Students are also encouraged to fulfill the optional requirements of the Graduate Student Enhanced Scholar Program, which includes three components: i) an individual development plan (IDP), ii) a competency passport, and iii) mentorship. Our Competence by Design approach is intended to equip graduates with the knowledge and skills to work in academia and beyond.

1.9 Curriculum Design

The total number of credits required for this program is 12. The proposed curriculum will address the program goals outlined in Section 1.6 and the program learning outcomes in Section 2.3 of this document through the following curriculum elements:

- Two mandatory three-credit courses on Women+ and Children's Health:
 - WACH 501 (3 credits) Women+ and Children's Health
 - WACH 502 (3 credits) Seminars in Women+ and Children's Health
- Elective courses (6 credits) chosen with recommendations from students' supervisors and/or supervisory committees;
- PhD dissertation (WACH 649);
- An optional career development program called the Graduate Student Enhanced Scholar Program, includes three parts – an individual development plan (IDP), a competency passport, and mentorship.

Please see Appendix A for course syllabi of new courses, Appendix B for course descriptions, and Appendix C for the Graduate Student Enhanced Scholar Program Guidebook. For further details of the curriculum, please see Section 2.4 below.

1.10 Program Strengths

Within the UBC Faculty of Medicine, the Oak Street campus is a major site for the Departments

of Obstetrics & Gynaecology and Pediatrics, as well as being the home for the BCCHRI and the WHRI. The focus of our collective research endeavours is women+ and children's health.

Within both departments, there are 64 academic faculty members and over 80 clinical (versus academic) faculty members with research expertise in a wide variety of topics, who would like to supervise graduate students. Obstetrics & Gynaecology has an active cross-pillar research program including biomedical researchers, clinical investigators, and population scientists supporting the current graduate program in Reproductive and Developmental Sciences. In Pediatrics, clinical faculty accounts for ~20% of the department's extramural grant funding and many are currently graduate student co-supervisors. In addition, BCCHRI and WHRI have established research and offer teaching capacity such as space (laboratories, classrooms, etc.), equipment, education events (seminar series, grand rounds, etc.), and community connections to support the proposed program. The adjacent BC Children's and Women's Hospitals offer access to the patient populations for clinical research recruitment that translates scientific knowledge "from bench to bedside to populations".

A further strength of the program is the integrated career development opportunities, including an individual career development plan (IDP) adopted from the Canadian Institutes of Health Research (CIHR), a competency passport, ComPass, adapted with permission from the CanMEDS framework by the Royal College of Physicians and Surgeons of Canada, and a mentorship program. The mentorship program will be based on the structure of the successful Department of Obstetrics & Gynaecology Faculty mentorship program. This formal structured program defines a framework for mentors and mentees. In addition to this framework, we plan to learn from other examples of successful mentorship programs such as the UBC Neuroscience graduate program, the Canadian Child Health Clinician Scientist Program (CCHCSP), and the NSERC Collaborative Research and Training Experience Program (CREATE). We will continue to reach out to our colleagues and partners in other graduate programs to seek their advice and to establish best practices in graduate mentorship. The WACH program intends to train graduate students in areas of knowledge and research pertaining to women+ and children's health and to provide integrated career development that will prepare students for careers in academia, government, industry, non-governmental organizations (NGOs), and business.

The WACH Program will also fulfill an important gap on the Oak Street campus that was identified in both a recent UBC Faculty of Medicine survey of graduate students and a 2019 external review of the BCCHRI. Specifically, both noted an inadequate learning community. The WACH program will build a strong collaborative research and learning community to engage our graduate students that extends beyond their research supervisor's immediate world.

1.11 Contribution to UBC and FoM Strategic Plans

Alignment with UBC 2018-2028 Strategic Plan: Shaping the Next Century

The proposed program is a collaborative effort between the Faculty of Medicine Departments of Obstetrics & Gynaecology and Pediatrics and will be the first interdisciplinary graduate program in Women+'s and Children's Health Sciences in Canada.

The Interdisciplinary nature of the WACH program builds on the strengths of our current

faculty, their research interests, and those of our partners. Interdisciplinarity refers to (i) training in two distinct Departments, which encompass the life trajectory through women+, maternal, neonatal, and child health and multiple sub-specialties; (ii) training across all four health research pillars as defined by the Government of Canada and the Canadian Institutes of Health Research (CIHR), which includes biomedical, clinical, health systems and services, and population health research (cihr-irsc.gc.ca); and (iii) providing a training focus (women+ and children) that will enable and embrace collaborations with other departments and faculties and specific fields within health research (e.g. biochemistry, genetics, immunology, biomedical technologies, pathology and laboratory medicine, pharmaceutical sciences, and many others). The program will appeal to anyone who is interested in pursuing graduate level research training in women+ health and/or child health, and may also include practitioners. Practitioners, who are already members of our community of women+ and child health research-intensive faculty include those in Applied Science (Nursing), Digital Medicine (Speech Science), Dentistry, Dietetics, Occupational Therapy, Pharmaceutical Sciences, Psychologists, and may include additional practitioners (e.g. counsellors, midwives, social workers, and others). The vision for this reimagined and expanded “umbrella-style” graduate program that brings together research expertise across the spectrum from bench-to-bedside-to-populations was partially inspired by UBC’s mandate to transform university-level systems and processes. It also embraces our goal to better prepare graduates for a variety of workforce career opportunities both within academia and beyond.

Strategies 6 through 10 capture the guiding principles of the new WACH program since its inception. Building on the diversity of research expertise, infrastructure, and resources already well established within the faculty of the Departments of Pediatrics and Obstetrics and Gynaecology both at the Oak Street Campus but also at all of the other UBC provincial sites, this program will catalyze new opportunities for interdisciplinary clinical and translational research across the four CIHR health research pillars and sub-specialties within Pediatrics and Obstetrics and Gynaecology. Moreover, these efforts will be facilitated by adjacencies to the BC Children’s and Women’s Hospitals, and the BCCHRI and WHRI. The program creates a strategically well-positioned partnership to facilitate our development into an internationally recognized academic health science centre. UBC students and trainees across the continuum (from undergraduates to postdoctoral fellows) will benefit as learners within this rich research ecosystem. Ethical research conduct and equity, diversity, and inclusion of under-represented, marginalized, and vulnerable populations represent core program values. These values are also among the competencies that students will acquire through curricular requirements and extra-curricular activities.

Faculty members with highly specialized expertise at the Oak Street campus and their students (current and recent graduates) were highly engaged in the co-creation of the interdisciplinary curricula, which spans the four CIHR health research pillars of biomedical research, clinical research, health services research, and population research. Case- and problem-based learning methodologies and new opportunities for experiential work-integrated learning opportunities have been incorporated into the curriculum. Structured student mentorship programs and a commitment to support and use Individualized Development Plans will help establish a learner-focused experience for all graduate students. The application of a new Competency Passport

(ComPass)³ framework of metric-based competencies (Competence by Design) will ensure that the program's graduates have not only become scientific experts in their area of concentration but that they are proficient as professionals, communicators, collaborators, leaders, advocates, and scholars (see Appendix C). This structure will better prepare health scientists for broad career options in academia and beyond. Dr. Eddy is planning an academic leave the year after completion of her second term as the UBC Head, Department of Pediatrics (beginning summer 2021) to develop an assessment methodology for the six core competencies of graduate student training using an evaluation based on “Entrustable Professional Activities” and “Milestones”. This work will be done in collaboration with faculty experts at the UBC Centre for Health Education Scholarship and will provide an assessment tool for graduate student competency that does not currently exist.



Figure 1 WACH Graduate Student Enhanced Scholar Program ComPass
(Image adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada.)

The WACH program has partnered with the UBC Public Scholars Initiative to integrate public engagement opportunities. Student supervisors in this program will be aligned with the values espoused by the Faculty of Graduate and Postdoctoral Studies' *Reimagining the PhD* report (2017). This alignment includes knowledge translation, knowledge dissemination, and health science advocacy, which will be among the program's core skills addressed in the ComPass. Alumni and emeriti will be among the mentors/coaches invited to help trainees explore career opportunities and to develop their professional competencies.

The program, working in partnership with BCCHRI and WHRI, will continue to work with Indigenous students, staff, and faculty members to implement new opportunities to increase the number of Indigenous students in our graduate program. We have developed new core curriculum content to address cultural awareness and competency, both within the learning

³ The Competency Passport (ComPass) is adapted from CanMEDS, a framework that identifies the abilities physicians are required to possess, with permission from the Royal College of Physicians and Surgeons of Canada.

environment and in research studies designed to address important health inequities. UBC Faculty members affiliated with our program, who are engaged with Indigenous communities in women+ and children's health research, include Drs. Laura Arbour, Mariana Brussoni, Lori d'Agincourt, Patti Janssen, Sheona Mitchell-Foster, Jenny Morgan, Patricia Spittal, and Ian Pike. These individuals will be teachers and research leaders within our program. In addition, we have, and will continue to establish, relationships with education partners with expertise in Indigenous health. Our current partners include Dr. Nadine Caron (UBC Department of Surgery) and the Simon Fraser University (SFU) Faculty of Health Sciences. Our goals are to recruit new Indigenous educators and researchers as new faculty; and to train Indigenous students. To facilitate this, we have designed the curriculum so that students conducting research in rural and remote communities can participate in the WACH program without having to be in Vancouver. These students will also bring a unique perspective to women+ and children's health research and enrich the overall environment of the WACH program.

Alignment with UBC Faculty of Medicine 2016-2021 Strategic Plan: Building the Future

The WACH graduate research program developed a new student competency framework (ComPass), modeled after the Royal College CanMEDS framework and representing a new concept for graduate schools. We recognize that successfully implanting scientists in academic, governmental, and industry roles require competencies beyond scientific expertise, and designed a curriculum to address these unmet needs. In addition, the WACH integrated career development opportunities are investments that will help research trainees meet evolving societal and career requirements (Educational Pillar 1). Individualized Learning Plans, supported and monitored, and mentorship that extends beyond the roles of the traditional student supervisory committee will be a standardized component of the program.

The WACH program faculty, with input from strategic partners across UBC, have developed an innovative approach to graduate student research that embraces a continuum from bench-to-bedside-to-populations. The program's "home base" will be the Oak Street campus that will facilitate clinical and patient-oriented translational research and knowledge translation. Precision medicine is an area of strength and a research priority theme for both the BCCHRI and the WHRI. Program leadership has established a partnership with the UBC Heart Lung Innovation Centre's *Career Pathways for Researchers* initiative, and will continue to expand experiential learning opportunities across the Faculty of Medicine. After the program is launched, it will be a program enrichment goal to partner with appropriate BC industries to develop student internship opportunities and hopefully to bring industry leaders into the program in an educational capacity.

The WACH program is an "umbrella style" graduate student program that was jointly developed and will be co-led by the UBC Departments of Obstetrics & Gynaecology and Pediatrics. A shared governance structure has been developed and described in a memorandum of understanding between the two departments (see Appendix D). The administrative office will be based on the UBC Oak Street campus. There will be future opportunities to plan strategic joint faculty recruitments to meet emerging new opportunities within the program. The program has included well-being and leadership skills among the core competencies that students will develop through the program's core and elective curricular activities.

The WACH program proponents will continue consultation efforts with Indigenous partners to

identify new opportunities for the program to better support the objectives of the renewed Indigenous Strategic Plans and to effectively address the health inequities facing British Columbians and others across the globe.

Indigeneity and Equity, Diversity, and Inclusion (challenges, opportunities, and successes) are incorporated into the core curriculum and woven through the ongoing learning and electives within the WACH program.

1.12 Related Programs at UBC and other BC Post-Secondary Institutions

The program will be the only PhD training program in BC and in Canada that provides training in both women+ and children's health sciences research across all four health research pillars.

UBC's Department of Obstetrics & Gynaecology in the Faculty of Medicine currently offers a PhD degree in Reproductive and Developmental Sciences (RDS). The program's learning objectives are to "provide students with a broad knowledge of mammalian reproductive and developmental biology, as well as in depth expertise in at least one area of research". In recent years, the RDS program has expanded from a biomedical research program to include perinatal epidemiology. The WACH program is rebranding the current RDS program to encompass its current activities and will further expand it to include women+ health and child health streams. The WACH program will cover a broader range of topics. The current RDS program will be transitioned into the WACH program. At the time of the WACH program inception, current RDS students will be given the opportunity to transfer to the WACH program or continue to complete their degree as an RDS student. The RDS program will close after current students complete their program or transition to the WACH program.

The Oak Street campus consistently has more than 350 research faculty and over 300 graduate students. These graduate students are enrolled in a variety of programs including Experimental Medicine (25%), Reproductive and Developmental Sciences (RDS) (13%), Medical Genetics (13%), Master of Public Health (MPH) (11%), Bioinformatics (9%), and Cell and Developmental Biology (6%)⁴. None of these programs offer the integrated professional development opportunities proposed in our new program. Some of the graduate students, who have traditionally enrolled in other Faculty of Medicine programs under the primary research supervision of Department of Pediatric faculty members, may also transition to the WACH program. The WACH Oversight Committee has pursued dialogue with other graduate programs and students to identify points of intersection & alignment between programs, and feedback to date has been positive. The WACH program is designed to train Scientists, but may attract some clinicians, primarily those seeking to become clinician scientists.

The SFU Faculty of Health Sciences offers a PhD specialization in Maternal and Child Health. However, the curriculum provides one general, interdisciplinary seminar course with contents not specific to women+ and children's health. The course offerings are geared towards population and public health with a focus on epidemiology or the social determinants of health.

⁴ Percentages of C&W students were calculated from a survey conducted in Spring 2019. The survey did not capture all students enrolled.

In contrast, the WACH program draws on the strong faculty expertise in basic science research in Pediatrics and Obstetrics & Gynaecology, with the addition of clinical research, health services research, and population health components.

1.13 Support from Other Post-Secondary Institutions

We conducted curriculum consultations with academic units within UBC and with other post-secondary institutions across the province. In addition to the support received from UBC Departments, Schools or Faculties, the following units have also provided support to the WACH proposal:

- SFU Faculty of Health Sciences, via Dean Dr. Tania Bubela
- SFU Faculty of Graduate and Postdoctoral Studies, via Dean and Associate Provost Dr. Jeff Derksen
- University of Northern British Columbia (UNBC) College of Arts, Social and Health Sciences, via Dean Dr. Shannon Wagner and Associate Professor Dr. Caroline Sanders
- University of Victoria (UVic) Faculty of Graduate Studies, via Dean Dr. David Capson

In particular, SFU Faculty of Health Sciences, which has significant strength in partnered Indigenous health research, has expressed strong interest in collaborations in research endeavours and graduate student training with the WACH program. The proposed program is expected to strengthen the existing relationship between SFU, BCCHRI, and WHRI.

1.14 Institutional Contacts

Dr. Allison Eddy, Professor and Department Head, Department of Pediatrics, James & Annabel McCreary Chair in Pediatrics, Faculty of Medicine allison.eddy@cw.bc.ca

Dr. Geoffrey Cundiff, Professor and Department Head, and the Dr. Victor Gomel Professor of Obstetrics & Gynaecology, Department of Obstetrics & Gynaecology, Faculty of Medicine geoff.cundiff@ubc.ca

Dr. Laura Sly, Associate Professor, Department of Pediatrics, Faculty of Medicine laurasly@mail.ubc.ca

Dr. Alexander Beristain, Associate Professor, Current Co-Director of the RDS Graduate Program, Department of Obstetrics & Gynaecology, Faculty of Medicine aberista@mail.ubc.ca

Dr. Angela Devlin, Associate Professor, Department of Pediatrics, Faculty of Medicine adevlin@bccr.ubc.ca

Dr. Paul Yong, Assistant Professor, Current Co-Director of the RDS Graduate Program, Department of Obstetrics & Gynaecology, Faculty of Medicine PYong@cw.bc.ca

2. Program Description and Specification

2.1 Need for the Program

We conducted preliminary market research in June 2019 to identify labour market trends and to determine market demand for the proposed WACH program. The conclusion was that market demand for the program is strong. Specifically, healthcare is the second largest sector in BC, and is expected to grow between 2018 and 2028. According to the 2018 British Columbia Labour Market Outlook⁵, several of the key national occupational classification (NOC) codes

⁵ BC Labour Market Outlook: 2018 Edition: <https://www.workbc.ca/getmedia/1dce90f9-f2f9-4eca-b9e5->

identified for WACH graduates are expected to see significant growth, including NOC 4011 University Professors and Lecturers, NOC 4021 College and Other Vocational Instructors, NOC 2121 Biology and Related Scientists, NOC 2221 Biological Technologists and Technicians, NOC 4165 Health Policy Researchers, Consultants and Program Officers, and NOC 1254 Statistical Officers and Related Research Support Occupations.

In addition, graduate career outcomes are also positive. PhD graduate program alumni from BCCHRI and WHRI end up in a variety of occupations, including positions as post-doctoral fellows, professors, academic scientists, industry scientists, and medical doctors⁶. We expect WACH graduates to follow career trajectories in the following sectors in addition to academia:

- Government agencies
- Biotechnology firms
- Consulting companies
- Nongovernmental organizations (NGOs) or non-profits related to women+and/or children's health

The following Classification of Instructional Programs (CIP) code applies to this program: 51.1401 Medical scientist (MS, MSc, PhD) – programs that train students to conduct medical research and to become scientists.

2.2 Program Objectives

The broadened program scope and interdisciplinary focus of training across the four health research pillars (biomedical, clinical, health services, population health) fulfills the following objectives:

1. Enhancing research and scholarship in topics pertaining to women+ and children's health sciences in a single graduate program;
2. Leveraging the expertise in both departments to prepare students for a wider range of interdisciplinary research fields and job opportunities in academia and beyond;
3. Expanding the research capacity at the UBC Oak Street campus through augmenting the current discovery activities within our departments and in partnership with other departments, programs, and units;
4. Strengthening UBC's capacity as a leading research institution that supports interdisciplinary research;
5. Filling the gap in graduate training in women+ and children's health sciences research in British Columbia.

2.3 Program Learning Outcomes

Upon completion of the program, all graduates will be able to:

- **Analyze, critique, and adjudicate** the current state of knowledge in the field regarding the normal developmental trajectory in pregnancy and childhood and the biology of human development and disease.
- **Compare and contrast** unique factors that impact women+ and children's health,

[c19de9598f32/BC_Labour_Market_Outlook_2018_English.pdf.aspx](https://www150.statcan.gc.ca/n1/pub/26-669-x/2019001/article/00001-eng.htm)

⁶ Alumni career outcomes were collected from a survey conducted in Spring 2019.

including biological factors and social determinants of health.

- **Apply** principles of equity, diversity, and inclusion to research. This will include a focus on Indigeneity.
- **Design and conduct** independent research **utilizing** appropriate and rigorous biological design and biostatistical analyses.
- **Create and communicate** new knowledge through an original scholarly contribution (i.e. a PhD dissertation), and a variety of methods including writing manuscripts appropriate for top-academic journals and preparation and delivery of presentations, both orally and via conference publication appropriate for advanced conferences in the field:
 - **Identify and analyze** the literature to define unmet clinical needs and scientific knowledge gaps;
 - **Develop and formulate** a testable hypothesis(es);
 - **Design and execute** experiments;
 - **Analyze and critically evaluate** their own data;
 - **Synthesize** their work in the form of scientific manuscripts and **contextualize** within the larger literature;
 - **Communicate** their findings both orally and in writing;
 - **Defend** their work among experts in the field outside of UBC;
 - **Evaluate** future research directions and **generate** new research questions.

In addition, students will have the opportunity to:

- **Demonstrate career competencies** in extracurricular career development opportunities including seminars, workshops, networking, and experiential learning.

2.4 Program Requirements

2.4.1 PhD Admission Requirements

Successful applicants must meet UBC's graduate-level admission requirements⁷, including the English Language Proficiency Requirements⁸. Students admitted to the PhD program normally possess an MSc, MA, or professional undergraduate degree in a related area (e.g. MD, pharmacy, nursing, midwifery, dietetics, social work), with clear evidence of research ability or potential. Transfer from a master's program to the PhD program is permitted under the regulations set by the Faculty of Graduate and Postdoctoral Studies.

2.4.2 PhD Program Requirements

PhD students must take the following core courses:

- WACH 501 (3) Women+ and Children's Health
- WACH 502 (3) Seminars in Women+ and Children's Health

In addition, students will be required to take 6 credits of elective courses from the following, or

⁷ UBC doctoral degree admission requirements: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,340,181>

⁸ UBC Faculty of Graduate and Postdoctoral Studies English language proficiency requirements: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0>

from other graduate programs:

- WACH 511 (3) Women+ Health Research
- WACH 521 (3) Child Health Research
- WACH 522 (3) Pediatric Nutrition
- WACH 548 (1.5-6) C Directed Studies in Women+ and Children's Health
- OBST 501 / WACH 531 (3) Reproductive Endocrinology
- OBST 502 / WACH 532 (3) Physiology of the Mother, Fetus and Newborn
- OBST 503 / WACH 533 (3) Fetal and Perinatal Metabolism
- OBST 507 / WACH 503 (3) Perinatal Epidemiology
- PATH 548C (3) – The Pathophysiology of Types I and II Diabetes
- MEDG 419 (3) – Developmental Origin of Human Disorders
- MICB 502 (3) – Advanced Immunogenetics

Please see Appendix B for WACH course descriptions

Students must also register in the following until the PhD dissertation is completed:

- WACH 649 (0) Doctoral Dissertation

In some circumstances, PhD students are not required to complete 12 credits of coursework. WACH MSc graduates, who subsequently enroll in the WACH PhD program, are required to register in WACH 502 only. MSc graduates from outside of the WACH program, who enroll in the WACH PhD program, are required to take 6 credits of coursework only, i.e. WACH 501 and WACH 502. WACH MSc students, who have already completed the required coursework and subsequently transfer to the WACH PhD program, will not have any additional course requirements. WACH MSc students, who have completed 9 credits of coursework, can transfer to the WACH PhD program and complete 3 additional credits of coursework.

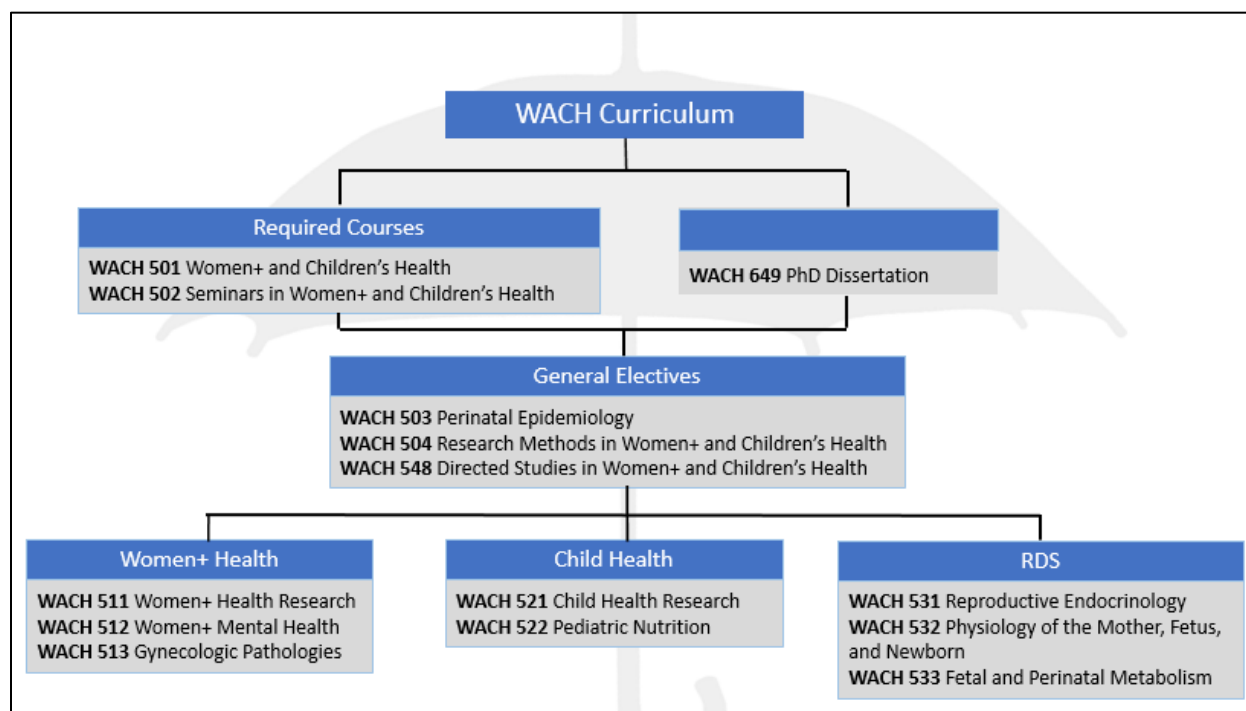


Figure 2 WACH curriculum and streams

Additional courses that build on existing research expertise and student interests will be developed and submitted for approval after the program is launched.

Original research supervised by a faculty member constitutes the major component of work towards the PhD degree. All PhD students are required to present and defend a research proposal at a committee meeting and pass a comprehensive examination on their research area within 36 months of registering in the program. The comprehensive exam is an oral examination administered by all supervisory committee members, and is intended to assess the student's breadth of knowledge in the general subject area(s) of the proposed research (i.e. it is not a defense of the written proposal). At the submission of the dissertation to the Graduate and Postdoctoral Studies Office for transmission to the External Examiner, an oral examination is to be scheduled. The format of this exam is detailed at <https://www.grad.ubc.ca/current-students/final-doctoral-examination>.

The major requirement for the PhD is completion of a research dissertation meeting the Faculty of Graduate and Postdoctoral Studies' requirements. The PhD is a 5-year degree (or 8 years, if taken part-time), but students may take longer depending on the nature of the research undertaken.

2.5 Linkages between Learning Outcomes and Curriculum Design

Learning outcomes	Where in the curriculum provides the training
<ul style="list-style-type: none"> Analyze, critique, and adjudicate the current state of knowledge in the field regarding the normal developmental trajectory in 	<ul style="list-style-type: none"> WACH 501 Women+ and Children's Health WACH 502 Seminars in Women+ and Children's Health WACH 511 Women+ Health Research

<p>pregnancy and childhood and the biology of human development and disease.</p>	<ul style="list-style-type: none"> • WACH 521 Child Health Research • WACH 522 Pediatric Nutrition • WACH 548 Directed Studies in Women+ and Children's Health • OBST 501 / WACH 531 Reproductive Endocrinology I • OBST 502 / WACH 532 Physiology of the Mother, Fetus and Newborn • OBST 503 / WACH 533 Fetal and Perinatal Metabolism • OBST 507 / WACH 503 Perinatal Epidemiology • All other elective courses (see Section 2.4.2)
<ul style="list-style-type: none"> • Compare and contrast unique factors that impact women+ and children's health, including biological factors and social determinants of health. 	<ul style="list-style-type: none"> • WACH 501 Women+ and Children's Health • WACH 502 Seminars in Women+ and Children's Health
<ul style="list-style-type: none"> • Apply principles of equity, diversity, and inclusion to research. This will include First People's Principles and Indigeneity. 	<ul style="list-style-type: none"> • WACH 501 Women+ and Children's Health • WACH 502 Seminars in Women+ and Children's Health
<ul style="list-style-type: none"> • Design and conduct independent research utilizing appropriate and rigorous biological design and biostatistical analyses. 	<ul style="list-style-type: none"> • WACH 649 PhD Dissertation
<ul style="list-style-type: none"> • Create and communicate new knowledge through an original scholarly contribution (i.e. a PhD dissertation), and a variety of methods including writing manuscripts appropriate for top-academic journals and preparation and delivery of presentations, both orally and via conference publication appropriate for advanced conferences in the field. 	<ul style="list-style-type: none"> • WACH 649 PhD Dissertation • WACH 548 Directed Studies in Women+ and Children's Health

<ul style="list-style-type: none"> • Identify and analyze the literature to define unmet clinical needs and scientific knowledge gaps; • Develop and formulate a testable hypothesis(es); • Design and execute experiments; • Analyze and critically evaluate their own data; • Synthesize their work in the form of scientific manuscripts and contextualize within the larger literature; • Communicate their findings both orally and in writing; • Defend their work among experts in the field outside of UBC; • Evaluate future research directions and generate new research questions. 	<ul style="list-style-type: none"> • WACH 649 PhD Dissertation • WACH 548 Directed Studies in Women+ and Children's Health
<ul style="list-style-type: none"> • Demonstrate career competencies by engaging in extracurricular career development opportunities including seminars, workshops, networking, and experiential learning. 	<ul style="list-style-type: none"> • Graduate Student Enhanced Scholar Program

2.6 Relationship to Established Programs

The program will be the first of its kind in Canada that offers training across all four health research pillars in both women+ and children's health at either the MSc or PhD level. In Canada, there are programs that focus on either maternal health or pediatric health but not both fields of expertise together. In Canada, there are no existing programs offering graduate degrees in pediatric health science similar to the 73-year old University College London Great Ormond Street Institute of Child Health.

In British Columbia

The RDS graduate program currently offers PhD training. This program includes reproductive and developmental biology and perinatal epidemiology, as well as a range of in-depth expertise in women+ health issues, such as bioinformatics and implementation science. The current RDS biomedical stream will be rebranded to the RDS stream in the proposed WACH program, and the other current RDS elements will be rebranded into the women+ health stream.

As noted above, beyond UBC, the SFU Faculty of Health Sciences offers a PhD specialization in maternal and child health. Students are required to attend an interdisciplinary seminar course

with contents that are not specific to women+ and/or child health. They are also required to take population and public health focused courses. In contrast, the proposed WACH program draws on the content expertise of our faculty and offers courses specific in these two areas. The UBC Oak Street campus adjacent to the BC Children's and Women's Hospitals has established resources and research capacity in women+ and child health. In addition, we require students to take two core courses in women+ and child health to build a foundation of knowledge. We have also designed a career development guidebook to prepare graduates for jobs both in and outside of academia.

In Canada

Beyond British Columbia, the University of Alberta has PhD programs in Pediatrics and Obstetrics & Gynaecology, respectively. They offer both reading and seminar courses in Pediatrics, but no gynaecology-specific courses. A strength of their program is that they support rotations and a multidisciplinary research environment. Our proposed program offers courses and seminars in both women+ and children's health, and supports interdisciplinary and translational learning as well as integrated professional development.

McGill University has a PhD program in Family Medicine. Although the program offers diverse research training in quantitative, qualitative, and mixed methods, it is not geared towards women+ and children's health. It primarily attracts healthcare professionals, particularly family doctors. In contrast, our proposed program is intended to appeal to all students interested in women+ and children's health sciences research, including healthcare professionals.

Lastly, the University of Toronto offers a PhD degree in Women's Health. It draws on the strengths of 19 participating programs, which allows for interdisciplinary collaboration among researchers. There are program-specific mentors available and students can attend over 100 free professional development courses, workshops, and seminars for members of the University of Toronto. In contrast, the proposed WACH program is interdisciplinary and housed in the Departments of Obstetrics & Gynaecology and Pediatrics that will leverage the expertise of faculty and staff, and resources at the UBC Oak Street campus. A program administrator and the Research Education Team at BCCHRI will support the career development activities. These activities happen on site at BCCHRI, off site at the Faculty of Graduate and Postdoctoral Studies at the UBC Point Grey campus, and throughout the Lower Mainland.

Beyond Canada

Internationally, few graduate programs have a combined focus on women+ and children's health. For example, the University of Maryland has a PhD degree in Maternal and Child Health that emphasizes *"training in research, practice, and policy relevant to health problems and services for women, infants, children, adolescents, and their families"*. However, they have a small student base and the professional development component prepares graduates primarily for faculty positions.

King's College in London, UK has an MSc degree in Women and Children's Health in the Faculty of Life Sciences & Medicine. It is the only postgraduate program in women+ and children's health in the UK but a PhD option is lacking. The curriculum focuses on *"the fundamentals of women and children's health, scientific and clinical research skills in practice, pediatric research: methods, statistical application and governance, and a research project in women and children's health"*. While the curriculum is similar to our proposed program, there is no

integrated career development and the high tuition may create financial barriers for students.

Table 1 Related Graduate Programs at Canadian and International Institutions

	University	Program	PhD	MSc	Inter-disciplinary	Women's Health focus	Child Health focus	Comments
Canada	UBC	RDS	+	+		+		<i>Program to undergo revision</i>
	Simon Fraser	Health Sciences	+		+			No curricula specific to women's/child health
	Alberta	Pediatrics	+	+			+	
	Alberta	Obstetrics & Gynecology	+	+		+		
	McGill	Family Medicine	+	+	+			
	Toronto	Women's Health	+	+		+		Specialization
International	Maryland	Maternal and Child Health	+		+			Course-based; Population health focus
	South Florida	Medical Sciences		+		+		Course-based concentration
	College of London	Pediatrics and Child Health		+			+	Population health focus
	College of London	Women's Health	+	+		+		
	King's College, London	Women's and Children's Health		+	+			Course-based
	Oxford	Women's and Reproductive Health	+	+		+		
	Liverpool	Women's Health	+	+		+		
	Liverpool	Child Health	+	+			+	

2.7 Demand for Program

2.7.1 Evidence of Ongoing and Sustainable Student Demand

Café Scientifiques

Student interest in women+ and children's health graduate training is notable. In November 2018, two Café Scientifiques were held on the UBC Oak Street campus. Seventy participants including students, faculty, and staff contributed ideas to the design of the new graduate program, specifically about the curriculum, teaching and learning styles, career development, and "reimagining the thesis" initiative. The two workshops yielded 10 themes to guide the direction of the program. Some of these key results are: the necessity for instruction in biostatistics and research methods, the need for training in research ethics, and the gap in career readiness training that will enhance leadership and communication skills. This information informed our curriculum.

Survey data

From November to December 2019, we conducted a survey online to gather feedback on the proposed program and curriculum. The survey was sent to over 850 members affiliated with BCCHRI and WHRI including graduate and undergraduate students, and alumni. There was huge support for the program based on the 192 responses collected. Highlights from respondents include:

- 87% supported developing the program (Figure 3)
- 65% supported the program name "Women's and Children's Health"⁹ (Figure 4)
- 49% would very likely or likely enroll in the program¹⁰ (Figure 5)

⁹ Balancing the feedback from students, alumni, staff, faculty and employers, we changed the program name to "Women+ and Children's Health Sciences (WACH)".

¹⁰ The top two reasons given by those who chose "unlikely/very unlikely to enroll" are i) "already have multiple degrees, not looking for another one," and ii) "already in a graduate program."

- The top three appeals of the program were i)“alignment with research interests,” ii)“alignment with personal interests,” and iii)“alignment with career interests”
- Respondents strongly supported the career development opportunities in the program, including the individual career development plan (95%), non-academic competencies/transferrable skills (87%), mentorship opportunities (95%), and internship opportunities (83%).

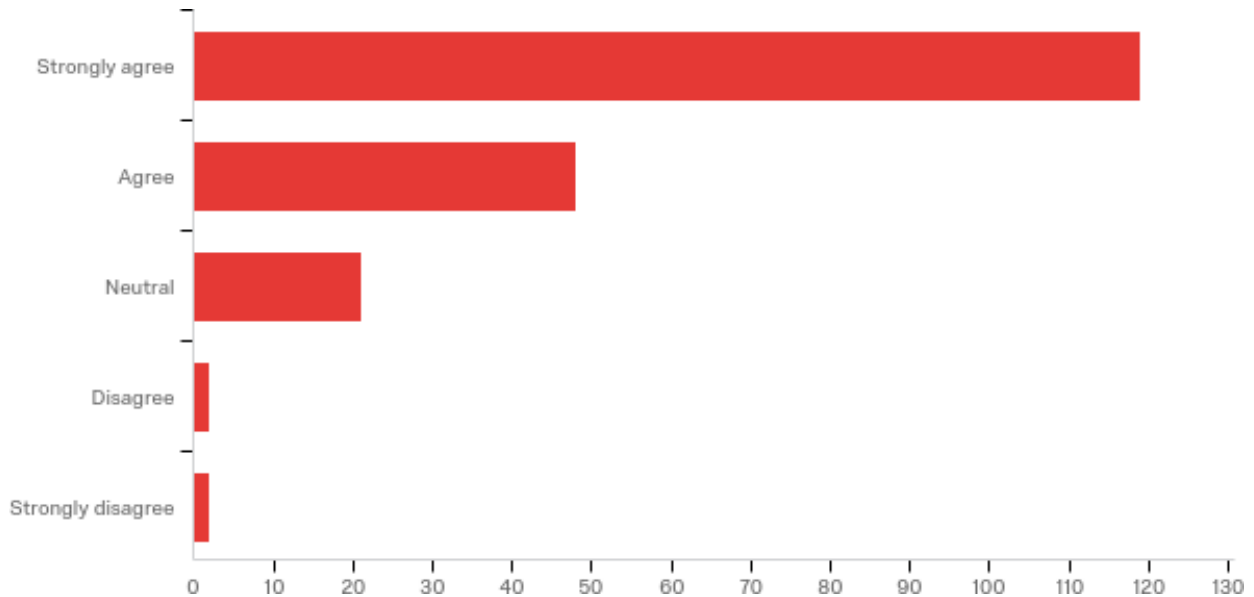


Figure 3 Support for the proposal to develop a graduate program that would offer both MSc and PhD degrees in Women's and Children's Health (WACH)

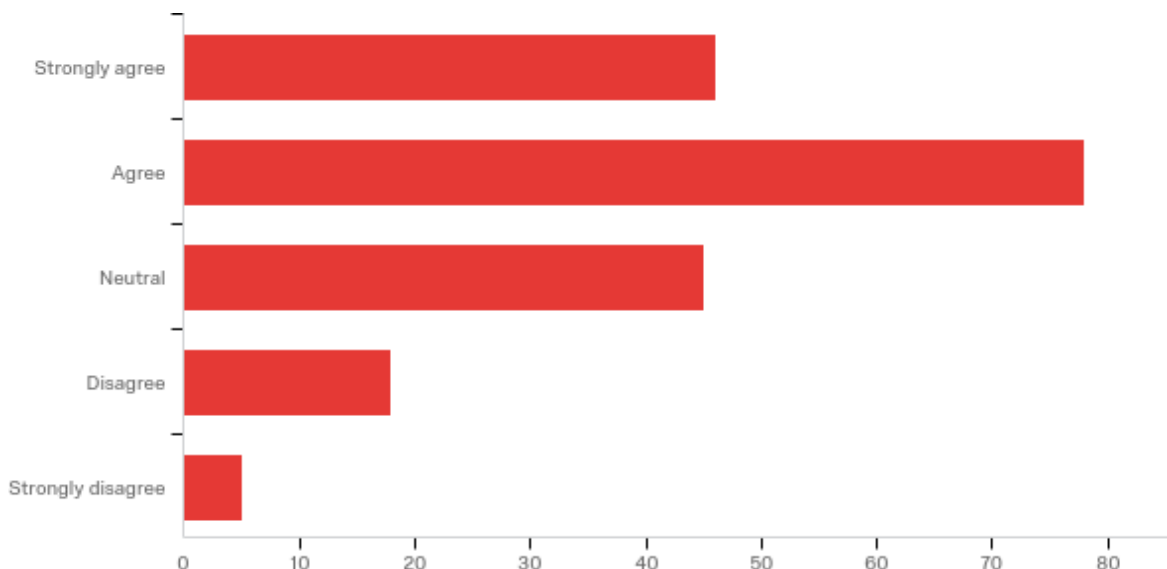


Figure 4 Responses to the statement: "Women's and Children's Health (WACH) is an appropriate

name for the program"

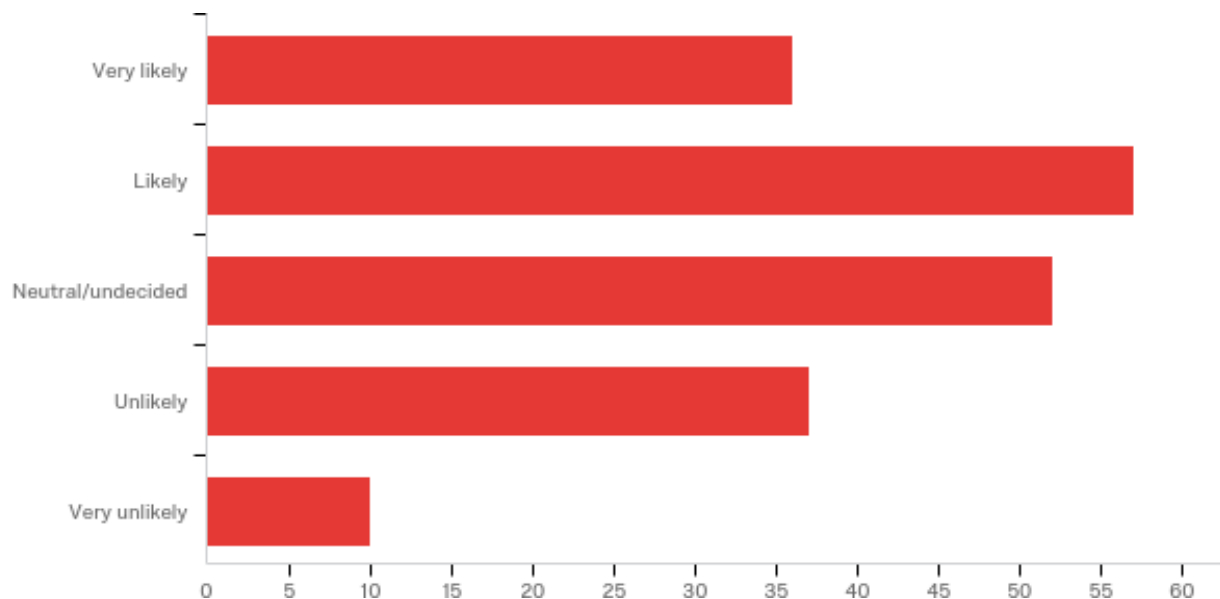


Figure 5 Likelihood to enroll in WACH were the option available

The student/alumni consultation also yielded valuable suggestions about the proposed program. Here, we describe the suggestions and explain how we have addressed them:

1. *"Women's health" in the program name is not a gender-inclusive term.* In response, we consulted the UBC Equity & Inclusion Office and the University of Michigan Centre for the Education of Women+ (CEW+)¹¹ and changed the program name to "Women+ and Children's Health Sciences (WACH)". We will also discuss equity, diversity, and inclusion issues of marginalized populations in different courses in the program.
2. *"The program should take into consideration Indigenous research methods and participation of Indigenous students and scholars."* In response, we will designate a full class in the core course WACH 501 to focus on Indigenous issues. We will also incorporate Indigeneity contents in courses throughout the program.
3. *"Midwifery is highly relevant to women+ health and should be included in this program."* In response, we will emphasize that the proposed program is a research-based program as opposed to a clinician-training program. However, midwives (and other professionals), who are interested in research, are welcome to enroll in this program.
4. *"The rationale for putting women+ health and children's health in the same program is unclear."* In response, we will emphasize that the rationale for WACH is to i) leverage the expertise in both departments to prepare students for a wider range of interdisciplinary research fields and job opportunities, ii) equip graduates with the knowledge and skills in both fields to take on careers in academia, government, industry, and NGOs, and iii) catalyze new collaborative research to address health

¹¹ The University of Michigan Centre for the Education of Women+ (CEW+):
<https://spg.umich.edu/policy/301.03>

disparities, social determinants of health, preconception to early life determinants of long-term health, and many other topics that are highly relevant to both women+ and children with significant overlapping domains.

Evidence of external support

From November 2019 to January 2020, we conducted employer consultations to gather feedback on the proposed program and curriculum. We received 13 responses in total with the following breakdown: government/academic institutions (2), government health authorities (2), non-profits (5), research funding organizations (1), biotech businesses (1), and fertility centres (2). Highlights of the consultations are as follows:

- Seven organizations (four health authorities/academic institutions, one biotech, one non-profit, and one fertility clinic) indicated interest in participating in mentorships and/or offering internships to our students
- Women's and Children's Health is a welcome, overdue program addition in British Columbia
- Multidisciplinary/interdisciplinary (research) training programs such as WACH prepare better graduates than a single discipline
- Possible job titles for our graduates include scientist, clinical/translational researcher, research manager, physician scientist, bioinformatician, product manager, and administrator.

Similar to the student/alumni survey, the employer consultations revealed some suggestions for the proposed program. Here, we describe the suggestions and explain how we have addressed them:

1. *"The program should include considerations of Indigenous women and children, and Indigenous research frameworks."* In response, in WACH 501, there is one class dedicated to Indigeneity, as well as Indigenous contents that spiral through the entire curriculum in various courses taught by subject experts. Other equity, diversity, and inclusion topics such as socio-economic status and disability are also integrated into the curriculum.
2. *"The word 'women' may be problematic with the new gender inclusivity policies."* In response, we changed the program name to "Women+ and Children's Health Sciences (WACH)", and incorporated gender-inclusive language and contents throughout the curriculum.
3. *"To work outside of academia, training in career skills such as communications, knowledge translation, and an understanding of workplaces such as non-profits is needed."* In response, in addition to rigorous research training, we have designed the Graduate Student Enhanced Scholar Program to encourage students to develop career skills applicable to industry, government, consulting, nongovernmental organizations (NGOs), and business.

2.7.2 Estimation of Program Demand

The existing RDS program will expand and become a part of the WACH graduate program. As such, the estimated program demand is also projected from current RDS application and

registration numbers. Table 2 contains data for the PhD program from 2014-2018.¹² In 2018, there were 7 PhD applications and 2 new registrations for a total of 17 students (admittance rate = 28.6%). From 2014 to 2018, the applications consistently outnumbered the offers.

Table 2 Enrolment Data of PhD Students in RDS Program, Department of Obstetrics & Gynaecology, UBC (2014-2018)

	2018	2017	2016	2015	2014
Applications	7	1	7	3	4
Offers	2	1	5	1	3
New registrations	2		3		2
Total enrolment	17	17	20	17	20

As stated in Section 1.11, in 2019 the UBC Oak Street campus had over 350 UBC-affiliated research faculty and over 300 UBC graduate students, in addition to UBC-funded support staff and undergraduate and postdoctoral trainees. Although the Department of Pediatrics has 449 faculty members, including 160 hospital-based pediatric specialists and sub-specialists, 37 UBC academic faculty (15 are PhD scientists), and 200 community-based faculty throughout the province, it does not have a graduate program of its own. The Department of Obstetrics & Gynaecology, on the other hand, has 252 faculty members, including 24 faculty members focused on discovery-based research, and 38 MSc and PhD students in the RDS program. We expect that the proposed WACH program, which will house the current RDS stream, in addition to the new women+ health and child health streams, will attract significantly more students than the current RDS program.

2.8 Target Audience and Enrolment Expectations

The PhD program is expected to attract:

- Recent graduates from a range of MA and MSc degree specializations, including microbiology & immunology, nutritional science, biology, computer science, pathology and laboratory science, sociology, psychology, and others.
- Graduates from professional undergraduate programs, including medicine (MD), dietetics (RD), nursing (RN), pharmacy (PharmD), midwifery (BMw), and others.
- Students in their first-third year of the MSc Program wishing to transfer to the PhD program.

The program expects to admit 4 PhD students in the first year, building up to a total of 25 PhD

¹² Data available on the UBC Faculty of Graduate & Postdoctoral Studies website:

<https://www.grad.ubc.ca/prospective-students/graduate-degree-programs/phd-reproductive-developmental-sciences>

students in year 5. We expect that up to 30 per cent of the students will be international, based on existing RDS enrolment numbers.

2.9 Resources

2.9.1 Budget, Tuition, and Fees

The WACH program will have tuition and fees that follow the standard UBC rules for graduate students in the Faculty of Graduate and Postdoctoral Studies. A new budget has been created describing the anticipated increases in revenues and expenses in relation to the RDS program.

2.9.2 Human Resources

Current and future academic faculty members in the Departments of Pediatrics and Obstetrics & Gynaecology will teach the core courses and electives, and supervise students. Their salaries are already covered under academic deliverables, leading to no new faculty costs. Clinical faculty teaching costs have been factored into the new budget. There will be new costs for the stipends of the Program Co-directors.

In the year before the launch of the program, a 0.5 FTE Program Manager will be hired to assist with the planning and implementation of the program. The Program Manager position will increase to 1.0 FTE starting from Year 1. In addition, a 0.5 FTE Program Assistant will be hired starting from Year 3 to accommodate growing student registrations. There will be Program Co-Directors, from the Departments of Obstetrics & Gynaecology and Pediatrics, who will receive a stipend in addition to academic salaries, starting at one year before program launch.

2.9.3 Space & Equipment

BCCHRI and WHRI currently have more than 300 graduate students enrolled through the Faculty of Medicine. We expect that new students in the WACH program will gradually take up the carrels vacated by current graduating students, and the existing facilities in BCCHRI and WHRI are sufficient to house the WACH program students for the foreseeable future.

The majority of teachers for the WACH program already have established laboratories with research equipment at BCCHRI, WHRI, BC Children's Hospital and BC Women's Hospital. Additional laboratory space and equipment will be provided by BCCHRI and WHRI, if necessary.

2.9.4 Library

The UBC Library has been consulted to discuss arrangements for appropriate resources. They have confirmed that resources will be available to support the WACH program and curriculum.

2.10 Program Evaluation

A WACH program annual review will be undertaken. The Program Co-Directors and Program Oversight Committee are responsible for conducting the annual Graduate Program review. A 5-year internal evaluation will be conducted by the UBC Graduate and Postgraduate Studies and shared with the Faculty of Medicine and the WACH Program Leadership. A 10-year decadal external evaluation will be conducted by external reviewers. The latter reviews will typically be conducted in conjunction with the formal Departmental Review processes.

3. Appendices**Appendix A - WACH New Course Syllabi:**

- WACH 501 Women+ and Children's Health
- WACH 502 Seminars in Women+ and Children's Health
- WACH 511 Women+ Health Research
- WACH 521 Child Health Research
- WACH 522 Pediatric Nutrition
- WACH 548 Directed Studies in Women+ and Children's Health

Appendix B – WACH Course Descriptions**Appendix C – Graduate Student Enhanced Scholar Program Guidebook****Appendix D – Memorandum of Understanding between Department of Pediatrics and Department of Obstetrics & Gynaecology****Appendix E – Memorandum of Understanding between Department of Pediatrics, Department of Obstetrics and Gynaecology, BC Children's Hospital Research Institute, and Women's Health Research Institute****Appendix F – Guidelines for Supervisory Activities****Appendix G – Enhancing Indigenous Inclusion in WACH****Appendix H – Letter of Support, Dean Tania Bubela, Faculty of Health Sciences, SFU**

UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: Women+ and Children's Health Sciences</p> <p>Degree Offered: PhD</p> <p>Members</p> <p>Professors M. Bedaiwy, L. Brotto, B. Carleton, G. Cundiff, S. Dell, A. Eddy, R. Goldman, R. Grunau, D. Huntsman, K.S. Joseph, T. Kissoon, P. C. K. Leung, D. Matsell, J. McAlpine, D. Money, T. Oberlander, I. Pike, S. Sanatani, K. Schultz, S. Stockler, G. Stuart, S. Turvey, B. Vallance.</p> <p>Associate Professors A. Beristain, J. Bettinger, T. Blydt-Hansen, M. Brussoni, A. Devlin, Q. Doan, R. Elango, R. Geoffrion, K. Harris, J. Hutcheon, J. Kwon, J. Lim, S. Lisonkova, C. Maxwell, G. Meckler, A. Rauscher, G. Reid, M. Sadarangani, L. Sly, P. Yong.</p> <p>Assistant Professors M. Anglesio, K. Brown, G. Hanley, S. Mitchell-Foster, A. Talhouk.</p> <p>Program Overview The goal of the graduate program in Women+ and Children's Health Sciences is to provide students with a broad knowledge of research in women+ and children's health sciences including biomedical, clinical, health services, and populations. Students will develop critical thinking skills to independently design, execute, and evaluate research experiments directly related to</p>	<p>URL: New URL requested</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create new calendar entry for the PhD program in Women+ and Children's Health Sciences (WACH)</p> <p>Rationale for Proposed Change: The BC Children's and Women's (C&W) Hospital campus is home to the Departments of Obstetrics & Gynaecology and Pediatrics, as well as the BC Children's Hospital Research Institute (BCCHRI) and the Women's Health Research Institute (WHRI). The common focus of our collective research endeavours is women+ and children's health. Despite this, there is no graduate-level training offered at UBC or in British Columbia that combines both research areas in one program. SFU's Faculty of Health Sciences has a PhD option to specialize in maternal and child health, but women+ and/or children's health specific courses are not available. As such, we propose a new graduate program titled "Women+ and Children's Health Sciences (WACH)" that would offer both MSc and PhD degrees. The rationale of the program includes:</p> <ol style="list-style-type: none"> 1. Leveraging the expertise in both Departments to prepare students for a wider range of interdisciplinary research fields and job opportunities 2. Expanding the research capacity at the C&W campus by complimenting activities carried out

women+ and children's health sciences. Core concepts will include biomedical, patient- and public-oriented translational research with consideration of social determinants of health and cultural competence, including sex and gender and indigenous health, and research methodologies. In addition, students will develop in depth expertise in at least one of the following areas of research that represent existing areas of faculty expertise within our departments:

- Acute or chronic diseases
- Brain development and function
- Implementation science
- Developmental origins of health and disease
- Placental, embryonic, foetal, perinatal, infant, child and/or youth: Development, physiology, and/or pathophysiology
- Reproductive biology
- Reproductive or childhood cancers
- Epidemiology specific to women+ or children
- Mental health specific to women+ or children
- Health services specific to women+ or children

Doctor of Philosophy

Admission Requirements:

Successful applicants must meet UBC's graduate-level admission requirements [<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,340,181>], including the English Language Proficiency Requirements [<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0>].

Part-time Doctoral Classification

[<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,341,187#24960>] is also available. Students who wish to be classified as part-time must obtain approval from their proposed supervisor and graduate program

by various departments and faculty members, and enriched by a large population of patients who come to this campus for care

3. Strengthening UBC's capacity as a leading research institution that supports interdisciplinary research.

The program aligns with the Faculty of Medicine 2016-2021 Strategic Plan: Building the Future, and the UBC 2018-2028 Strategic Plan: Shaping the Next Century. In addition, it aligns with the Ministry of Health's priority to "[deliver] on a renewed commitment to evidence-based research and analysis" and "to support holistic models of healthy child and family development". It also fits directly with the HealthyFamilies BC framework.

The program requirements include coursework and dissertation research. In addition, optional career development activities have been developed to train students to become well- rounded individuals that could find employment in academia and beyond.

The anticipated start date of the PhD program is September 2022.

advisor as part of the admission process.

Program Requirements:

- Candidates are required to successfully defend a PhD dissertation WACH 649 (0).
- A total of 12 credits are required to graduate from this program.
- Mandatory courses are WACH 501 (3) and WACH 502 (3).
- Elective courses include WACH 511 (3), WACH 521 (3), WACH 522 (3), WACH 531 (3), WACH 532 (3), WACH 533 (3), WACH 534 (3), and WACH 548 (1.5-6), or others selected in consultation with the student's supervisor/supervisory committee and program director.
- WACH MSc graduates, who subsequently enroll in the PhD program, are required to register in WACH 502 only.
- Students entering the program with an MSc must take WACH 501 and WACH 502 but can apply to the program to have other course requirements waived.
- Students are required to complete coursework and pass a comprehensive examination to advance to candidacy within 36 months of registering in the program.
- Prior to graduation and in consultation with their research supervisors, students can choose one of the following research streams: Women+ Health, Child health, or Reproductive and Developmental Sciences (RDS). This stream will appear on the student's transcript, but not on their parchment.
- Students are encouraged to participate in optional career development activities including developing an individual development plan (IDP), completing a competency passport (ComPass), and participating in a mentorship program.

Students' academic program must be approved by the supervisory committee and the program director.

The expected time to completion is 5 years.

<p>Contact Information: Department of Pediatrics Faculty of Medicine Rm 2D19, 4480 Oak Street BC Children's Hospital Vancouver, BC V6H 3V4 Telephone: 604-875-3177 Fax Number: 604-875-2890 Website: https://pediatrics.med.ubc.ca/</p> <p>Department of Obstetrics & Gynaecology Faculty of Medicine Suite 930, 1125 Howe Street Vancouver, BC Canada V6Z 2K8 Website: https://obgyn.ubc.ca/</p>	
<p>Proposed URL: Homepage > Faculties, Colleges, and Schools > The Faculty of Graduate and Postdoctoral Studies > Degree Programs > Women+ and Children's Health Sciences</p> <p>Proposed Calendar Entry: The Faculty of Graduate and Postdoctoral Studies</p> <p>Contents Reproductive and Developmental Sciences Resources, Environment and Sustainability School and Applied Child Psychology Science and Technology Studies Science Education Social Studies Education Social Work Society, Culture and Politics in Education Sociology Soil Science Special Education Statistics Surgery Teaching English as a Second Language Theatre</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,0</p> <p>Present Calendar Entry: The Faculty of Graduate and Postdoctoral Studies</p> <p>Contents Reproductive and Developmental Sciences Resources, Environment and Sustainability School and Applied Child Psychology Science and Technology Studies Science Education Social Studies Education Social Work Society, Culture and Politics in Education Sociology Soil Science Special Education Statistics Surgery Teaching English as a Second Language Theatre Urban Design</p>

<p>Urban Design</p> <p>Visual Art</p> <p>Vocational Rehabilitation Counselling</p> <p>Women+ and Children's Health Sciences</p> <p>Zoology</p>	<p>Visual Art</p> <p>Vocational Rehabilitation Counselling</p> <p>Zoology</p> <p>Type of Action: Add Women+ and Children's Health Sciences to the Faculty of Graduate and Postdoctoral Studies entry</p> <p>Rationale for Proposed Change: To accurately list the programs available in the Faculty of Graduate and Postdoctoral Studies</p>																																										
<p>Proposed URL: Homepage > Course Descriptions > Courses by Subject Code > WACH Women+ and Children's Health Sciences</p> <p>Proposed Calendar Entry:</p> <table border="0"> <tr><td>URST</td><td>Urban Studies</td></tr> <tr><td>URSY</td><td>Urban Systems</td></tr> <tr><td>VANT</td><td>Vantage College</td></tr> <tr><td>VISA</td><td>Visual Arts</td></tr> <tr><td>VRHC</td><td>Vocational Rehabilitation Counselling</td></tr> <tr><td>VURS</td><td>Visiting Undergraduate Research Students</td></tr> <tr><td>WACH</td><td>Women+ and Children's Health Sciences</td></tr> <tr><td>WOOD</td><td>Wood Products Processing</td></tr> <tr><td>WRDS</td><td>Arts Studies in Writing</td></tr> <tr><td>WRIT</td><td>University Writing Centre Courses</td></tr> <tr><td>ZOO</td><td>Zoology</td></tr> </table>	URST	Urban Studies	URSY	Urban Systems	VANT	Vantage College	VISA	Visual Arts	VRHC	Vocational Rehabilitation Counselling	VURS	Visiting Undergraduate Research Students	WACH	Women+ and Children's Health Sciences	WOOD	Wood Products Processing	WRDS	Arts Studies in Writing	WRIT	University Writing Centre Courses	ZOO	Zoology	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</p> <p>Present Calendar Entry:</p> <table border="0"> <tr><td>URST</td><td>Urban Studies</td></tr> <tr><td>URSY</td><td>Urban Systems</td></tr> <tr><td>VANT</td><td>Vantage College</td></tr> <tr><td>VISA</td><td>Visual Arts</td></tr> <tr><td>VRHC</td><td>Vocational Rehabilitation Counselling</td></tr> <tr><td>VURS</td><td>Visiting Undergraduate Research Students</td></tr> <tr><td>WOOD</td><td>Wood Products Processing</td></tr> <tr><td>WRDS</td><td>Arts Studies in Writing</td></tr> <tr><td>WRIT</td><td>University Writing Centre Courses</td></tr> <tr><td>ZOO</td><td>Zoology</td></tr> </table> <p>Type of Action: Create subject code for Women+ and Children's Health Sciences (WACH) program</p> <p>Rationale for Proposed Change: The Departments of Pediatrics and Obstetrics & Gynaecology in the Faculty of Medicine are jointly proposing to create a new PhD program in Women+ and Children's</p>	URST	Urban Studies	URSY	Urban Systems	VANT	Vantage College	VISA	Visual Arts	VRHC	Vocational Rehabilitation Counselling	VURS	Visiting Undergraduate Research Students	WOOD	Wood Products Processing	WRDS	Arts Studies in Writing	WRIT	University Writing Centre Courses	ZOO	Zoology
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	<p>Health Sciences, as an expansion and reconfiguration of the existing Reproductive and Developmental Sciences (RDS) PhD program. The RDS program will transition to the WACH program over a few years, and the OBST subject code will no longer be used. As a result, a new subject code WACH is required for the proposed Women+ and Children's Health Sciences program.</p>
<p>Proposed URL: Homepage > Course Descriptions > Courses by Subject Name > WACH Women+ and Children's Health Sciences</p> <p>Proposed Calendar Entry:</p> <p>URSY Urban Systems</p> <p>UROL Urological Surgery</p> <p>VANT Vantage College</p> <p>VURS Visiting Undergraduate Research Students</p> <p>VISA Visual Arts</p> <p>VRHC Vocational Rehabilitation Counselling</p> <p>WACH Women+ and Children's Health Sciences</p> <p>WOOD Wood Products Processing</p> <p>ZOOL Zoology</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</p> <p>Present Calendar Entry:</p> <p>URSY Urban Systems</p> <p>UROL Urological Surgery</p> <p>VANT Vantage College</p> <p>VURS Visiting Undergraduate Research Students</p> <p>VISA Visual Arts</p> <p>VRHC Vocational Rehabilitation Counselling</p> <p>WACH Women+ and Children's Health Sciences</p> <p>WOOD Wood Products Processing</p> <p>ZOOL Zoology</p> <p>Type of Action: Create subject name for Women+ and Children's Health Sciences (WACH) program</p> <p>Rationale for Proposed Change: The Departments of Pediatrics and Obstetrics & Gynaecology in the Faculty of Medicine are jointly proposing to create a new PhD program in Women+ and Children's Health Sciences, as an expansion and reconfiguration of the existing Reproductive and Developmental Sciences (RDS) PhD program. The RDS program will transition to the WACH program over a few years, and the OBST subject name will no longer be used. As a result, a new subject name WACH is</p>

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Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 501 (3) Women+ and Children's Health Biomedical, clinical, translational, and population research; research approaches and opportunities across the four health research pillars (biomedical, clinical, health services, population health). <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new required course for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It is a core course in the program that enables students to:</p> <ul style="list-style-type: none"> • Describe the current state of knowledge in key research areas in women+ and children's health including biomedical, clinical, health services, and population health • Apply and interpret appropriate, rigorous statistical analyses in each of the key research areas • Identify and apply principles of equity, diversity, and inclusion to research. This will include sex and gender considerations and Indigeneity • Analyze unique factors that impact women+ and children's health, including biological factors and social determinants of health, and • Evaluate interdisciplinary opportunities that intersect with students' own research focus

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<p>Proposed Calendar Entry: WACH 502 (3) Seminars in Women+ and Children's Health Biological and social determinants of health, health equity and inclusion. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new required course for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It is a core course in the program that enables students to:</p> <ul style="list-style-type: none"> • Describe broad research themes in women+ and children's health including biomedical, clinical/translational, health services, and population health • Analyze biological and health system disparities that exist for women+ and children, locally and globally • Analyze the origins of health inequities for women+ and children and evaluate current systems in place to improve women+ and children's health • Create and frame research questions including within the context of health disparities that exist for women+ and children • Apply appropriate research methods to address research question(s), and • Evaluate and interpret rigorous statistical analyses pertinent to research question(s)

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 511 (3) Women+ Health Research Sexual development, transgender medicine, reproduction and pregnancy, chronic and acute diseases, and social determinants of health. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course in the Women+ Health stream for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Differentiate female physiology and pathophysiology across the different lifestage trajectories including development, menarche, reproduction, pregnancy, and menopause • Evaluate unique factors that impact research in women+ health and disease such as gender specific implications for research • Analyze and apply principles of equity, diversity, and inclusion to women+ health research • Evaluate how different research approaches offer different insights into women+ health and how translational approaches improve the impact of research on women+ health, and • Apply and interpret appropriate statistical methods to women+ health research

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 521 (3) Child Health Research Biology of human development, child growth and puberty, adolescent health, childhood chronic and acute diseases, gender diversity in pediatrics, social environment and child health, and pediatric research in partnership with Indigenous communities. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course in the Children's Health stream for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Describe the biology of human development across the different lifestage trajectories including prenatal, infancy, toddler/preschool, childhood, and adolescence • Differentiate unique factors that impact child health and disease and considerations when conducting research at different developmental time points • Compare and contrast sex-specific differences in development • Analyze and apply principles of equity, diversity, and inclusion to pediatric research, and • Evaluate experimental methods, research design, and statistical approaches used in child health research. Determine the most appropriate approach/method for a given research question.

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 522 (3) Pediatric Nutrition Dietary assessment and nutrient requirements in children and youth, assessment of growth and adiposity, application of nutritional biochemistry and animal models, energy balance, macronutrient and micronutrient metabolism and research, restricted diets in children, nutritional interventions in children. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course in the Children's Health stream for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Differentiate nutrient requirements and dietary assessment across the different lifestage trajectories including prenatal, infancy, toddler/preschool, childhood, and adolescence • Describe the biology of nutrient absorption and physiology/metabolism during development • Evaluate experimental methods, research design, and statistical approaches used to assess the role of diet and nutrition in child health and disease. Determine the most appropriate approach/method for a given research question • Compare and contrast sex-specific differences in nutrient physiology/metabolism, and • Analyze and apply principles of equity, diversity, and inclusion to nutrition research.

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 548 (1.5-6) c Directed Studies in Women+ and Children's Health Student-directed literature-based or experimental investigation of a topic. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Evaluate the current state of knowledge in a key research area pertinent to women+ or children's health • Synthesize current literature identifying critical knowledge gaps and unmet clinical needs Analyze state-of-the-art techniques that may be used to address research questions identified to improve health outcomes for women+ or children, and • For students undertaking a research component, create new knowledge by addressing knowledge gaps experimentally.

Category: 1

Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022	Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca
Proposed Calendar Entry: WACH 649 (0) PhD Dissertation <i>This course is not eligible for Credit/D/Fail grading.</i>	URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry Rationale for Proposed Change: This is a new entry for the proposed Women+ and Children's Health Sciences (WACH) PhD program. Completion of a PhD dissertation is a requirement to graduate from the program. Students must register in this course until their PhD dissertation is completed.
Proposed Calendar Entry: WACH 531 (3) Reproductive Endocrinology Neuroendocrine regulation of reproduction, regulation of the ovarian and testicular function. <i>This course is not eligible for Credit/D/Fail grading.</i> <i>Equivalency: OBST 501.</i>	URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry Rationale for Proposed Change: The existing RDS course OBST 501 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 501 and WACH 531.
Proposed Calendar Entry: WACH 532 (3) Physiology of the Mother, Fetus and Newborn Functional development of the placenta and major organ systems in the fetal and newborn period in man and animals. <i>This course is not eligible for Credit/D/Fail grading.</i>	URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry

<p>Equivalency: OBST 502.</p>	<p>Rationale for Proposed Change: The existing RDS course OBST 502 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 502 and WACH 532.</p>
<p>Proposed Calendar Entry: WACH 533 (3) Fetal and Perinatal Metabolism Nutrient metabolism and requirements during fetal and perinatal development and research methods used to assess requirements; developmental origins of health and disease; gestational obesity and diabetes; nutritional supplements during pregnancy. <i>This course is not eligible for Credit/D/Fail grading.</i> Equivalency: OBST 503.</p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: The existing RDS course OBST 503 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 503 and WACH 533.</p>
<p>Proposed Calendar Entry: WACH 503 (3) Perinatal Epidemiology Indicators of maternal/newborn well-being across population subgroups, changing trends in obstetrical intervention, perinatal morbidity, and the analysis of perinatal data. <i>This course is not eligible for Credit/D/Fail grading.</i> Corequisite: One of OBST 502, WACH 532. Equivalency: SPPH 537, OBST 507.</p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: The existing RDS course OBST 507 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 507 and WACH 534.</p>

Appendix B WACH Course Descriptions

WACH 501 (3) Women+ and Children's Health

Biomedical, clinical, translational, and population research; research approaches and opportunities across the four health research pillars (biomedical, clinical, health services, population health)

WACH 502 (3) Seminars in Women+ and Children's Health

Biological and social determinants of health, health equity and inclusion

WACH 511 (3) Women+ Health Research

Sexual development, transgender medicine, reproduction and pregnancy, chronic and acute diseases, and social determinants of health

WACH 521 (3) Child Health Research

Biology of human development, child growth and puberty, adolescent health, childhood chronic and acute diseases, gender diversity in pediatrics, social environment and child health, and pediatric research in partnership with Indigenous communities

WACH 522 (3) Pediatric Nutrition

Dietary assessment and nutrient requirements in children and youth, assessment of growth and adiposity, application of nutritional biochemistry and animal models, energy balance, macronutrient and micronutrient metabolism and research, restricted diets in children, nutritional interventions in children

WACH 548 (1.5-6) C Directed Studies in Women+ and Children's Health

Student-directed literature-based or experimental investigation of a topic

OBST 501 / WACH 531 (3) Reproductive Endocrinology

Neuroendocrine regulation of reproduction, regulation of the ovarian and testicular function.

OBST 502 / WACH 532 (3) Physiology of the Mother, Fetus and Newborn

Functional development of the placenta and major organ systems in the fetal and newborn period in man and animals.

OBST 503 / WACH 533 (3) Fetal and Perinatal Metabolism

Knowledge of fetal growth and development, physiology, pathology of labour.

OBST 507 / WACH 503 (3) Perinatal Epidemiology

Indicators of maternal/newborn well-being across population subgroups, changing trends in obstetrical intervention, perinatal morbidity, and the analysis of perinatal data.

PATH 548C (3) The Pathophysiology of Types I and II Diabetes

Physiology of pancreatic islets and the underlying mechanisms of glucose dysregulation in both types 1 and 2 diabetes

MEDG 419 (3) Developmental Origin of Human Disorders

Genetic and epigenetic determinants of development from conception to birth. Topics include development of the neural tube, face, heart, endoderm, blastocyst, embryonic stem cells, gastrulation, genomic imprinting, placental complications, chromosomal abnormalities and prenatal diagnosis. Discussions based on published research articles

MICB 502 (3) Advanced Immunogenetics

Recent advances in immunological mechanisms and human immunology

Appendix C Graduate Student Enhanced Scholar Program Guidebook

Women+ and Children's Health Sciences Program
Department of Pediatrics | Department of Obstetrics & Gynaecology
Faculty of Medicine

GRADUATE STUDENT ENHANCED SCHOLAR PROGRAM

(Image adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada.)

Version November 2019

ACKNOWLEDGEMENTS

Department Heads: Dr. Geoffrey Cundiff, Dr. Allison Eddy

Oversight Committee: Dr. Alex Beristain, Dr. Geoffrey Cundiff, Dr. Angela Devlin, Dr. Allison Eddy, Andi Martin, Dr. Dan Rurak, Dr. Laura Sly

Steering Committee: Dr. Alex Beristain, Dr. Lori Brotto, Dr. Geoffrey Cundiff, Dr. Angela Devlin, Dr. Allison Eddy, Dr. Soren Gantt, Dr. Asif Khowaja, Dr. Tex Kisson, Andi Martin, Dr. Dawn McArthur, Dr. Gina Ogilvie, Simona Powell, Dr. Wendy Robinson, Dr. Dan Rurak, Dr. Laura Sly, Dr. Wyeth Wasserman, Dr. Paul Yong

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With guidance from the Faculty of Graduate and Postdoctoral Studies and the Faculty of Medicine.

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OVERVIEW

The Graduate Student Enhanced Scholar Program is designed to encourage and facilitate Faculty of Medicine (FoM) graduate students in transitioning from their graduate training to careers in academia and beyond. Recognizing a growing number of health research graduates pursue non-academic careers, the Departments of Pediatrics and Obstetrics & Gynaecology seek to encourage trainees to develop universal employability skills, explore career options in alignment with their interests, passions, and skills, and make a plan to secure employment upon graduation.

Program Duration

This program can be completed over the course of the student's graduate program, whether it is a Master of Science or Doctor of Philosophy degree, at the discretion of their research supervisor.

Program Components

- I. Individual Development Plan
- II. Competency Passport
- III. Mentorship

THE PROGRAM

I. Individual Development Plan - adapted from the Canadian Institutes of Health Research (CIHR)

An Individual Development Plan (IDP) is a tool that supports graduate students in actively preparing for the career(s) of their choice by exploring career paths, establishing career goals, and identifying skill gaps, culminating in an action plan to achieve their career goal(s). The use of an IDP presents an opportunity for self-evaluation, and also allows graduate students and postdoctoral fellows (PDFs) to map their progress over time. Finally, IDPs serve as a communication tool between trainees and mentors (supervisor or other mentor(s)) regarding the training outcomes and expectations of both parties.

IDP components generally include self-assessments, career exploration, goal determination, plan development, refinement, and implementation. Two common IDP templates include the CIHR IDP and Science Careers' myIDP. Either one can be selected according to the trainee's preferences, but orientations will use the CIHR IDP as an instructive tool - found here:

http://www.cihr-irsc.gc.ca/e/documents/training_idp_form-en.pdf

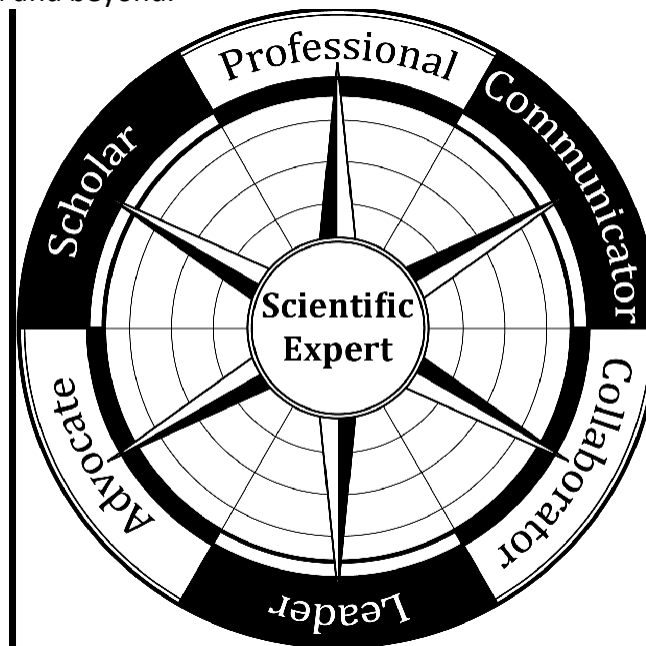
Please note: The IDP is not intended to be an assignment that is completed. Rather, it is a tool that undergoes continual change as trainees' understanding of themselves and their goals come into better focus over time. A summary of the student's activities in the IDP, including mentorship and extracurricular accomplishments, could be included as an appendix in the student's thesis.

II. Competency Passport

The Graduate Student Enhanced Scholar Program acknowledges the importance of developing important transferrable skills (competencies) to supplement core research training undertaken with a FoM supervisor. The degree to which the below-listed competencies need to be addressed should be aligned to the trainee's IDP and in consultation with the trainee's supervisor and mentor. A trainee may be deemed to have already achieved some degree of

competency in one or more of the areas prior to beginning the program, in which case they should focus on other areas for development.

Drawing from the Royal College of Physicians and Surgeons of Canada's CanMEDS, recent health research pedagogical literature, and consultations with UBC faculty, alumni, and students, six categories of competencies consistently emerge. These competencies constitute the core qualities of the next generation of scientific experts. Positioning these competencies on a radial 'skill wheel' illustrates how competency development can be tracked discretely - like a passport. Hence, the Competency Passport (*ComPass*) serves as a tool to conceptualize and visualize core skills needed to turn graduate trainees into scientific experts equipped with skills applicable in academia and beyond.



(Image adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada.)

The table below describes each *ComPass* competency in more detail, and provides examples of mandatory and recommended activities, and workshops held offsite and at the BC Children's Hospital Research Institute (BCCHR). Some activities may help you develop more than one competency. Consult your peers, mentors, supervisor, or program manager for ideas on other competency-developing opportunities.

Competency	Description	Activities	Recommended Workshops
Scholar	Graduates will gain broad conceptual knowledge related to women+ and children's health and deep knowledge related to their specific field of study, to enable meaningful intra- and inter-disciplinary scientific interactions. Graduates will develop critical thinking, experimental, and computational skills required in their field of study. Furthermore, graduates will advance the scientific enterprise and health outcomes including translation across the spectrum of implementation science, while learning about and adhering to responsible conduct of research principles (ethics), as well as developing teaching and mentoring skills. Graduates will establish a pattern of lifelong learning in their broad scientific discipline.	Mandatory Activities <ul style="list-style-type: none"> • Complete a formal research ethics training course (e.g. RCR) • Pass your comprehensive examination (PhD students) • Defend your thesis/dissertation Recommended Activities <ul style="list-style-type: none"> • Write a review paper that synthesizes knowledge in your field • Consistently attend a journal club (at least 50% attendance) • Contribute to research outside of your translational science domain (e.g. basic/clinical/population/systems) • Write a fellowship or research grant funding proposal • Attend seminar series at BCCHR 	BCCHR <ul style="list-style-type: none"> • Preparing an Ethics Submission • Biostatistics • BCCHR Studentships & Fellowships • Translating Research into Policy • Instructional Skills • Animal Welfare & Ethics (if appropriate) • Proposal Development Offsite <ul style="list-style-type: none"> • Statistics (GPS¹⁴)

¹⁴ Graduate Pathways to Success program offered by the Faculty of Graduate and Postdoctoral Studies

Communicator	Graduates will develop oral and written communication skills and strong knowledge dissemination skills to assimilate and articulate information to other scientists, clinicians, agencies, patients, communities, and to society at large.	<p>Mandatory Activities</p> <ul style="list-style-type: none"> • Present your thesis/dissertation <p>Recommended Activities</p> <ul style="list-style-type: none"> • Contribute original writing to a manuscript • Present research findings locally and at national/international conferences • Present at journal clubs and student-run workshops • Participate in 3-Minute Thesis • Participate in Let's Talk Science • Participate in a panel discussion • Participate in Mini Med School • Write a newspaper article on someone else's research • Write a blog 	<p>BCCHR</p> <ul style="list-style-type: none"> • Digital Communications • Presentation Skills • Storytelling your Research • Interacting with the Media • Visual Thinking • Complex Ideas, Simple Phrases <p>Offsite</p> <ul style="list-style-type: none"> • UBC Writing courses • Business Writing for Today's Professional (GPS) • Establishing Yourself as an Expert through Strategic Communication (GPS) • Strategies for Presenting Your Research in 3 Minutes (GPS) • What are you researching again? Vivid talks for varied audiences (GPS)
Collaborator	Graduates will develop collaborative and team science skills that enable self- and disciplinary awareness and integration of information across disciplines and research pillars, and with community partners to achieve a translational approach to research that will improve health care and health research.	<p>Recommended Activities</p> <ul style="list-style-type: none"> • Participate in a team project • Contribute to research in a lab outside your own • Reach out to others for insight on your research • Work together with an expert outside your field 	<p>BCCHR</p> <ul style="list-style-type: none"> • Sign-up, Pair-up, Drink-up • MITACS: Networking <p>Offsite</p> <ul style="list-style-type: none"> • Essentials of Productive Teams (GPS) • Soft Skills for Hard Times (GPS)

Leader	Graduates will develop leadership and management skills that include formulating research questions and strategic plans, managing group dynamics and communication, organizing and planning, decision making, problem solving, and resolving conflicts.	Recommended Activities <ul style="list-style-type: none"> • Serve as a mentor to junior trainees • Volunteer on a student or research leadership council • Organize workshops/ research days • Initiate and lead a non-research-based project 	BCCHR <ul style="list-style-type: none"> • Project Management • Conflict management Offsite <ul style="list-style-type: none"> • Financial Literacy for your Professional Career and Personal Wellbeing (GPS) • Foundations of Project Management (GPS) • Leading with Emotional Intelligence (GPS) • Time Management (GPS)
Advocate	Graduates will develop advocacy skills, including promoting health care; health research; and equity, diversity, and inclusion in both health care and research endeavors (including under-represented, disadvantaged, and vulnerable populations).	Recommended Activities <ul style="list-style-type: none"> • Volunteer with a health-related agency or community organization • Participate in the Public Scholars Initiative • Participate in patient-oriented research 	BCCHR <ul style="list-style-type: none"> • Ethical Engagement with Communities Offsite <ul style="list-style-type: none"> • UBC 23 24 ICS
Professional	Graduates will create a fluid individual development plan (IDP) and use reflexivity to develop self-awareness about their personal values, interests, and limitations so that they can identify and cultivate the skills needed for personal career readiness. Responsible, respectable, and ethical conduct	Mandatory Activities <ul style="list-style-type: none"> • Use, and iteratively evolve, an IDP Recommended Activities <ul style="list-style-type: none"> • Conduct an informational interview with a professional 	BCCHR <ul style="list-style-type: none"> • Self-Care 101 • Non-Academic Career Panel Offsite <ul style="list-style-type: none"> • Assertiveness (GPS) • Breaking Patterns of Procrastination (GPS)

	will be among the core professional values nurtured.		<ul style="list-style-type: none"> • Cops in the Head: Rehearsing Courage, Enacting Confidence (GPS) • Leveraging your Strengths to Strategize Success (GPS) • Overcoming Perfectionism (GPS) • Roadmap to Resilience in Graduate School and Beyond (GPS) • The Non-Academic Job Search for Graduate Students and Postdocs (GPS)
Scientific Expert	The unifying competency. Graduates will gain skills and experience in communication, collaboration, leadership, advocacy, professionalism, and scholarship.	<ul style="list-style-type: none"> • Develop all six other competencies 	

III. Mentorship

The primary goal of mentorships in this program is to gain an expert's perspective on one's career readiness. The degree of engagement with mentors can range from casual coffee meetings to ongoing IDP development. Accordingly, mentorship styles can range from informal to formal. The Graduate Student Enhanced Scholar program gives trainees the flexibility to choose which style works best for them, although mentorship training and documentation of meetings is strongly encouraged.

Trainees are encouraged to network with individuals at their research site and beyond, and initiate and negotiate mentorship expectations from the outset. Appropriate mentor candidates include: their research supervisor (principal investigator), supervisory committee members, postdoctoral fellows, industry contacts, and senior graduate students. Mentorship activities may include: working on an IDP, job shadowing, attending professional development events, meeting for coffee, etc.

Trainees should meet with their mentors at least once within the first 6 months of their program to complete the Mentoring Agreement. Afterwards, meetings should occur at least twice per year to review the IDP and evaluate their competency development. Meetings should be documented using the Mentor Meeting Template. Refer to your IDP for additional meeting discussion points.

MENTORING AGREEMENT

Please complete the mentoring agreement and return to [program administrator].

NB: All members of a mentoring pair should sign one copy of this 2-page agreement. Once signed, copies of the form can be made for each member of the pair.

MENTORING FORMAT & PLAN:

It is helpful to discuss and agree upon expectations and the format of mentoring sessions at the outset. Modifications can be made as needed during the program. Please take some time to discuss your expectations with your mentor.

Mentoring Format & Plan
How frequently do you intend to meet over the next year?
Approximately how long do you intend these meetings to be?
Where/how will you meet (in person, teleconference or a combination of both)?
Who will be responsible for scheduling meetings?
How will the agenda for your meetings be set?
What resources will you need to make your meetings successful?
What is your preferred mode of communication between mentoring sessions?
What topics or issues are "out of bounds"? (e.g. lending money or discussing financial matters)

Any other requirements or expectations?

AGREEMENT TERMS:

We agree to openly discuss - at any time during the mentorship relationship - areas of success or weakness, and actions that we will take moving forward. We understand that [program administrator] can be approached at any time for assistance in all matters relating to the mentorship relationship, including any difficulties that may arise.

We acknowledge that this is a no-fault agreement and that there may come a time when either party wishes to end the relationship early. Should this occur we agree to give the other party as much notice as possible, and we will make an effort to reflect on the relationship and take positive actions to benefit from the relationship as much as possible.

We also agree to be bound by a duty of confidentiality and will:

1. Keep conversations confidential and not to reveal information disclosed during the mentoring relationship to a third party;
2. Respect the mentor's or mentee's right to confidentiality except when this right conflicts with your responsibility to the law, or when the maintenance of confidentiality would result in significant risk of substantial harm to themselves or others; in such cases, you are responsible for taking all reasonable steps to inform the mentor or mentee that confidentiality will be breached; and
3. Maintain confidentiality beyond this mentoring relationship.

Name	Signature
Mentor	
Mentee	

You can return the signed agreement to [program administrator] by email.

Email: [program administrator]

MENTOR MEETING TEMPLATE**Mentor:** _____**Meeting Date:** _____**What are the key points from this meeting?****What goals am I planning on working on between now and our next meeting?****What are the anticipated challenges to implementing these changes and how will I address them?****What topics do I want to explore further at the next meeting?****What will I need to make the next meeting effective?****Additional notes:**

ADDITIONAL RESOURCES

UBC Resources:

UBC Community Leadership Program | <http://clp.ubc.ca/>

UBC Centre for Health Education Scholarship | <https://ches.med.ubc.ca/>

UBC Graduate Outcomes | <http://outcomes.grad.ubc.ca/>

UBC Graduate Pathways to Success | <https://www.grad.ubc.ca/current-students/professional-development/workshops-events>

UBC Knowledge Exchange Unit | <https://innovation.ubc.ca/how-engage/knowledge-exchange>

UBC Learning Exchange | <https://learningexchange.ubc.ca/>

UBC Public Scholars Initiative | <https://www.grad.ubc.ca/psi>

UBC Responsible Conduct of Research | <https://grad-postdoc.med.ubc.ca/current-students/research-conduct-course/>

IDP Resources:

CIHR IDP | <http://www.cihr-irsc.gc.ca/e/50516.html>

myIDP | <http://myidp.sciencecareers.org/>

Other Resources:

CanMEDS | <http://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e>

iBiology | <https://www.ibiology.org/career-development/professional-development/>

University of Toronto 10,000 PhD's | <http://www.sgs.utoronto.ca/about/Pages/10,000-PhDs-Project.aspx>

NIH BEST | <http://www.nihbest.org/>

Beyond the Professoriate | <https://beyondprof.com/>

University Affairs | <https://www.universityaffairs.ca/>

PHSA Learning Hub | <https://learninghub.phsa.ca/Learner/Home>

VOLUNTEERING OPPORTUNITIES

BCCHR

Discovery Days in Health Sciences – this is a one-day event that gives secondary school students and teachers the opportunity to explore a variety of career options in medicine and the health sciences. Organized by the Canadian Medical Hall of Fame and hosted by BCCHR, the day comprises a dynamic keynote lecture, hands-on workshops and a career panel discussion.

<https://bcchr.ca/discovery-days>

Contact: Research Education Office reseduc@bcchr.ca

Gairdner High School Symposium – this is a half-day event held each fall that gives secondary students and teachers the opportunity to hear from Gairdner award-winning scientists and attend a behind-the-scenes tour of BC Children's Hospital's research facilities. This event is hosted in conjunction with the Center for Molecular Medicine and Therapeutics (CMMT) and the Canada Gairdner Foundation.

<https://bcchr.ca/gairdner>

Contact: Research Education Office reseduc@bcchr.ca

Healthy Starts Community Outreach Society (COS) - trainees on this committee are involved in various community outreach and knowledge translation activities.

Contact: Healthy Starts Research Theme Manager

Mini Med School BC – each year this travelling program uses big ideas, big discoveries and big names to engage high school students, teachers and the general public in learning and discussion about health research topics. Participants learn about the latest in biomedical and clinical research in a learning environment that fuses lectures with live demonstrations to inspire and motivate further learning.

<https://bcchr.ca/minimedbc>

Contact: Research Education Office reseduc@bcchr.ca

Mini Med School Vancouver – each year this program at BCCHR uses big ideas, big discoveries and big names to engage high school students, teachers and the general public in learning and discussion about health research topics. Participants learn about the latest in biomedical and clinical research in a learning environment that fuses lectures with live demonstrations to inspire and motivate further learning.

<https://bcchr.ca/events/mini-med-school/mini-med-school-vancouver>

Contact: Research Education Office reseduc@bcchr.ca

Research Open House – this is an interactive morning event at BC Children's Hospital that offers high school students an opportunity to visit research labs, interact with research trainees and participate in research activities.

<https://bcchr.ca/research-open-house>

Contact: Research Education Office reseduc@bcchr.ca

Canadian Foundation for Women's Health (CFWH)

This is a national not-for-profit fundraising foundation for women's sexual and reproductive health. Whether you have been personally affected by a women's health issue, want to give back to your community or are looking for career experience or personal improvement, CFWH needs your skills and commitment. You can volunteer for the short or long term, part-time or full-time.

<http://cfwh.org/how-you-can-help/>

Genome BC

Geneskool – this program provides a variety of resources and programs for students in Grades 9 through 12 that make learning about genomics fun.

<https://www.genomebc.ca/education/what-is-geneskool/>

Society for Canadian Women in Science and Technology (SCWIST)

Volunteers are integral to advancing and achieving the organisation's mission. Volunteers are recruited using a formal screening process that may include an interview. Types of volunteering are in the areas of communications, fundraising, event planning, and one-on-one mentoring of children and youth. Membership with SCWIST is required to become a volunteer.

<https://www.scwist.ca/get-involved/volunteer/>

Sunny Hill Health Centre

The Volunteer Resources Department matches your skills and interests in supporting patients and families. The areas where volunteers contribute their time and skills include: adapted aquatic therapy, auxiliary board member, therapeutic recreation group activities, and thrift shop at Sunny Seconds.

<http://www.bcchildrens.ca/our-services/sunny-hill-health-centre/volunteer-with-us#Apply>

The Auxiliary to BC Children's Hospital

This is a self-governing membership organization independently organized to support the care provided for patients. The Auxiliary is founded by persons from the community who agree to work together to assist a health care institution in promoting the health and welfare of the community.

<http://www.bcchauxiliary.com/>

UBC

Community Leadership Program (CLP) – this is an innovative leadership development opportunity designed for emerging staff, faculty, and graduate student leaders offered in collaboration by UBC Human Resources and the Centre for Community Engaged Learning.

<http://clp.ubc.ca/>

Let's Talk Science Outreach – this is a program that connects educators and youth with outstanding volunteers to deliver a wide variety of meaningful science, technology, engineering and mathematics (STEM) learning experiences in both school and community settings.

<http://outreach.letstalkscience.ca/ubc>

Multidisciplinary Undergraduate Research Conference (MURC) – this is a conference for UBC undergraduate students to showcase their research in front of their fellow UBC students, family, and friends. Volunteers are given the opportunity to network with other student leaders and researchers on campus and learn about the research being conducted by their peers. Volunteers will be supported by the MURC Committee and UBC Centre for Student Involvement and Careers Staff.

<https://students.ubc.ca/career/events-workshops/multidisciplinary-undergraduate-research-conference>

URO Research Experience (REX) – this program connects undergraduate students with multi-disciplinary research opportunities via programs, events, and various research-related services. It helps students to get a foot in the door, find a summer lab job, or get a manuscript published.
<https://www.roubc.com/about-us/>

Vancouver Coastal Health (VCH)

VCH hosts volunteers to support patients, clients and residents in communities across the North Shore, Powell River, Richmond, Sea-to-Sky, Sunshine Coast and Vancouver. Types of volunteer opportunities are in community and public health, hospitals, and residential care facilities.

<http://www.vch.ca/get-involved/volunteer>

Appendix D Memorandum of Understanding between Department of Pediatrics and Department of Obstetrics & Gynaecology

Memorandum of Understanding

Between

Department of Pediatrics, Faculty of Medicine, University of British Columbia,
And

Department of Obstetrics and Gynaecology, Faculty of Medicine, University of British Columbia

This Memorandum of Understanding (MOU) sets the terms and understanding between the Department of Pediatrics and the Department of Obstetrics and Gynaecology, University of British Columbia, Faculty of Medicine regarding the governance, leadership, administration, funding and evaluation of a new Graduate Program in *Women+ and Children's Health Sciences (WACH)*.

Background

The UBC Department of Obstetrics and Gynaecology established a Graduate Program (MSc and PhD) in Reproductive and Developmental Sciences (RDS) in the 1980s. With the goal of expanding the scope of the program beyond traditional basic sciences to capture research faculty expertise and graduate student interests in clinical and epidemiological research, the RDS program was undertaking transformational work, while at the same time that the Department of Pediatrics was in the early stages of developing a Graduate Program in Children's Health. Given that the primary locations of the respective research programs are on the Oak Street campus – BC Women's Hospital and Research Institute and BC Children's Hospital and Research Institute - and the many areas of research overlap and existing interaction between women+ and children's health, the two departments have worked closely together to obtain approval to start an innovative new "umbrella-style" graduate research program in *Women+ and Children's Health Sciences (WACH)*. Not only will this integrated graduate program provide a strong sense of community for UBC graduate students training on the Oak Street campus (noting that faculty members from both Departments also conduct research and supervise graduate students at other UBC Research Institutes), but the program has introduced a multi-faceted "Enhanced Scholar Program" to improve student learning experiences and preparation for careers both within and outside of academia after graduation.

Governance

This is a UBC graduate program under the joint responsibility of the Pediatric and Obstetrics & Gynaecology Departments. At the time the Program is officially launched (likely ready for student enrolment in the fall of 2022), the RDS Program will be transitioned into the WACH Program. Students already enrolled in the RDS Program will have the option to remain as an RDS student until graduation or transfer into the WACH program. The Heads of the Department of Pediatrics and the Department of Obstetrics and Gynaecology will share ultimate responsibilities for the oversight, administration, finances, and evaluation of the WACH Program. The Department Heads will be aided in this work by the Program Oversight Committee, with members to include themselves, the Program Co-Directors, the Program

Manager and both Department Senior Administrative Directors. Ad hoc Oversight Committee members may include: Executive Directors of the BC Children's Hospital Research Institute (BCCHR) and the Women's Health Research Institute (WHRI) and their Senior Directors, Senior Department Finance Managers, Course Directors, Enhanced Scholar Program leads and student representatives. It is anticipated that all major decisions can be made at the Oversight Committee level, but in the unlikely event that an unresolved conflict arises, it will be resolved through a conflict resolution process that will include appropriate representatives from the UBC Faculty of Medicine and the Faculty of Graduate and Postdoctoral Studies.

Program Directorship

The WACH Program will be co-lead by two directors, one selected by the Department of Pediatrics and the other by the Department of Obstetrics and Gynaecology. There may be situations where a Department prefers to have two faculty members share the role, though this is generally a less effective leadership structure. Directors are typically appointed for a renewable 5-year term. It is essential that the appointed Program Co-Directors can work well with each other. The Co-Directors will have specific responsibilities as defined by the Program Director Terms of Reference Document.

Program Committees

When the program launches, the following committees will be constituted with faculty and student representation from both Departments: Admissions Committee, Awards Committee, Curriculum and Enhanced Scholar Program, Evaluation/Review/Renewal Committee, and Annual Academic Day Program Committee.

Program Operational Administration

We fully acknowledge that excellent administrative support for program operations is an essential component of a successful graduate program. WACH will build on the administrative structure of the RDS Program, beginning with a Program Manager (0.5 FTE) in year zero and increasing to 1.0 FTE in year one and adding a Program Assistant (0.5 FTE), when required, to accommodate increased student enrolment. The need to increase the FTE for the Program Assistant work will be determined by student numbers. The Faculty of Medicine uses 1.0 administrative FTE per 80 graduate students (2019) as a reference. The WACH Oversight Committee will be responsible for hiring into these positions and determining whether the Human Resources team in the Departments of Pediatrics or Obstetrics & Gynaecology will process the appointment. Annual performance evaluations will be the primary responsibility of the Program Directors, in consultation with the Oversight Committee Members. Job descriptions for both of these roles have been developed. A formal orientation process for all research supervisors and students, supplemented by an orientation handbook (updated annually), will be a priority.

Administrative Space

At the time the program is launched, the Program Manager and Program Assistant will occupy space supplied by the Department of Obstetrics & Gynaecology. As the program grows and

requires more space, the Departments will work together to identify new space – potentially UBC Departmental space or WHRI/BCCHR research admin space.

Financial Model

The Departments of Pediatrics and Obstetrics & Gynaecology co-share financial responsibility for the WACH Program. Given that the UBC fiscal year begins April 1, a formal budget meeting will be scheduled each fall to review the budget for the current year and discuss and approve the budget for the next year. This meeting will include the Pediatrics and Obstetrics & Gynaecology Department Heads, WACH Program Co-Directors, Senior Departmental Administrators, Senior Department Finance Managers, and the WACH Program Manager. A budget report will also be prepared quarterly for review by this group.

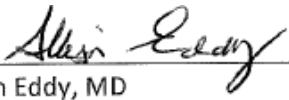
The initially approved WACH budget proposal should be used as a framework as the program matures. It is based on a few key shared guiding principles:

1. The core program should be self-funded, with student tuition fees being the primary revenue source.
2. In a year when the program has a surplus, these funds will remain within the WACH program and be used to fund the most compelling program need/opportunity in the next fiscal year, as determined by the Oversight Committee and prioritized to enrich student learning experiences. Guidelines to inform this decision-making process will be developed and updated on a periodic basis by the Oversight Committee.
3. In a year when the program has a deficit, it is expected that the Departments (with or without assistance from the research institutes) will develop a plan to manage the deficit. In general, the solution should be apportioned to departments based on the number of faculty members who are actively supervising graduate students (and adjusted by their total MSc [x0.5] and PhD student commitments [x1.0]). Should the program witness an increase in the number of WACH students with primary faculty supervisors appointed to Departments other than Pediatrics and Obstetrics & Gynaecology (a growth trajectory that we support), the Oversight Committee may recommend that these faculty members and their Department Heads be asked to contribute to deficient management deliberations.
4. The program is committed to exploring innovative partnerships with industry to enhance training and career opportunities outside of academia. This might include contributions such as guest lecturers and internship experiences (potentially funded by industry). Any corporate partnership will be compliant with UBC rules regarding conflict of interest and independence from industry.


Program Evaluation

A WACH program annual review will be undertaken. The Program Co-Directors and Program Oversight Committee are responsible for conducting the annual Graduate Program review. A 5-

year internal evaluation will be conducted by the UBC Graduate and Postgraduate Studies and shared with the Faculty of Medicine and the WACH Program Leadership. A 10-year decanal external evaluation will be conducted by external reviewers. The latter reviews will typically be conducted in conjunction with the formal Departmental Review processes.


Allison Eddy, MD
Head, Department of Pediatrics, UBC
Chief of Pediatrics, BC Children's Hospital

Date: April 23, 2020


Geoffrey Cundiff, MD
Professor and Head, Department of Obstetrics & Gynaecology

April 22, 2020
Date: _____

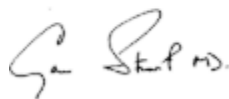
Addendum

Both Departments agree to offset departmental deficits accumulated by Year 0 and Year 1 of the WACH Program by using WACH Program surpluses in Year 2 and 3 (if required) to offset the deficit created by the original investment of both Departments. Any remaining Departmental deficits after Year 3 will be covered by each Department and any surplus from Year 4 of the WACH Program onwards will go toward program enrichment activities. The operational details will be determined by the Program Oversight Committee.



Allison Eddy, MD
Head, Department of Pediatrics, UBC
Chief of Pediatrics, BC Children's Hospital

Date: July 23, 2020



Gavin Stuart, MD
Professor and Head, Department of Obstetrics & Gynaecology

Date: 31 July 2020

Appendix E Memorandum of Understanding between Department of Pediatrics, Department of Obstetrics and Gynaecology, BC Children's Hospital Research Institute, and Women's Health Research Institute

Memorandum of Understanding

Between

Department of Pediatrics, Faculty of Medicine, University of British Columbia,

And

Department of Obstetrics and Gynaecology, University of British Columbia,

And

The BC Children's Hospital Research Institute and Women's Health Research Institute

This Memorandum of Understanding (MOU) sets the terms and understanding between the Department of Pediatrics and the Department of Obstetrics and Gynecology, University of British Columbia, Faculty of Medicine with the BC Children's Hospital Research Institute (BCCHR) and the Women's Health Research Institute (WHRI) regarding the governance, leadership, administration, funding and evaluation of a new Graduate Program in *Women+ and Children's Health Sciences (WACH)*.

Research Institutes Affirmations

1. WACH is viewed as high importance for the academic health missions of WHRI and BCCHR and an opportunity to enrich the graduate student community on the Oak Street Campus.
2. WHRI and BCCHR will seek to coordinate efforts, allowing for the potential integration of events, such as shared research days, workshops, celebrations, graduate student trainee organizations, and other events that will enhance graduate student learning experiences.
3. WACH students are welcome to use student spaces across the C&W campus, such as the David Hardwick Reading Room and the UBC learning commons.
4. WACH students based at C&W campus are welcome to draw upon the core services such as the Research & Technology Development Office (RTDO) which assists students and supervisors to develop competitive research proposals. If broader access to all WACH students is sought, we would expect to have an appropriate contribution from WACH to the budget of the RTDO to cost-recover these services.
5. The leadership of BCCHR and WHRI will encourage interactions between their institute education teams and the WACH team to find synergies (e.g. orientation days, high school outreach programs, etc.) and shared training enhancement opportunities for graduate students.

6. We will work together to improve support and experiences for UBC students, such as expanding counseling services at the C&W campus, extending C&W staff wellness opportunities to students, and seeking social and recreational/exercise spaces.
7. We will provide space for the program as it grows, and to coordinate access to appropriate classroom and training space.

Departmental Affirmations

1. WACH is a research-intensive graduate program that highly values collaborations and graduate student training opportunities made possible by the opportunity to work as investigators and scientists at WHRI and BCCHR.
2. The WACH Department Heads and Program Co-Directors (or their delegates) will participate in any research institute activities that impact graduate students, including the examples mentioned in the section above.
3. The WACH Department Heads and Program Co-Directors will meet annually with the research institute leadership tables (i.e. Research Leadership Council at BCCHR; Executive at WHRI) to provide updates on the program and share plans for the coming year.
4. Oak Street-based WACH research supervisors and mentors and their students will be expected to be active engaged members of the research institutes' communities, including participation in strategic planning, committees, campus-wide educational activities and community outreach initiatives upon request.
5. As the WACH program matures (with a positive annual budget predicted beginning in 2025-26), we will partner with WHRI and BCCHR leadership to develop novel initiatives that will enhance the graduate student experience and enrich the entire Oak Street campus research community.

WACH; Brief Background

The UBC Department of Obstetrics and Gynaecology established a Graduate Program (MSc and PhD) in Reproductive and Developmental Sciences (RDS) in 1986. With the goal of expanding the scope of the program beyond traditional basic sciences to capture research faculty expertise and graduate student interests in clinical and epidemiological research, the RDS program was undertaking transformational work, while at the same time that the Department of Pediatrics was in the early stages of developing a Graduate Program in Children's Health. Given that the primary locations of the respective research programs are on the Oak Street campus – BC Women's Hospital and Research Institute (WHRI) and BC Children's Hospital and Research Institute (BCCHR) - and the many areas of research overlap and intersections between women's and children's health, the two departments have worked closely together to develop an innovative new "umbrella-style" graduate research program in *Women+ and Children's Health Sciences (WACH)*. Not only will this integrated graduate program provide a strong sense of community for UBC graduate students training on the Oak Street campus, but the program

has introduced a multi-faceted “Enhanced Scholar Program” to improve student learning experiences and preparation for careers both within and outside of academia after graduation.

WACH Advisory Role for Research Institutes

This is a UBC graduate program under the joint responsibility of the Pediatric and Obstetrics & Gynaecology Departments. The Heads of the Department of Pediatrics and the Department of Obstetrics and Gynaecology will share ultimate responsibilities for the oversight, administration, finances, and evaluation of the WACH Program. The WACH Program will be co-lead by two directors, one selected by the Department of Pediatrics and the other by the Department of Obstetrics and Gynaecology.

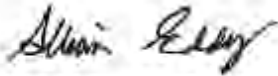
They will be aided in this work by the **Program Oversight Committee**, with members to include the co-directors, the Program Manager and both Department Senior Administrative Directors. Ad hoc Oversight Committee members may include: Executive Directors of the BC Children’s Hospital Research Institute (BCCHR) and the Women’s Health Research Institute (WHRI) and/or their Senior Directors or delegates, Senior Department Finance Managers, Course Directors, Enhanced Scholar Program leads and student representatives.

Program Committees

When the program launches, the following committees will be constituted with faculty and student representation from both Departments: Admissions Committee, Awards Committee, Curriculum and Enhanced Scholar Program, Evaluation/Review/Renewal Committee, and Annual Academic Day Program Committee. Recommendations from the Research Institute Executive Directors for membership on these committees will be valued.

Program Evaluation

A WACH program annual review will be undertaken. The Program Co-Directors and Program Oversight Committee are responsible for conducting the annual Graduate Program review. A 5-year internal evaluation will be conducted by the UBC Graduate and Postgraduate Studies and shared with the Faculty of Medicine and the WACH Program Leadership. A 10-year decadal external evaluation will be conducted by external reviewers. The latter reviews will typically be conducted in conjunction with the formal Departmental Review processes.



Allison Eddy, MD
Head, Department of Pediatrics, UBC
Chief of Pediatrics, BC Children's Hospital

Date: July 9, 2020



Geoff Cundiff, MD
Head, Department of Obstetrics & Gynecology

Date: June 30, 2020



Wyeth Wasserman, PhD
Executive Director
BC Children's Hospital Research Institute

Date: July 2, 2020



Lori Brotto, PhD
Executive Director
Women's Health Research Institute

Date: July 8, 2020

Appendix F Guidelines for Supervisory Activities

(I) Guidelines for granting supervisory privileges to non-Faculty of Graduate and Postdoctoral Studies (FG+PS) members

Rationale: The WACH program is co-housed in the Departments of Pediatrics and Obstetrics & Gynaecology. Within our departments, there are a number of research-intensive faculty with UBC partner track or clinical appointments. These scientists and investigators may be experienced and qualified in graduate supervision or may be interested in gaining experience and developing the skills required to shepherd graduate students through their programs. We are fully supportive of these individuals supervising in our program and will support individuals, who wish to develop skills required to make the supervisory experience rewarding for them and their future graduate students.

First and foremost, supervisors in the program must have a research focus. Ideally, this would be an externally funded research program but may also be a funded research project. Importantly, all supervisors must adhere to all UBC policies and requirements pertinent to graduate student training, including UBC's current minimum funding package.

Non-FG+PS faculty members with significant supervisory experience including serving on student's committees, participating in students exams (MSc defenses, PhD comprehensive exams, and PhD defenses), and who have successfully supervised students through graduation requirements, will be given supervisory privileges.

For non-FG+PS member faculty, who do not have supervisory experience, we recommend participating in the following activities to increase their graduate student supervisory experience:

1. Serve on the supervisory committee for MSc and/or PhD students (≥ 2).
We recognize that greater than or equal to 50% of the members of a supervisory committee must be FG+PS members and we will adhere to that UBC policy (≥ 2).*
2. Serve as a committee member examiner at an MSc defense, PhD comprehensive examination, and PhD defense. Depending upon approval by the program (for MSc) or FG+PS (for PhD), non-FG+PS faculty members may also serve as a University Examiner for MSc defenses, PhD comprehensive examinations, and PhD defenses.
3. Co-supervise an MSc student alongside an experienced faculty member, who is a member of FG+PS. If the first student is accepted into a PhD program or wishes to transition from the MSc to the PhD program, this is reasonable with support from the co-supervisor.

The Academic Review Committee will review requests for supervisory privileges from non-FG+PS members, which should include a cover letter highlighting cumulative graduate student training experience and the UBC Academic CV.

*The WACH Program Manager will establish and keep a list of supervisors in the WACH program and their research interests. This will be a valuable tool in identifying opportunities to gain supervisory experience.

**See attached: Supervisor-mentee expectations agreement

(II) The Graduate Program in Reproductive and Developmental Sciences

Agreement between Graduate Student and Supervisor

According to U.B.C. Policy 85, graduate student supervisors are to outline issues such as stipends, supervision, research data & publications to new members of their research team.

Policy 85. The University of British Columbia (UBC) is responsible for developing awareness among all students and members of faculty and staff involved in teaching and scholarly activities of the need for the highest standards of integrity, accountability and responsibility. UBC holds scholars responsible for scholarly and scientific rigor and integrity in teaching and research, in obtaining, recording and analyzing data and in presenting, reporting and publishing results. Research conditions for all involved in a research team should be outlined in a letter from the principal investigator before team members become engaged. Letters are to include issues as compensation, supervision, authorship, records of data, ownership and/or use of data, publication rights, and commercialization.

Accordingly, this agreement must be read and signed by the prospective graduate student and his/her proposed research supervisor. This agreement should be reviewed annually, prior to the beginning of each academic year. Upon completion, a copy of the agreement should be retained by each party, and the original should be forwarded to the RDS Program Coordinator, Mrs. Roshni Nair [rnair@cw.bc.ca], for review by the Director of the RDS Program (Dr. Dan Rurak; drurak@cw.bc.ca) and placement in the student's file. **COMPLETION OF THIS FORM IS A CONDITION FOR THE ACCEPTANCE OF A STUDENT INTO THE GRADUATE PROGRAM IN REPRODUCTIVE AND DEVELOPMENTAL SCIENCES.**

Student Name: _____ Student Number: _____

Degree Program: _____ Date: _____

Financial Support. Faculty members of the RDS Graduate Program are committed to supporting full-time graduate students financially during the course of their training. The minimum level of financial support is \$20,000 per annum, for a minimum duration of 2 (M.Sc. students) or 4 (Ph.D. students) years. After these minimum durations, continued funding is at the discretion of the Research Supervisor. If termination of a student's funding is contemplated due to lab funding / financial difficulties, the Research Supervisor must inform the student of this possibility in writing (copy to the Program Coordinator) at least 3 months prior to the end date of the student's stipend. Students are expected to pay tuition from their stipend.

The minimum funding package may include a maximum of two 0.5 Teaching Assistantships per year. Note that students are required to apply for as many scholarships/awards for which (s)he is eligible. Students who receive a scholarship/award (excluding any tuition waiver) equal to or more than \$8,000/yr will receive a minimum top-up of \$3,000/yr above the minimum funding level for the duration of their scholarship/award (*i.e.* these students will receive a minimum funding package of \$23,000/yr). Students who receive a scholarship/award equal to or more than \$16,000/yr will receive a minimum top-up of \$6,000/yr above the minimum funding level for the duration of their scholarship/award (*i.e.* these students will receive a minimum funding package of \$26,000/yr). In the case of students receiving scholarships/awards totaling \$35,000/yr or greater, any top-up is at the discretion of the Research Supervisor. When a scholarship/award ends, continuation of the top-up is at the Research Supervisor's discretion.

The sources of support indicated below (*e.g.* Scholarship, Teaching Assistantship, Research Assistantship, Other) will be available to you, subject to satisfactory academic and research progress and unless unforeseen factors (*e.g.* termination of research grant, reductions in T.A. budgets) intervene. **ALL FINANCIAL SUPPORT IS CONTINGENT UPON SATISFACTORY ACADEMIC AND RESEARCH PERFORMANCE AND IS SUBJECT TO YEARLY REVIEW.**

Supervision. The responsibilities of Supervisors and Graduate Students can be found at <https://www.grad.ubc.ca/handbook-graduate-supervision/supervisor-responsibilities> and <https://www.grad.ubc.ca/handbook-graduate-supervision/graduate-student-responsibilities>, respectively. Further information can be found in the *Handbook of Graduate Supervision* (<https://www.grad.ubc.ca/handbook-graduate-supervision>) which students and Research Supervisors are encouraged to read. You are expected to conduct research under the general guidance of your Advisory Committee. Your Committee should meet regularly, at least once per year, and a formal report of each meeting must be forwarded to the RDS Program Coordinator.

Records of data/Authorship. Original records must remain with the lab. Students may take copies with them when they have completed their program to assist in writing papers. If there are outstanding papers when you leave the lab, you will have one calendar year to draft a manuscript. If, at the end of that time, you have not produced a manuscript, it will be written for you, and your position in the author list may change.

Intellectual Property. Both parties acknowledge that, according to current U.B.C. policies, the creator(s) of intellectual property has rights to full or partial ownership of that property. Full details of U.B.C.'s intellectual property policies can be found at <http://universitycounsel.ubc.ca/policies/index/> (note especially policies 87 and 88). These resources should be consulted prior to any agreement being reached between a supervisor and a student concerning the disposition of intellectual property.

Conflict Resolution. The Faculty of Graduate and Postdoctoral Studies (G+PS) at U.B.C. recommends that every effort should be made to resolve differences and disputes as close as possible to the source of the problem. The following steps should be taken in order. Each level will want to make sure that all reasonable efforts have been exhausted at all previous levels prior to launching a formal investigation. Informal advice can be offered by G+PS at any step; additional information is provided in the *Handbook of Graduate Supervision*.

- 1) *The student and supervisor (or other party, e.g. the student's Advisory Committee) should first discuss problems frankly and seek solutions.*
- 2) *If a problem cannot be resolved at this level, it should normally be referred next to the RDS Program graduate advisor, Dr. Timothy Rowe (trowe@mail.ubc.ca), and RDS director, Dr. Dan Rurak.*
- 3) *The problem and all steps taken to resolve the problem may progress to a review by G+PS.*
- 4) *If no resolution can be achieved, the problem may ultimately be taken to the Dean of Graduate and Postdoctoral Studies. The Dean will check to ensure that each previous level of problem resolution has been explored to the fullest extent before proceeding to other levels.*

Agreement. The undersigned agree that the preceding accurately describes the present plan for your degree program and recognize that it may require change because of unforeseen circumstances (including, but not limited to, performance in course work and research). Both parties note that this document is subordinate to Graduate Regulations, University Policies and Procedures and contracts with CUPE 2278 and with other parties.

THIS AGREEMENT SHOULD BE REVIEWED ANNUALLY and any changes to the agreement should be forwarded to the Director of the RDS Graduate Program, with a brief explanation.

Research Supervisor: _____

Date: _____

Student: _____

Date: _____

Upon completion, a copy of this agreement should be retained by each party and the original should be forwarded to the RDS Program Coordinator [rnair@cw.bc.ca] for review by the Director of the RDS Program and placement in the student's file.



THE UNIVERSITY OF BRITISH COLUMBIA

(III) Reproductive and Developmental Sciences

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RDS Program Contacts

	Contact	Roles/When to Contact
Program Co-Director Dr. Paul Yong	pyong@cw.bc.ca	<ul style="list-style-type: none"> • Chair RDS Steering Committee • Recruitment of students • Determines Admissions Committee • Final Decision for MSc and PhD student applications • Ensures Supervisors/Students are aware of, and adhere to applicable policies and procedures • Point of contact for Student/Supervisor inquiries/concerns
Program Co-Director Dr. Alexander Beristain	alexander.beristain@ubc.ca	<ul style="list-style-type: none"> • Chair Graduate Program Awards Committee • Chair Curriculum Committee • Recruitment of students • Oversees the Basic Science core of the program

Program Assistant Natalie Twohey	natalie.twohey@cw.bc.ca 604-875-2424 x3108	<ul style="list-style-type: none"> • Point of contact for all administrative questions • Liaison with G+PS • Form submission
Education Manager Leah Solomon	solomon@cw.bc.ca	<ul style="list-style-type: none"> • Unresolved items after first contacting Program Administrator or Program Directors

Principles of Quality Supervision

The UBC Faculty of Graduate and Postdoctoral Studies (G+PS) lists the [Seven Principles of Excellent Graduate Student Supervision](#) as:

1. Students' learning benefits from individualized supervisory approaches.
2. Students' learning develops with both dialogue and guidance.
3. Students' multi-faceted growth as scholars is supported by supervisors.
4. Students learn from role models.
5. Communication is key to teaching and learning and to relationship-building.
6. Scholarly and other communities are central to students' development.
7. Reflection makes one a better supervisor.

These principles will be discussed in the RDS Supervisors' Workshop, and at regular campus-wide [supervision workshops](#). Use the link above for further details on the principles, examples of each principle in practice, and key G+PS resources to support supervisors.

Supervisor Responsibilities

Supervisor responsibilities include:

- Preparing a program of study for the student.
- Arranging for and attending all supervisory committee meetings and examinations when applicable, ensuring that these are held in accordance with G+PS and RDS Program regulations.
- Reviewing, and expediting submission of, manuscripts produced by the student.

- Reviewing the thesis/dissertation in both draft and final form, and ensuring defense (final oral exam) and graduation are scheduled/completed in a timely manner.

Supervisors, with the support of the RDS Program, should promote the academic and professional progress of the student by:

- Providing an environment that is conducive to research and in which the student can grow intellectually.
- Maintaining a respectful environment that in which the human dignity of each individual is valued, and the diverse perspectives, ideas and experiences of all members of the community are able to flourish.
- Ensuring that there are sufficient material and supervisory resources for each graduate student.
- Providing appropriate guidance to the student on the nature of research and the standard expected.
- Ensuring appropriate biosafety and Human Research Ethics Board approvals are obtained as necessary.
- Establishing, with the student, a realistic timetable for completion of various phases of the program.
- Considering the graduate student a junior colleague.
- Working with the student to establish the supervisory committee as soon as possible after the start of the program and ensuring that it maintains contact and formally meets at least once a year with the student.
- Ensuring that the student is adequately supervised by the provision of an acting supervisor, when going on leave or an extended period of absence.

Supervisors should actively participate in the RDS program and interact with fellow supervisors by:

- Participating in at least one of the RDS committees (e.g. Admissions, Awards, etc.), as requested.
- Serving on graduate student supervisory committees as a member or chair, when requested.
- Serving as an examiner, when requested.
- Attending at least one RDS Supervisor workshop.
- Leading an RDS (OBST) graduate course, or lecture/participate in a RDS (OBST) graduate course, in consultation with the RDS Director(s).
- Attending their student's presentations in the OBST 506 seminar course.

Please see the Terms of Reference for RDS Membership for details on the expectations for full and associate members (Appendix B.)

The sections below will address specific RDS policies and guidelines relevant to providing quality supervision and supporting a student's progress through their program.

Graduate supervision can be a complex form of pedagogy, and the RDS program is continually growing and evolving.

Please do not hesitate to bring questions or complex situations to the attention of the Program Co-Directors and Program Assistant.

Admissions

Applicants to the RDS program are required to secure a research supervisor prior to applying. This means that a faculty member has agreed to act as their research supervisor and provide the required minimum stipend (\$20,000/a), should the applicant be admitted to the RDS program.

It should be clear to both applicants and supervisors that admission is not guaranteed, but subject to the applicant meeting the minimum admissions requirements, and receiving approval from the RDS Admissions Committee and the Faculty of Graduate and Postdoctoral Studies.

Minimum Admissions Requirements

- MSc program: minimum 4 year degree (BSc) in biological sciences, or area of study appropriate for proposed research project
- PhD program: minimum MSc (or in some cases, MD) in biological sciences or related area
- B+ average

International applicants must meet the minimum academic requirements for the country in which their education was completed, and meet the [minimum English proficiency test scores](#).

Other considerations:

- How did the applicant perform in courses most relevant to their proposed course of study?
- Are the reference letters positive and detailed? Do they comment on qualities likely to make the applicant a successful graduate student?
- Does the student indicate academic and/or professional goals that are in line with the RDS program?

How to Choose a Great Graduate Student

It is highly recommended that you interview a potential graduate student, either in person, by phone or virtual meeting platform (e.g. Skype).

Questions for you to consider when making a decision to offer supervision:

- Do you have the time, resources and knowledge to supervise this student?
- Does this student have an adequate academic background and experience to be successful?
- Are the student's goals and expectations consistent with expected outcomes?
- Will you be able to work well with this student? Do you have compatible communication styles? How might you address any personal, cultural or structural challenges this student may face?
- Are there adequate resources to support this student, such as:
 - Funding for student stipend (minimum \$20 000/a) and research costs
 - Colleagues who can serve on a supervisory committee
 - Opportunities to participate in research, teaching, and extracurricular activities
 - Engagement in a community of scholars

Please feel free to consult with the Program Co-Director if you are unsure of how to proceed. The Program Assistant can verify the admissions requirements and answer questions from applicants.

Applications Circulated to Supervisors

In rare cases where an applicant has not secured a supervisor prior to applying, and they are deemed a strong candidate by the Admissions Committee, this application will be circulated to RDS faculty for their consideration.

If you have a vacancy and are interested in offering a spot to the applicant, you will be put in contact with them. You can then determine suitability of this fit for both yourself and the applicant as per above, knowing that the RDS program will make an offer of admission contingent on a supervisor being secured.

Faculty of Graduate and Postdoctoral Studies Approval

In 2016, admissions authority was delegated to UBC graduate programs. This means that each graduate program reviews applications, determines eligibility, and is authorized to issue offers of admission.

These offers are still subject to approval by the Faculty of Graduate and Postdoctoral Studies (G+PS).

Two situations of note in which G+PS approval is critical are:

- The institution used for the basis of admission is not yet 'confirmed for admission.' This means that there is not yet enough information available to determine if the institution is admissible, and G+PS will further review the transcripts before confirming/denying the offer of admission.
- A rationale is required to support the admission of this student (low GPA, low English proficiency scores, etc.)

Please note: A rationale is also required for students admitted on an ungraded MD/MBBS (or equivalent) degree.

FAQ

How can I respond to so many emails from interested applicants?

It is useful to have a stock response for when you do not have vacancies, or when interested applicants do not warrant further conversation:

Thank you for your interest in the ____ lab/research team. I do not currently have any openings for graduate students. Openings may become available in ____.

Or

Thank you for your interest in the ____ lab/research team.

Admissions to the Reproductive and Developmental Sciences program are very competitive. I am currently looking for a (MSc/PhD) student interested in conducting research on _____, and able to demonstrate their potential as a graduate student with: high grades in or similar coursework, and prior research/wet lab experience.

If you have such experience, please respond with your transcripts, CV, and area of research you are interested in.

What if a student brings their own funding?

It is possible to accept students who are sponsored by their home countries or home institutions. This funding must meet or exceed the RDS minimum stipend (\$20 000/a), and must be confirmed in writing.

What if a student claims self-funding (non-institutional)?

We cannot accept 'self-funded' students. These are applicants who offer to waive their right to a stipend.

The RDS program requires that all students receive the minimum stipend from their supervisor or an independent awarding agency. This ensures that students are chosen on academic merit, regardless of personal finances.

Can I accept a student, conditional on their securing an external award?

Yes. Please indicate to the student (using the Memo of Acceptance in Appendix B) that you are willing to act as their supervisor, contingent on their admission, and contingent on their securing an external award.

Please note:

- Supervisors are required to supplement or 'top up' external awards that fall below the \$20 000/a minimum stipend.
- Award announcement timelines may alter the timeline for making official offers of admission.

How do I indicate agreement to supervise an applicant?

Please use the Memo of Acceptance in Appendix B to indicate your willingness to supervise an applicant. You may also note any conditions to this agreement.

If your ability or willingness to supervise an applicant changes, please contact the Program Assistant as soon as possible.

What if I would like to make offers to multiple students but have only one spot (as some applicants may accept positions elsewhere)?

This is acceptable, but supervisors must ensure the formal acceptance is not offered to more than one student per spot, and that the students that are unsuccessful are informed of the fact as soon as possible.

What are the admissions timelines?

Typical timeframes for the three admissions periods are:

Start Date	Application Opens	International Deadline	Domestic Deadline	Admissions Decisions Sent
January	Early May	Late June	Late July	October
May	Early September	Late October	Late November	January – February
September	Early November	Late January	Late February	April – May

Specific dates can be found here: <https://obgyn.ubc.ca/education/graduate-studies/prospective-students/how-to-apply/>

Why do international students have an earlier deadline?

Setting the application deadline one month earlier for international applicants means that we can get the ball rolling on these applications earlier. The Program Assistant reviews all applications for completeness and eligibility. The applicant may need to be contacted for further information or documentation, and this happens more often in the case of international applicants.

It is important to be able to give admissions decisions promptly to international applicants, to maximize the time available for them to arrange the logistics of their immigration.

Getting Started: Supervisor Training

Mandatory Training

1. TCPS 2 CORE training is expected for all individuals who engage in research involving humans. PI's and supervisors are required to be familiar with TCPS 2 guidelines and are responsible for ensuring that any trainees conducting research under their supervision adhere to the guidelines and policies. Any graduate students, and medical residents are required to have completed the on-line tutorial before submitting an application for REB approval. This training is free and requires about 2 hours to complete.

- <https://ethics.research.ubc.ca/education-training/online-tutorials-training>

Certificates of completion do not need to be included in the REB application, but copies should be printed and retained by the study supervisor to ensure compliance.

Investigators conducting research funded by NIH or any other US agency may be required to complete the training through the NIH office of extramural research

- [Protecting Human Research Participants \(PHRP\)](#)

2. Privacy & Confidentiality

a. UBC Fundamentals Training: There are two parts, both of which must be completed.

- <https://privacymatters.ubc.ca/fundamentals-training>

b. The PHSA Privacy and Confidentiality online course is required by all staff, students, volunteers or others who are involved in clinical research studies at Children's & Women's. (<1hr).

- Access via [PHSA Learning Hub](#)

3. CITI Responsible Conduct of Research

How should you conduct your research? What practices should you follow? Researchers are expected by the public, their colleagues, their institutions, and their funding sources to behave with integrity. The Responsible Conduct of Research (RCR) collection of courses provides the learner with a solid foundation of knowledge relating to the norms, principles, and rules governing responsible research practice.

Recommended for all staff.

- <https://about.citiprogram.org/en/series/responsible-conduct-of-research-rcr/>

4. Biospecimen Research Methods. Required if working with biospecimens, as per UBC Ethics.

- <https://www.edx.org/course/biospecimen-research-methods>

5. Safety Programs Training (UBC). It is required that supervisors complete all applicable sections, with Safety Supervision at UBC for required for all.

- <http://srs.ubc.ca/training-and-general-education-courses/safety-programs-training>

6. Biosafety Training (UBC). Required, if applicable.

- <https://srs.ubc.ca/training-and-general-education-courses/research-safety-training-courses/biological-safety-training/>

7. Bullying and Harassment Training. Mandatory for all supervisors.

- https://hse2.ubc.ca/custom_login/

Additional Training

Ethics education and training will help to improve the quality and efficacy of your application. For new researchers we recommend that you familiarize yourself with the basic ethics process here at UBC. The CREB board has two webinars designed to assist you with a basic understanding of the UBC REB process.

- [An Introduction to the UBC Ethics Review Process and the Clinical Research Ethics Board](#)
- [Common Challenges in Ethics Submission](#)

The CREB and VCHRI are currently offering a number of ethics training options for researchers wishing to find out more about how to navigate RISE (hands on workshop), informed consent and the secondary use of data. These sessions are open to any member of the Department of Medicine.

For more information about current training programs please consult the [VCHRI webpage](#).

Getting Started: The Student – Supervisor Expectations Checklist

You will find the RDS Student-Supervisor Expectations Checklist in Appendix B. **You should complete this checklist with each incoming graduate student within their first two months. A copy of the completed checklist must be sent to the Program Assistant for the student's file.**

This checklist is a valuable tool, and can be used to guide an important conversation with your student about each of your roles and responsibilities, mutual expectations, and workplace and academic norms.

The RDS program encourages you to address each item thoroughly and openly, ask and answer questions, and add any extra items important to establishing a quality working relationship and mentorship, such as:

- The student's and supervisor's roles with regard to data collection and analysis.
- Expectations about work hours.
- Who trains the student to do technical work.
- Standard hours for office space or laboratory, and policy for work done outside these hours.
- Safety training that must be completed.
- Dress code or appropriate laboratory attire.
- Presentations at conferences and meetings: how many are expected, whether funding is available.

You may revisit this checklist at any time if you are experiencing difficulties with a student, or need to realign expectations. We also ask that the expectations checklist is completed **annually** and attached to the student's progress report for annual supervisory committee meetings.

Research Conditions

In addition, [University Policy 85](#) requires that **research conditions for all involved in a research team be outlined in a letter from the principal investigator before team members become engaged.**

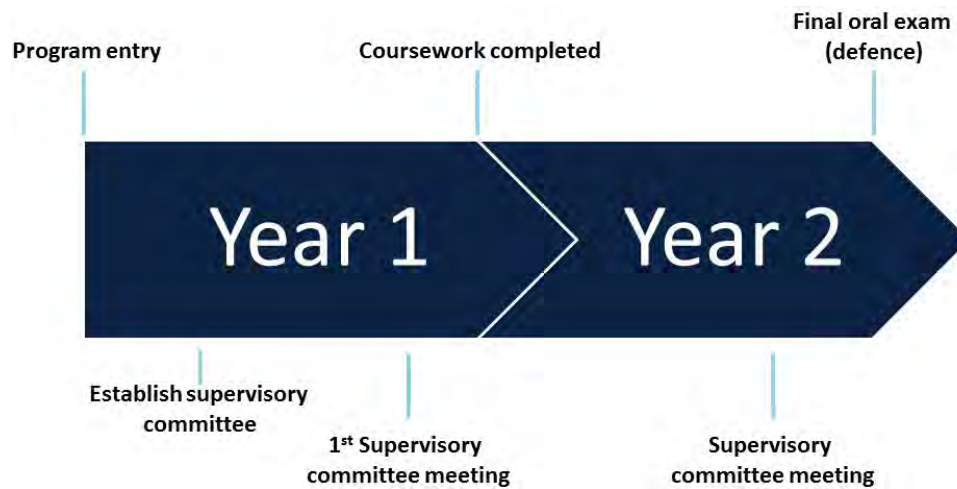
Letters should cover issues such as compensation, supervision, authorship practices, records of data, ownership and/or use of data, publication rights, and commercialization. The student-supervisor expectations checklist may assist supervisors in meeting this University requirement, or letters detailing research conditions may be appended to the checklist.

An example can be found in Appendix B.

Program Timelines

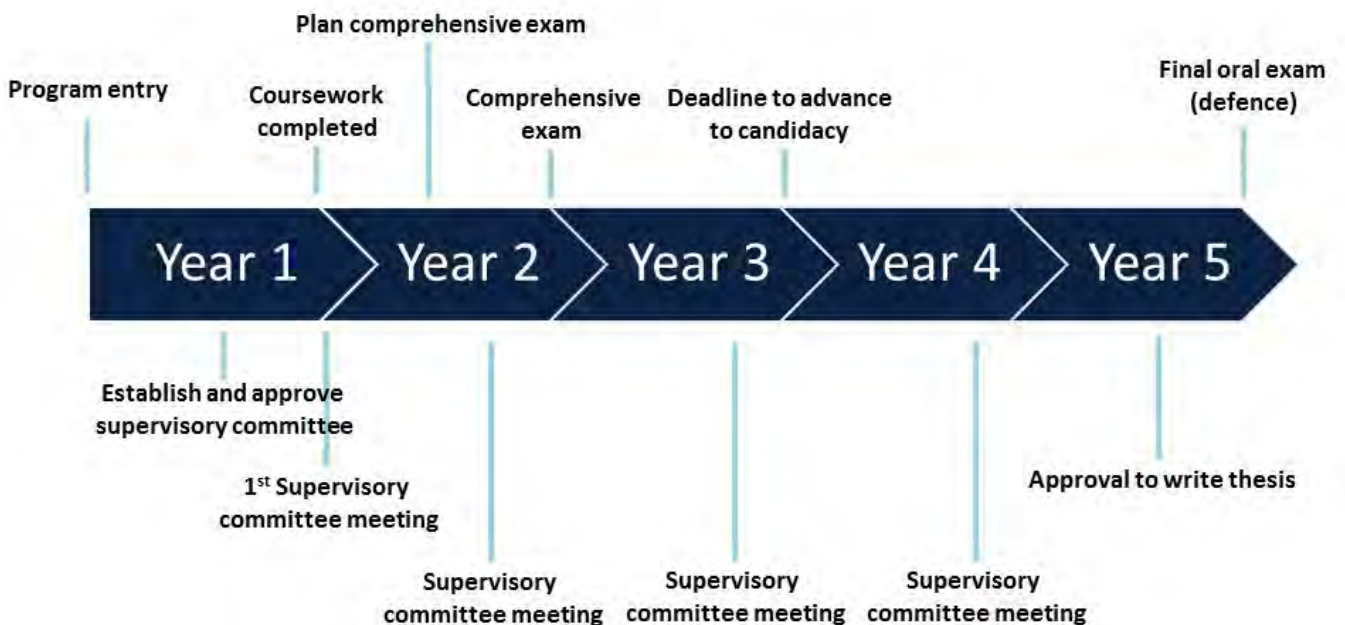
Typical program timelines for MSc and PhD students are shown below. Significant deviations (longer or shorter programs) should be discussed at supervisory committee meetings.

MSc



PhD

Some PhD programs may be completed in less time, i.e. 4 years.



The topic and scope for the student's research project should be established as early as possible, and at latest by the end of the first year (ie. this is when the research proposal written by the student is due). The student should be ready to present their research proposal for approval at their first supervisory committee meeting.

For MSc students, the research project is typically already well-defined by the supervisor, although consultation with the student as to their specific goals and interests may influence the direction or scope. It is also appropriate to offer the student the choice of several available projects. A MSc research project should be accomplishable in 2 years, have a clear research question, include a component of literature review, and include data collected by the student. For PhD students, the research project should be developed in consultation between the student and supervisor. The research proposal should be ready to be presented for approval at the first supervisory committee meeting. A PhD research project should include an original contribution to scientific or medical knowledge.

Please note that the supervisor should keep the research and tasks assigned to the student aligned with their research topic, and career trajectory/development. Supervisors should be in communication with the student regarding their career goals, and should be careful not to assign tasks that are not aligned with the student's career goals, or which do not have significant educational value. If you are unsure of whether work you wish to assign is appropriate, please feel free to confirm with the Program Co-Directors.

Examples of appropriate tasks:

- Data collection and analysis
- Literature review
- Grant preparation
- Manuscript writing and submission
- Preparation of presentations

Coursework

MSc

Minimum 30 credits:

- 18 credits – OBST 549 – MSc thesis and oral exam
- 3 credits – OBST 506 – Mandatory for all RDS students (including RDS Journal Club)
Students will present twice in OBST 506. Supervisors should attend their students' presentations, and join in the discussion. Students are responsible for communicating

the dates of these presentations.

- 6 credits – Two additional OBST courses
- 3 credits – One additional course, OBST or external

Courses should be selected in discussion with the supervisor. **Deviations from the “two additional OBST courses” are possible, with permission from the Program Co-Director.**

PhD

Minimum 21 credits:

- OBST 649 – PhD dissertation and oral exam
- 3 credits – OBST 506 – Mandatory for all RDS students

Students will present twice in OBST 506. **Supervisors should attend their students’ presentations, and join in the discussion.** Students are responsible for communicating the dates of these presentations.

Additional coursework may be selected in consultation with the supervisory and supervisory committee.

PhD students are also required to pass a comprehensive examination.

External Seminars and Professional Development

The RDS program recognizes that the academic landscape is changing, becoming more competitive, and involves researchers from all four health research pillars. Graduate students not only need to excel in academics and research, but also develop skills in communication, leadership, knowledge translation, networking and professionalism that will help them in their future careers.

While graduate students are a key component of a functioning laboratory or research environment, and while schedules are often complicated and crowded, **we urge supervisors to support RDS graduate students in attending seminars and workshops that develop their skills and knowledge base**, such as:

- [Graduate Pathways to Success](#) workshops (G+PS)
- [UBC Library](#) workshops
- Relevant research institute seminars, research rounds, and academic days: BCCHRI, WHRI, VCHRI
- OBST 506 seminars and the RDS Journal Club (following OBST 506 every second week)

It is strongly encouraged that non-first year students and faculty attend these seminars as well.

- OBGYN Department conference ([DA Boyes Society Meeting](#) – first Thu/Fri of November) and [OBGYN Annual Academic Day](#) (May)

Some strategies to mitigate student and supervisor stress, and promote balance:

- Discuss with the student their goals and areas for improvement, and support them in looking for opportunities to address these using the resources above. Planning ahead is critical to ensure the needs of both student and supervisor are met.
- Identify the skills and seminar topics you think would be of the most value for the student. Your expertise and guidance will help students narrow their options to the most useful.
- Support students in attending workshops/seminars available at times/locations that will offer the least disruption.
- Work with the student to generate a schedule that avoids lengthy experiments on Thursdays, or assign work that can be done remotely/with laptop alone. The student can then travel to and attend the OBST 506 seminar/RDS Journal Club, and use the rest of the afternoon for productive work without returning to the lab.
- If important workshops on a certain topic are difficult to schedule in a way that does not disrupt student activities, let the Program Assistant know. Sometimes it may be possible to invite the speaker to a more central location, incorporate this material into other RDS meetings, or find an equivalent offering elsewhere.

Supervisory Committee

The supervisory committee is established by the research supervisor and student, in conjunction with the Program Co-Directors. The committee should be formed as soon as possible.

The Program Assistant can assist with scheduling supervisory committee meetings, as initiated by the student and/or supervisor.

The supervisory committee must meet at least annually, with the first meeting taking place before the end of the student's first year. It is strongly recommended that the student's research proposal be presented at the first meeting by the end of their second term of registration.

Because a MSc project typically takes two years, the schedule may be more like: first meeting at end of first year, second meeting at 18-20 months, defense.

Supervisory Committee Composition

The supervisory committee must have a minimum of four (MSc) or five (PhD) members, including:

- The supervisor (or co-supervisors)
- A Chair, who is appointed by the Program Director

The Chair is a member of the RDS faculty with significant experience in the supervision of graduate students, who will ensure that the meetings proceed according to protocol.

- An additional RDS faculty member
- A G+PS faculty member from either the Faculty of Medicine or the Faculty of Science who is not a full member of the Department of Obstetrics and Gynaecology
- PhD supervisory committees require an additional faculty member (from 1 of the 2 categories above)

Other members may be suitable for inclusion on the supervisory committee. Please consult with the Program Directors if you are unsure.

Inclusion of supervisory committee members not meeting the criteria above require:

- MSc: approval of the RDS Program Director
- PhD: approval of the Faculty of Graduate and Postdoctoral Studies

The Program Assistant will facilitate the approval of supervisory committee members.

Additional information: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/non-members-faculty-graduate-postdoctoral-studies-supervisory>

Responsibilities of the Supervisory Committee

- Provides general supervision of the student's research and academic studies. Reviews the student's program of study.
- Reviews and approves the student's research proposal.
- Reviews student's research progress and confirms that there is sufficient material for inclusion in the thesis.
- Makes note of any concerns in the above areas to the Program Co-Directors.

- Certifies that the student's thesis is ready for final examination. At least two members will be asked to serve as examiners for the final oral examination(defense).
- Additionally, two members (who are not the Chair) will be asked to serve as examiners for the comprehensive examination for PhD students.

Agenda for Supervisory Committee Meetings

Annual meetings of the supervisory committee are designed to be a supportive endeavor through which the students can demonstrate progress in their studies and research, and seek guidance from experts. However, it is also an important tool for helping the student who is experiencing difficulties with their research project or academic progress. It should be clear to all that the mandate of the committee is to help the student in as many ways as possible.

In preparation for the meeting, the student should distribute the following to each of the committee members, Program Directors, and the Program Assistant, at least 1 week before the meeting:

1. A complete progress report/research proposal (Graduate Student Annual Progress Report)
2. Student-Supervisor Expectations Checklist
3. Research proposal
4. Additional documents, including papers in press and accepted abstracts

The student should report on their academic and research progress, including further research work necessary to complete the project, in a presentation of 20-30 min. The supervisory committee reviews and evaluates this information, asks questions, and offers guidance and direction. The Chair submits a written report to the Program Assistant as soon as possible following the meeting. This report is circulated to the student and supervisory committee members for their records.

If there are concerns identified regarding the student's progress, the Program Director will follow up and help to determine an appropriate course of action. In extreme cases, this may result in voluntary or recommended withdrawal for unsatisfactory academic progress.

A final supervisory committee meeting is required in order for PhD candidates to be given permission to write their dissertation. In order to proceed with writing the dissertation and planning the defense, a quorum must approve this course of action. This quorum consists of: the supervisor, Chair, and two other members. The committee can record this decision using the Supervisory Committee Meeting – Chair's Report.

Roles of the Supervisory Committee Chair

- Moderates and contributes to the discussion in meetings and examinations.
 - Summarizes the opinions of the committee.
- Helps the committee come to consensus decisions.
 - If there is a lack of consensus, the chair helps determine an appropriate course of action (for example, scheduling additional meetings, or taking an average of suggested marks for a MSc final oral exam)
- Files a written report for the student's file.
- For PhD students, serves as the Comprehensive Examination Chair and completes the Comprehensive Exam Report detailing the minutes and results.
 - If there is a tie vote, the Chair will cast the deciding vote.
- In the case of significant disputes or problems, the Program Directors should be informed.
- The Program Director and Chair are also asked to help organize annual supervisory committee meetings in the event that the Program Assistant is unable to obtain compliance from the parties involved.

Comprehensive Examination

It is a G+PS requirement for PhD students advance to candidacy by 36 months from their start date. A key requirement for candidacy is the successful completion of the comprehensive examination.

In the RDS program, the comprehensive exam is an oral exam with 4 examiners, to assess the student's knowledge of their chosen field of study, the general area of reproductive and developmental sciences, and the student's ability to communicate their understanding and critical thinking in English.

Upon successful completion of the comprehensive exam, the RDS Program will recommend to G+PS that the student be advanced to candidacy (assuming the other requirements of completion of coursework and approval of research proposal have also been met.)

It is important that doctoral students realize the importance of the comprehensive exam, a critical milestone for doctoral students. This exam is at least as important as the final oral exam/defense. The exam is intended to determine whether the student has the knowledge base and critical thinking skills to make an original contribution to their area of research. This is

a crucial mechanism for ensuring that students do not begin dissertation work that they are not prepared to complete and defend successfully.

By the time of the defense, the PhD candidate will likely be, with the possible exception of their supervisor, more knowledgeable about their project than any of the examining committee members. This is not the case with the comprehensive exam.

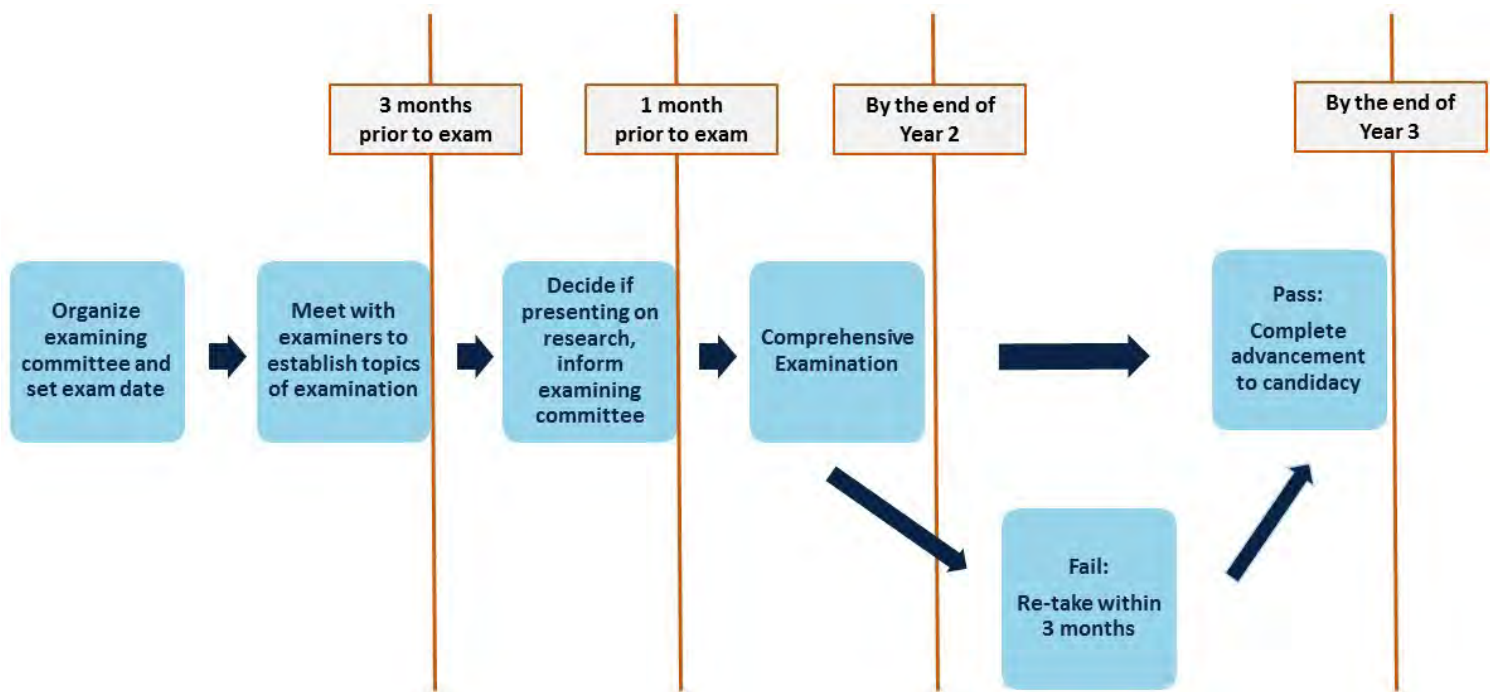
A student who fails 2 attempts will not be permitted to continue as a PhD student.

Supervisors should:

- Familiarize themselves with the RDS guidelines for the comprehensive exam.
- Support their students in preparing for this exam in a timely manner.
- Ensure that students understand the importance and weight of the exam.
- Supervisors may attend the comprehensive exam, but do not ask questions, and are not members of the examining committee.
- Inform the PA and PD(s) if they have any concerns with a student's progress toward the comprehensive exam.

See Appendix B for:

- Guidelines – Comprehensive Exam (PhD)



Final Exams

MSc Oral Examination (Defense)

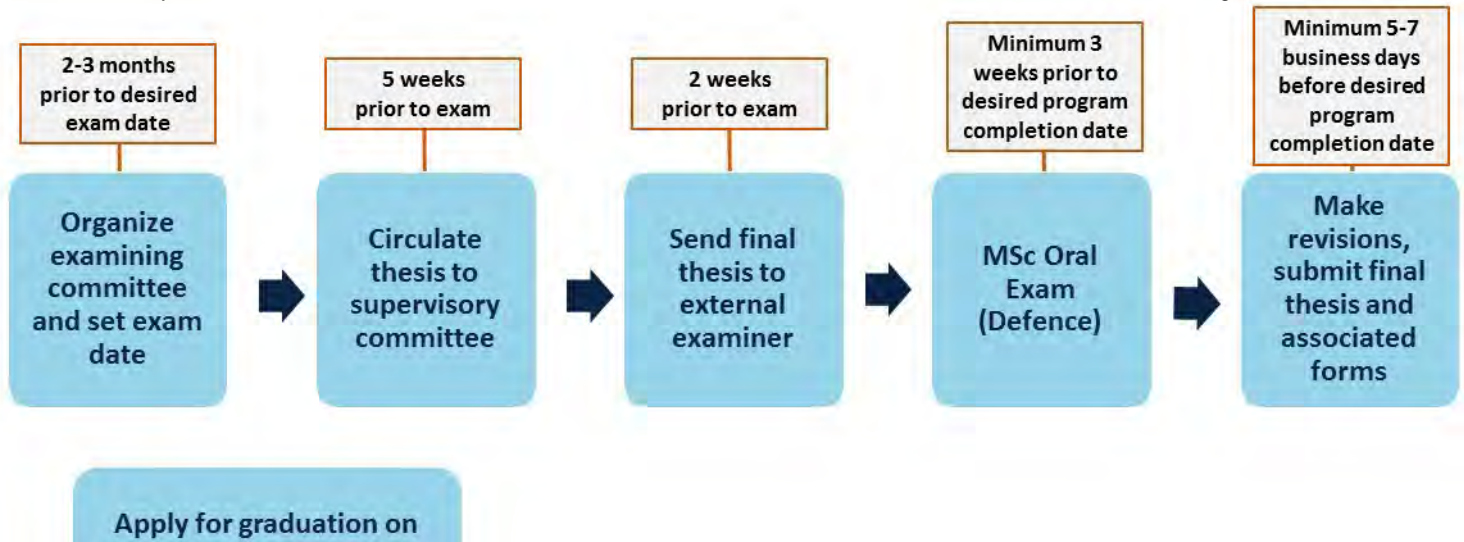
The RDS program requires a final oral examination (defense) at the Master's level. This exam is not subject to G+PS-level policies, but should adhere to the policy/procedures included in Appendix B.

Supervisors should:

- Familiarize themselves with the RDS requirements and procedure for the MSc oral exam.
- Support their students in preparing for this exam in a timely manner.
- Make recommendations for appropriate external examiners.
 - External examiners for MSc exams can be academic or clinical faculty members outside of the RDS faculty, with expertise in the student's research topic.
- Be the first reviewer of the thesis.
- Advise the student and provide guidance on the preparation of their oral presentation, communication with examiners, and professional conduct in the exam.
- Serve as an examiner.
- Inform the PA and PDs if they have any concerns with a student's progress towards graduation.

See Appendix B for:

- MSc Oral Examination – Guidelines
- MSc Oral Examination – Conduct and Chair's Report
- MSc Oral Examination – Planning Tool



Doctoral Oral Examination (Defense)

The Faculty of Graduate and Postdoctoral Studies requires a final oral examination (defense) at the doctoral level. This exam is subject to G+PS-level policies and procedures, which must be followed closely. As planning the doctoral exam is a complex process, it is recommended that you review both the guidelines included in Appendix B, and the more detailed resources available online with [G+PS's Doctoral Exam Guide](#).

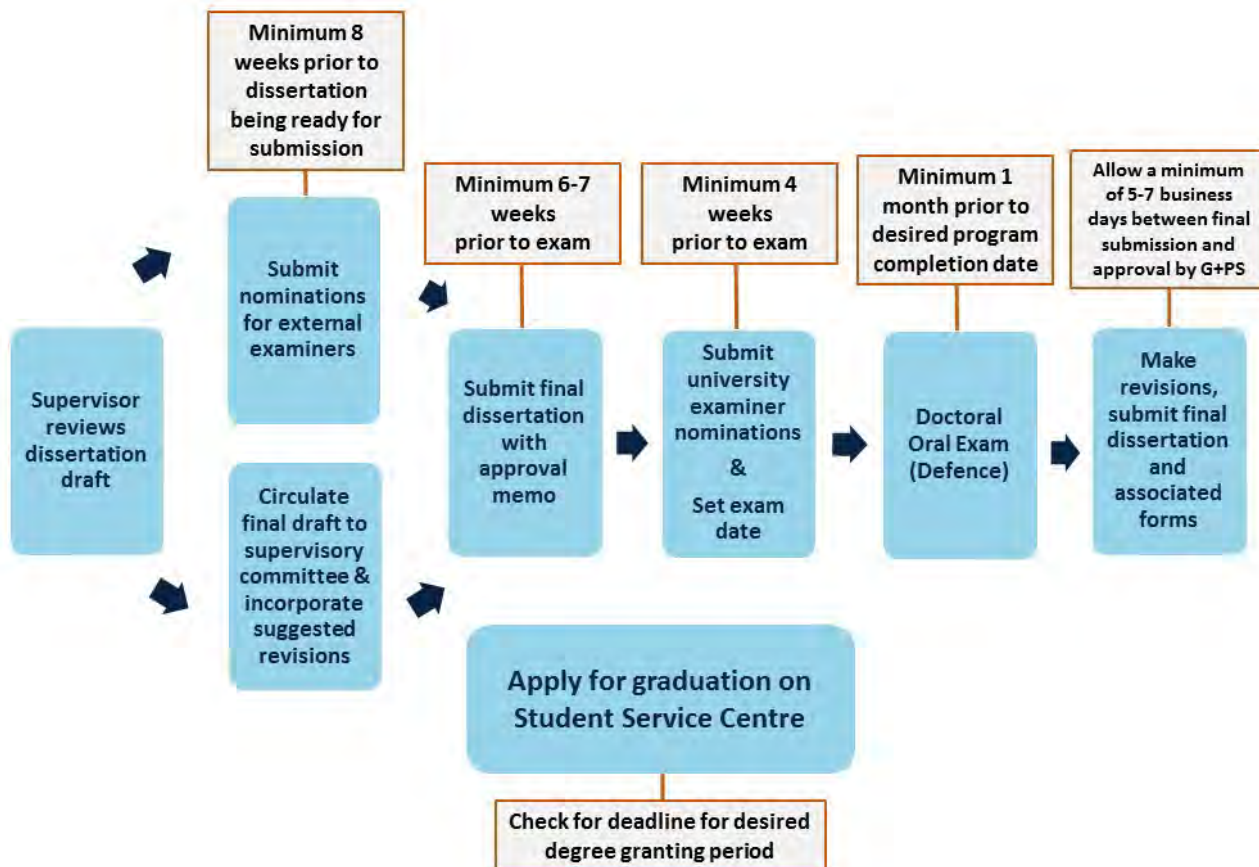
Supervisors should:

- Familiarize themselves with the requirements, procedure, and timeline for the PhD oral exam.
- Support their students in preparing for this exam in a timely manner.
- Make recommendations for appropriate university and external examiners.
 - There are strict eligibility and arm's length requirements for both types of examiners, so please thoroughly review these to prevent recommendations being rejected.
- Be the first reviewer of the dissertation.
- Advise the student and provide guidance on the preparation of their oral presentation, communication with examiners, and professional conduct in the exam.
- Decide if you would like to invite the external examiner to attend in person, and work with PA to arrange travel, copying the Graduate Doctoral team on all communications.
 - The supervisor is responsible to covering the external examiner's travel expenses, and may apply for \$500 from the Doctoral External Examiners Transport Fund.
- Work with the Program Assistant to ensure the [Off-Site Final Doctoral Oral Examinations Graduate Program Responsibilities](#) are accomplished, if necessary.
- Serve as an examiner.

- Inform the PA and PD(s) if they have any concerns with a student's progress towards graduation.

See Appendix B for:

- Doctoral Oral Examination – Planning Tool



Transfer from MSc to PhD

MSc students are eligible to transfer into the PhD program if they have completed:

- 1 year in the MSc program

- 9 credits at the 500-level or above, with first class standing (80% or better)

Transfers need to be approved by the research supervisor and Program Director, and supported by the supervisory committee.

Students entering the doctoral program after partial completion of a master's degree must:

- Demonstrate research ability/potential
- Complete a total of 12 credits, with a first class average, during their first 2 years of study. Of these, 9 credits must be 500-level or above, with first class standing.

The start date of the PhD program will be the date of first registration in the MSc program. This is important to keep in mind for candidacy and graduation deadlines.

Additional information and form: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-masters-doctoral-programs-without-completing-masters>

Transfer from PhD to MSc

PhD students may apply for a transfer to the MSc program, with the support of their research supervisor and Program Director. This should be initiated early in a student's program, be appropriate for their professional goals, and include a recommendation from the RDS program documenting the reasons for the transfer. Such transfers may have implications for student funding.

Additional information and form: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-doctoral-masters-programs>

Transfer between Graduate Programs

In exceptional cases, students may transfer between closely-related programs, with the support of both the current and receiving programs, and an academic justification from the receiving program's Program Co-Director. Transfers involving a change of discipline are treated as new admissions.

Additional information and forms: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-between-closely-related-programs>

Student Transfer between Supervisors

While rare, circumstances may arise that necessitate a supervisor and student ending their working relationship.

These include, but are not limited to:

- Supervisor retires, leaves UBC, or is on an extended leave
- Incompatibility
- Funding issues
- Student changes area of interest

Such circumstances need to be brought to the attention of the Program Directors and Program Assistant as soon as possible.

The process for moving forward will depend on the nature of the situation. Generally, student-initiated changes in supervision require the student to identify a suitable new supervisor, with the support of the Program.

Students are not permitted to continue in the program without a supervisor, and may be required to withdraw if they are not able to identify an alternative supervisory arrangement.

Conflict Resolution

A productive student-supervisor relationship is key to the success of the student and the research team, and can be rewarding for both parties. However, conflict within this relationship does sometimes arise. There may be many sources of conflict, including misaligned expectations, conflict over timelines, personality conflicts, etc. While difficult, it is worthwhile to prevent conflicts where possible, and resolve conflicts that do arise.

There is no single formula that will resolve all conflicts, but below are some general practices and principles that may help prevent or resolve conflicts:

- Clarify roles and expectations early, and revisit regularly. (Student-Supervisor Expectations Checklist)
- Resolve conflicts early, before they escalate. Some individuals may respond to conflict by avoiding or ignoring the situation. While some conflicts may naturally diminish, avoiding the situation can often result in an escalation of the conflict. It is best to resolve the conflict early by employing constructive resolution strategies.

- Conflicts often arise due to a lack of communication between the student and supervisor. Establish a meeting/check in schedule early, and cancel only as necessary. Be clear about when students can expect responses and feedback to submitted work or emails.
- If you are not sure the student is correctly recalling the information communicated to them, you may ask them to take minutes at your regular meetings. These can be sent to you afterwards to ensure you have the same understanding, and to provide a record for subsequent discussions.
- Have open and respectful discussions. Express empathy towards the other's situation. Clearly articulate the existing conflict and its impact, make reasonable requests of the student, and/or discuss what each of you may do to resolve the conflict.
- Remember that the goal is not to win an argument, but to resolve conflict and increase the productivity and ease of your student-supervisor relationship.
- Be aware that sometimes conflict may be due to stressful or difficult situations in the student's personal or professional lives. Kind inquiries may increase understanding, and provide opportunities to offer assistance or direct the student to appropriate resources (see below).

Not all conflicts can be easily resolved. Some are very complex in nature, may be resistant to resolution, or may simply benefit from the involvement of a third party.

Seek help when necessary!

If you are experiencing a serious, complicated, protracted, or concerning conflict with a student, please contact the PA to arrange a meeting with the Program Directors.

The Program may be able to offer assistance, serve as and/or recommend a neutral third party to aid resolution, keep records of the conflict, advise on Program, Faculty and G+PS policies, and advise as to when and how to bring to the attention of the Department or G+PS.

Assisting Graduate Students in Distress

If you are concerned about a student's wellness, please consult the resources available for UBC graduate students:

- [G+PS: Assisting Graduate Students in Distress](#)
 - [Comprehensive Guide for Faculty and Staff](#)

- [UBC Graduate Student Support and Services](#)

Please be aware that services available, their hours and locations may change from time to time, so it is important to check the links above for the most up-to-date information.

Please seek support from the RDS Program or G+PS if you have a serious concern about a student and are not comfortable having these conversations, or feel that additional or urgent support is needed.

Appendix A: Resources for Supervisors

1. Faculty of Graduate and Postdoctoral Studies

[G+PS Handbook of Graduate Supervision](#)

[G+PS Principles of Graduate Supervision](#)

[G+PS Graduate Supervision Workshops](#)

2. Department of Obstetrics and Gynaecology

[Reproductive and Developmental Sciences Program website](#)

- [Admissions Requirements](#)
- [Application Instructions](#)
- [RDS Program Policies for Students](#)

[Department Policies and Guidelines](#)

- [Guidelines on Workplace Bullying and Harassment](#)

3. Faculty Wellness

Employee and Family Assistance Program

The Employee and Family Assistance Program (EFAP) is a confidential and voluntary counselling support service that provides you and your family with the help you need to resolve a wide range of personal, work, health or life issues. Expert information and immediate support resources are available in-person and by phone, video, web or mobile app. Available 24 hours, 7 days a week: 1-800-387-4765

UBC Faculty Association

If you experience a problem, face an issue, or need information to help resolve a difficulty in your working life at UBC, we're here to help. The Faculty Association is your legal representative in all employment-related matters. This means that you have the right to:

- Consult with the Association at any time;
- Provide the Association with any information or documentation related to your work at UBC;
- Request that the Association officially represent you in any dealing with the university administration.

Appendix B: RDS Forms & Policies

Appendix B is provided in a Zip file.

RDS forms can also be found online at: <https://obgyn.ubc.ca/education/graduate-studies/current-students/program-policies/>

G+PS forms can be found online by searching: <https://www.grad.ubc.ca/forms>

1. Memo of Acceptance
2. Terms of Reference for RDS Membership
3. Student-Supervisor Expectations Checklist
4. Supervisory Committee Meeting – Annual Student Progress Report

5. Supervisory Committee Meeting – Chair’s Report
6. Comprehensive Examination – Guidelines
7. Comprehensive Examination – Chair’s Report
8. MSc Oral Examination – Planning Tool
9. MSc Oral Examination – Conduct and Chair’s Report
10. PhD Oral Examination – Planning Tool

Appendix G – Enhancing Indigenous Inclusion in WACH

Meeting re: Enhancing Indigenous Inclusion in WACH

Oct 22, 2020

In attendance: Drs. Sheryl Lightfoot, Allison Eddy, and Laura Sly

LS and AE introduced the WACH program and provided an overview to SL.

We listed current connections and ideas about Indigenous offerings, partnership, and plans and asked for additional ideas. Through our discussion, we identified multiple tangible pieces that we can cite in our program proposal to enhance opportunities for recruitment, retention, and support of Indigenous students. I have organized these below and included ideas from our previous discussions.

To recruit Indigenous students:

1. partner with the award-winning BCCHRI research education program, “Mini Med School” to reach our future students in their grade 11 year. Recent program evolution has enhanced ties with UBC-Okanagan and their Indigenous students; on-line delivery and videotaping, necessitated by Covid-19, has provided the opportunity to develop a blended learning model for the program that we will maintain to reach out to remote communities that includes Indigenous students, who may not have been reached in previous years.
2. offer 8 week summer student research positions to a cohort of 3 Indigenous students to provide an opportunity to come and work in a research laboratory. A similar program exists at BCCHRI but is not specifically targeted to Indigenous students.
3. participate annually in the Longhouse lunches, where we will provide information about our program to prospective Indigenous students, who are currently undergraduates
4. participate in the Indigenous Undergraduate Research Mentorship Program to provide one on one mentorship to Indigenous undergraduate students, who may be interested in pursuing a research career
5. inform and advertise Indigenous undergraduate scholarships to program faculty and undergraduate students to ensure optimal uptake of prestigious Nationally-funded awards (e.g. NSERC Indigenous student Ambassadors NISA)

To support and retain Indigenous students (if you build it, they will come):

1. provide tuition support for all Indigenous students at program launch (dedicated from GSI funds available in the program)
2. provide entrance awards for Indigenous students (\$5K/student dedicated from GSI funds)

3. provide scholarships for Indigenous students. We anticipate that the program will be operating with a budget surplus by year 5. As per established agreements between the host Departments of Pediatrics and Obstetrics & Gynaecology, surplus funds will be re-invested in the program to enhance student learning opportunities. A portion of these funds will be dedicated to a scholarship (\$30K per year for 4 years) for an Indigenous student. We will continue to seek additional partnerships to increase scholarship offerings for Indigenous students.
4. required courses and elective/selective offerings will be offered as blended learning models. Specifically, courses will be offered in-person, live on-line, or in taped sessions. This multi-delivery mode will enable learners in all remote communities (including Indigenous students and students studying in Indigenous communities) to participate in all course opportunities. This will remove geographical barriers and reduce financial barriers associated with travel and living in the Vancouver area for students, whenever possible.
5. we will facilitate formation of a student group for Indigenous students, providing them with appropriate meeting space (in partnership with the BCCH and BCCHRI) and budget for food and social events meetings (\$2.5K per year from GSI funds to start). Non-Indigenous students with interest in learning about Indigenous culture, ways of knowing, ways of being, may be included in this group if there are not sufficient numbers of Indigenous students in the community to create a cohort of students.
6. we will facilitate peer mentorship (as well as scholarly mentorship, which is part of our Enhanced Scholars Program for all students) for Indigenous students.

Medium-Long Term Goal:

We recognize that students need inspirational and aspirational role models. Though we have many faculty members, who partner with Indigenous communities to do women+’s and children’s health research, we do not have Indigenous Faculty members. There is only 1 Indigenous Faculty member in the Department of Pediatrics, and her role is largely clinical. Similarly, in the Department of Obstetrics and Gynecology, there is a paucity of Indigenous Faculty. Our Departments are committed to the recruitment of outstanding Indigenous Faculty members. In partnership, we are currently actively seeking out opportunities to hire new Faculty and are committed to identifying and recruiting an Indigenous, research-intensive Faculty member.

Appendix H – Letter of Support, Dean Tania Bubela, Faculty of Health Sciences, SFU



August 13, 2020

Dear Dr. Allison Eddy and Dr. Geoff Cundiff,

I am writing to offer my support for the proposed Women+ and Children's Health Sciences (WACH) graduate program in the Faculty of Medicine at the University of British Columbia.

The interdisciplinary Faculty of Health Sciences at Simon Fraser University intersects with many of the goals of WACH and can contribute to expanding its relevant knowledge domains, including: developmental trajectories, infectious diseases, mental health and substance use, indigenous health, planetary health, policy and systems research, big data, health sciences and public health education, and big data. Faculty members with active researchers in these knowledge domains include:

- Dr. Angela Kaida (Women's Health Research Institute Executive Committee member and Scientific Advisor; Canada Research Chair in Global Perspectives on HIV and Sexual and Reproductive Health);
- Dr. Charlotte Waddell (University Professor and Director of the Children's Health Policy Centre in the Faculty of Health Sciences);
- Dr. Pablo Nepomnaschy (Associate Professor and Director of the Maternal and Child Health Laboratory, BCCHRI-affiliated researcher with expertise on the effects of stress on growth, development and health across the human life course); and
- Dr. Nadine Provencal (Assistant Professor, BCCHRI-affiliated researcher with expertise in epigenetics of early life adversity)

All are enthusiastic about collaborating with you on the proposed WACH graduate program, which could benefit graduate students across our institutions. In FHS, we train MSc and PhD students in women+ and child health research, in disciplines that range from epigenetics to health policy.

Collaboration could include FHS faculty representation on your Steering Committee to provide input into program development and to contribute to the program upon its launch. Contributions could include lectures in your annual seminar course, WACH 502, and participation in your annual research day. Specifically, our faculty members have complementary expertise in women's and children's health and could contribute teaching and mentorship in: qualitative research methods, randomized controlled trial methods, systematic review methods, child mental health epidemiology and public health surveillance, social determinants of health, mental health for women, children's mental health, child health policy, developmental origins of health and disease, epigenetics, and reproductive and sexual health and policy, both locally and globally.

We are eager to create new opportunities for FHS graduate students engaged in women+ and child health research to take courses offered by your program via the Western Deans' Agreement – so they can also benefit from the envisioned broader trainee and mentorship community.

We wish you all the best in this exciting endeavour.

Yours sincerely,



Tania Bubela, BSc (Hons), PhD, JD, FCAHS, FRSC
tbubela@sfu.ca



Date 7th April 2020

Dear Neville

Thank you for the opportunity to review the proposed Master of Science (MSc) Program and PhD in Women+ and Children's health sciences.

The reviewer recognises that the proposal is linked to the Department of Pediatrics and Department of Obstetrics and Gynaecology at UBC, both highly esteemed within the Faculty of Medicine.

A strong emphasis throughout both program design and delivery is the concept of 'interdisciplinary' collaboration and learning. Providing clarity around the meaning attributed to this concept within the curriculum could help both readers and prospective students. For example, while graduates from a range of disciplines (i.e., dietetics (RD), nursing (RN), pharmacy (PharmD), midwifery (BMw); should social work be included here?) are cited throughout the document, others are absent (i.e., health & human geographers). Faculty from across these areas are absent within instructional staff lists provided. While these programs fall outside the Faculty of Medicine how they are embedded within an interdisciplinary proposal is unclear.

Inter, multi or transdisciplinary working is a cornerstone in the proposal focused on "strengthening UBC's capacity as a leading research institution that supports interdisciplinary research" thereby producing research scientists. The proposal demonstrated clear ways in which a holistic student approach is considered i.e., supporting students to flourish in the areas of science, presentation skills, grant writing acumen, and research skills. The potential for social, computer, and implementation science focus on women+ and child health within this curriculum is a little more difficult to see. Strengthening this would be helpful in light of key statements linked to areas of research interest such as precision health (WHRI).

The proposals highlight mid-to-longer term outputs focused on the development of professional skills that can transfer to careers in industry, government, and non-government organizations. The proposal acknowledges that understanding the complexity and impact of partnerships with industry or business on innovations and careers is yet unknown. Considering the current opportunity to develop an original program in Canada – consultation with incubator and accelerator programs i.e., UBC's prior use of Hackathons, industry, and academic health science networks was difficult to find in the document.

Thoughtful consideration had been applied to future careers with evidence of the more common trajectories. However, outside of the Bio Scientist / Medical Laboratory Technologists etc. there remained some uncertainty as to how the programs could meaningfully support managers in healthcare, when the Business School is absent from the curriculum. While the aim is to develop research-academic vs. clinical-academic careers if interdisciplinary professional graduate students are



to engage in this program bridging research to practice, understanding complexity and systems science could bolster environmental and future social policy outputs and impact.

How such programs can support both urban and rural contexts is worth consideration since Indigenous health and diversity are well placed in the program.

The proposal appeared weighted to acute care provision. Considering the social pediatric discourse and outputs from BCCH and the program leadership this was surprising. Primary care was noted twice in the document both times in the reference list. If the drive to situate social pediatrics in the mainstream of curriculum development and interprofessional approaches at UBC has been a long-standing goal perhaps it could be more visible in the curriculum. Furthermore, mental health for women+ and child was noted twice in the proposed syllabus. In light of the rising trends in Canada and globally, and recent pandemic events is this sufficient within the existing program structure?

Review of the team clearly identifies the level of skill and expertise held by the instructional staff.

The level of work in the proposal to identify the current limitations in graduate studies in this area is comprehensive. The cost of programs outside Canada is noted (\$10-40,000 + CAN). The scoping exercise to garner interest is clearly reported. While the recruitment tables provide information as to the stable applicant pool, is there data to evidence graduation numbers and any indication as to the professional vs. non-professional undergraduate degree applicant anticipated numbers or caps?

Thank you for the opportunity to review this exciting proposal.

Kind regards,

A handwritten signature in cursive script that reads 'Caroline Sanders'.

Dr Caroline Sanders, MBE, RN.

Associate Professor

School of Nursing

University of Northern British Columbia.



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Women+ and Children's Health Sciences (WACH)

Master of Science (MSc) Program

New Program Proposal

Department of Pediatrics

Department of Obstetrics & Gynaecology

Faculty of Medicine

The University of British Columbia

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Executive Summary

The Departments of Obstetrics & Gynaecology and Pediatrics propose to offer a new Women+¹ and Children's Health Sciences (WACH) MSc program. This program will be a University of British Columbia (UBC), Faculty of Medicine MSc program jointly hosted by the Departments of Obstetrics & Gynaecology and Pediatrics and principally based on the Oak Street campus. WACH is an expansion and reconfiguration of the existing Reproductive and Developmental Sciences (RDS) MSc graduate program in the UBC Department of Obstetrics and Gynaecology. Faculty expertise and research interests include the health of women, maternal health, the overlapping and unique health considerations of transgender and non-binary individuals, neonates, and children (all genders). Transgender and non-binary individuals share some biological aspects of health with women (and children) and also have some unique biology and social determinants of health that fall within the clinical and research expertise of our Faculty.

The Oak Street campus, also known as the BC Children's and Women's Hospital campus, is a major site for the UBC Faculty of Medicine Departments of Obstetrics & Gynaecology and Pediatrics, as well as being the home of the BC Children's Hospital Research Institute (BCCHR), and the Women's Health Research Institute (WHRI). The focus of our collective research endeavours is women+ and children's health.

Students who enroll in the MSc program will be required to complete 30 credits, including 2 core courses (6 credits), and at least 2 elective courses (6 credits). The students will also complete an MSc thesis. The program will be full-time. The expected time of completion is 2 years. Students will choose 1 of 3 streams: Women+ Health, Child Health, and Reproductive and Developmental Sciences (RDS). In the future, we plan to add a stream, in which students can obtain a Master's degree specializing in Clinical Embryology.

The delivery of training will be through didactic lectures, which will include case- and/or problem-based learning, seminars, and/or laboratory work in the required and elective coursework. Courses will be offered as a hybrid model of in-person and on-line learning, and will be recorded, with permission, to accommodate distance learning. Students will also complete supervised thesis research. Finally, students are encouraged to fulfill the optional requirements of the Graduate Student Enhanced Scholar Program, which includes three components: an individual development plan (IDP), a competency passport, and formal mentorship. The Curriculum incorporates Competence by Design and emphasizes the enhanced scholar program.

Inclusion, and a specific focus on Indigeneity, are key components of the WACH program with the goal of achieving a faculty and student body that reflects the demographics of British Columbia. The goal is to cultivate a learning environment that embraces equity, diversity, and inclusion.

The program will recruit top graduates from BSc/BA degree specializations, including microbiology & immunology, nutritional science, biology, computer science, genetics, pathology

¹ Women+ embraces women, transgender, and non-binary individuals.

and laboratory science, pharmaceutical sciences, psychology, sociology, and others. The WACH program is not a professional program. It is a thesis-based research graduate program that is primarily designed for undergraduate students seeking a Masters or PhD degree aligned with one or more of the four CIHR pillars in women+'s or children's health research (I biomedical, II clinical, III health services, and IV social, cultural, environmental, and population health research). It is conceivable some healthcare professionals who are interested in pursuing graduate-level thesis-based research training will choose to enroll in the WACH program but we anticipate that they will be limited to a small number seeking academic clinician scientist careers after graduation. People with professional undergraduate degrees, could include those with degrees in medicine (MD), dietetics (BSc/RD), nursing (BSN), pharmacy (PharmD), midwifery (BMw), and social work (BSW).

The program will enable students to:

- **Analyze, critique, and adjudicate** the current state of knowledge in the field;
- **Compare and contrast** unique factors that impact women+ and children's health;
- **Apply** principles of equity, diversity, and inclusion to research, including Indigeneity;
- **Create and communicate** new knowledge through an original scholarly contribution (i.e. a MSc thesis), and a variety of methods including written manuscripts and oral presentations; and
- **Demonstrate career competencies** in optional extracurricular career development opportunities including seminars, workshops, networking, and experiential learning.

The WACH program intends to produce graduates, who will have the competencies for successful careers in academia, as well as in industry, government, consulting, and non-governmental organizations (NGOs). From a market analysis conducted in 2019 in conjunction with UBC Extended Learning focused on BC labour market trends, the types of positions our graduates could pursue upon graduation include: NOC² 4011 University Professors and Lecturers, NOC 4021 College and Other Vocational Instructors, NOC 2121 Biology and Related Scientists, NOC 2221 Biological Technologists and Technicians, NOC 4165 Health Policy Researchers, Consultants and Program Officers, and NOC 1254 Statistical Officers and Related Research Support Occupations.

² NOC refers to the National Occupational Classification code.

1.1 Credentials

Graduates from the MSc program will be awarded an MSc in Women+ and Children's Health Sciences (WACH).

1.2 Location

The UBC Oak Street campus is the primary location for education and administration. Other locations include the UBC Point Grey campus, St. Paul's Hospital, and Vancouver General Hospital, although, the embrace of distance learning opens the program to students at any of our provincial sites.

1.3 Faculty Offering Program

The Faculty of Medicine will offer the program, which will be jointly administered by the Departments of Pediatrics and Obstetrics & Gynaecology.

1.4 Program Start Date

The program is expected to start in September 2022.

1.5 Program Completion Time

The expected time to completion of the MSc program is 24 months (2 years) of full-time academic study.

1.6 Program Overview

The goal of the MSc program in Women+ and Children's Health Sciences is to provide students with a broad knowledge of research in women+ and children's health sciences including biomedical, clinical, health services, and populations. Core concepts will include biomedical, patient- and public-oriented translational research with consideration of social determinants of health and cultural competence, including sex and gender and Indigenous health, and research methodologies. In addition, students will develop in depth expertise in at least one of the following areas of research that represent existing areas of faculty expertise within our departments:

- Acute or chronic diseases
- Brain development and function
- Implementation science
- Developmental origins of health and disease
- Placental, embryonic, foetal, perinatal, infant, child and/or youth: Development, physiology, and/or pathophysiology
- Reproductive biology
- Reproductive or childhood cancers
- Epidemiology specific to women+ or children
- Mental health specific to women+ or children

- Health services specific to women+ or children

1.7 Inclusion and Indigeneity

The WACH Program views inclusion as an essential requirement and interprets that goal as achieving a faculty and student body that reflects the demographics of British Columbia, and providing a learning environment that embraces equity, diversity, and inclusion. Our admissions committee will use a holistic approach when considering students for admission that includes consideration of achieving inclusion and representation of equity seeking groups. Ethical research conduct and equity, diversity, and inclusion of under-represented, marginalized, and vulnerable populations represent core program values reflected in the curriculum. These values are also among the competencies that students will acquire through curricular requirements and extra-curricular activities. We also developed new core curriculum content to address cultural awareness and competency, both within the learning environment and in research studies designed to address important health inequities.

We recognize that at present, a major component of this aspiration is increasing the participation of Indigenous students and faculty in WACH.

Presently, faculty members affiliated with our program who are engaged in research with Indigenous communities in women+ and children's health research, include Drs. Laura Arbour, Mariana Brussoni, Lori d'Agincourt, Patti Janssen, Sheona Mitchell-Foster, Jenny Morgan, Patricia Spittal, and Ian Pike. These individuals will be teachers and research leaders within our program.

The WACH program will continue consultation efforts with Indigenous partners to identify new opportunities for the program to better support the objectives of the renewed Indigenous Strategic Plan and to effectively address the health inequities facing British Columbians and others across the globe. The program, working in partnership with BCCHRI and WHRI, will continue to work with Indigenous students, staff, and faculty members to implement new opportunities to increase the number of Indigenous students in our graduate program. In addition to our existing faculty conducting research in partnership with Indigenous communities, we have and will continue to establish relationships with education partners with expertise in Indigenous health. Our current partners include Dr. Nadine Caron (UBC Department of Surgery) and the Simon Fraser University (SFU) Faculty of Health Sciences.

In Appendix G, we outline key strategies that we have developed in partnership with Indigenous leaders to enhance Indigenous inclusion in the WACH program. In summary,

To recruit Indigenous students, we will:

1. partner with the award-winning BCCHRI research education program, "Mini Med School" to reach our future students in their grade 11 year. Recent program evolution has enhanced ties with UBC-Okanagan and Indigenous students there; on-line delivery and videotaping, necessitated by Covid-19, has provided the opportunity to develop a blended learning model for the program that we will maintain to reach out to remote communities that includes Indigenous students, who may not have been reached in previous years.

2. offer 8-week summer student research positions to a cohort of 3 Indigenous students to provide an opportunity to come and work in a research laboratory. A similar program exists at BCCHRI but is not specifically targeted to Indigenous students.
3. participate annually in the Longhouse lunches, where we will provide information about our program to prospective Indigenous students, who are currently undergraduates
4. participate in the Indigenous Undergraduate Research Mentorship Program to provide one on one mentorship to Indigenous undergraduate students, who may be interested in pursuing a research career
5. inform and advertise Indigenous undergraduate scholarships to program faculty and undergraduate students to ensure optimal uptake of prestigious nationally-funded awards (e.g. NSERC Indigenous student Ambassadors NISA)

To support and retain Indigenous students, we will:

1. provide tuition support for all Indigenous students at program launch (dedicated from GSI funds available in the program)
2. provide entrance awards for Indigenous students (\$5K/student dedicated from GSI funds).
3. provide scholarships for Indigenous students. We anticipate that the program will be operating with a budget surplus by year 5. As per established agreements between the host Departments of Pediatrics and Obstetrics & Gynaecology, surplus funds will be re-invested in the program to enhance student learning opportunities. A portion of these funds will be dedicated to a scholarship (\$30K per year for 4 years) for an Indigenous student. We will continue to seek additional partnerships to increase scholarship offerings for Indigenous students.
4. offer required courses and electives/selectives as blended learning models. Specifically, courses will be offered in-person, live on-line, or in taped sessions. This multi-delivery mode will enable learners in all remote communities (including Indigenous students and students studying in Indigenous communities) to participate in all course opportunities. This will remove geographical barriers and reduce financial barriers associated with travel and living in the Vancouver area for students, whenever possible.
5. facilitate formation of a student group for Indigenous students, providing them with appropriate meeting space (in partnership with the BCCH and BCCHRI) and budget for food and social events meetings (\$2.5K per year from GSI funds to start). Non-Indigenous students with interest in learning about Indigenous culture, ways of knowing, ways of being, may be included in this group if there are not sufficient numbers of Indigenous students in the community to create a cohort of students.
6. facilitate peer mentorship (as well as scholarly mentorship, which is part of our Enhanced

Scholars Program for all students) for Indigenous students.

The majority of these impactful short-term goals are achievable at program launch. A graduate scholarship for an Indigenous student will be made available as soon as program funds permit, which we anticipate being within 5 years of program launch.

An additional medium- and long-term goal is to recruit new Indigenous educators and researchers as new faculty.

1.8 Delivery Methods

Training of MSc students in women+ and children's health sciences theory and topics, research methods and data analyses will be through didactic lectures, which will include case- and/or problem-based learning, seminars, and/or laboratory work in the required and elective coursework. Courses will be offered as a hybrid model of in-person and on-line learning, and will be recorded, with permission, to accommodate distance learning. This will enable students conducting research in communities outside the lower mainland to participate in the program, while conducting their research activities closer to home. Students will also complete supervised thesis research (see Section 2.4 below for details on program requirements). Students are also encouraged to fulfill the optional requirements of the Graduate Student Enhanced Scholar Program, which includes three components: i) an individual development plan (IDP), ii) a competency passport, and iii) mentorship. Our Competence by Design approach is intended to equip graduates with the knowledge and skills to work in academia and beyond.

1.9 Curriculum Design

The total number of credits required for this program is 30. The proposed curriculum will address the program goals outlined in Section 1.6 and Section 2.3 of this document through the following curriculum elements:

- Two mandatory three-credit courses on Women+ and Children's Health:
 - WACH 501 (3 credits) Women+ and Children's Health
 - WACH 502 (3 credits) Seminars in Women+ and Children's Health
- Elective courses (6 credits) chosen with recommendations from students' supervisors and/or supervisory committees;
- MSc thesis (WACH 549);
- An optional career development program called the Graduate Student Enhanced Scholar Program, includes three parts – an individual development plan (IDP), a competency passport, and mentorship.

Please see Appendix A for course syllabi of new courses, Appendix B for course descriptions, and Appendix C for the Graduate Student Enhanced Scholar Program Guidebook. For further details of the curriculum, please see Section 2.4 below.

1.10 Program Strengths

Within the UBC Faculty of Medicine, the Oak Street campus is a major site for the Departments of Obstetrics & Gynaecology and Pediatrics, as well as being the home for the BCCHRI and the

WHRI. The focus of our collective research endeavours is women+ and children's health. Within both departments, there are 64 academic faculty members and over 80 clinical (versus academic) faculty members with research expertise in a wide variety of topics, who would like to supervise graduate students. Obstetrics & Gynaecology has an active cross-pillar research program including biomedical researchers, clinical investigators, and population scientists supporting the current graduate program in Reproductive and Developmental Sciences. In Pediatrics, clinical faculty accounts for ~20% of the department's extramural grant funding and many are currently graduate student co-supervisors. In addition, BCCHRI and WHRI have established research and offer teaching capacity such as space (laboratories, classrooms, etc.), equipment, education events (seminar series, grand rounds, etc.), and community connections to support the proposed program. The adjacent BC Children's and Women's Hospitals offer access to the patient populations for clinical research recruitment that translates scientific knowledge "from bench to bedside to populations".

A further strength of the program is the integrated career development opportunities, including an individual career development plan (IDP) adopted from the Canadian Institutes of Health Research (CIHR), a competency passport, ComPass, adapted with permission from the CanMEDS framework by the Royal College of Physicians and Surgeons of Canada, and a mentorship program. The mentorship program will be based on the structure of the successful Department of Obstetrics & Gynaecology Faculty mentorship program. This formal structured program defines a framework for mentors and mentees. In addition to this framework, we plan to learn from other examples of successful mentorship programs such as the UBC Neuroscience graduate program, the Canadian Child Health Clinician Scientist Program (CCHCSP), and the NSERC Collaborative Research and Training Experience Program (CREATE). We will continue to reach out to our colleagues and partners in other graduate programs to seek their advice and to establish best practices in graduate mentorship. The WACH program intends to train graduate students in areas of knowledge and research pertaining to women+ and children's health and to provide integrated career development that will prepare students for careers in academia, government, industry, non-governmental organizations (NGOs), and business.

The WACH Program will also fulfill an important gap on the Oak Street campus that was identified in both a recent UBC Faculty of Medicine survey of graduate students and a 2019 external review of the BCCHRI. Specifically, both noted an inadequate learning community. The WACH program will build a strong collaborative research and learning community to engage our graduate students and extend beyond their research supervisor's immediate world.

1.11 Contribution to UBC and FoM Strategic Plans

Alignment with UBC 2018-2028 Strategic Plan: Shaping the Next Century

The proposed program is a collaborative effort between the Faculty of Medicine Departments of Obstetrics & Gynaecology and Pediatrics and will be the first interdisciplinary graduate program in Women+'s and Children's Health Sciences in Canada.

The Interdisciplinary nature of the WACH program builds on the strengths of our current faculty, their research interests, and those of our partners. Interdisciplinarity refers to (i) training in two distinct Departments, which encompass the life trajectory through women+, maternal, neonatal, and child health and multiple sub-specialties; (ii) training across all four health research pillars as defined by the Government of Canada and the Canadian Institutes of

Health Research (CIHR), which includes biomedical, clinical, health systems and services, and population health research (cihr-irsc.gc.ca); and (iii) providing a training focus (women+ and children) that will enable and embrace collaborations with other departments and faculties and specific fields within health research (e.g. biochemistry, genetics, immunology, biomedical technologies, pathology and laboratory medicine, pharmaceutical sciences, and many others). The program will appeal to anyone who is interested in pursuing graduate level research training in women+ health and/or child health, and may also include practitioners. Practitioners, who are already members of our community of women+ and child health research-intensive faculty include those in Applied Science (Nursing), Digital Medicine (Speech Science), Dentistry, Dietetics, Occupational Therapy, Pharmaceutical Sciences, Psychologists, and may include additional practitioners (e.g. counsellors, midwives, social workers, and others). The vision for this reimagined and expanded “umbrella-style” graduate program that brings together research expertise across the spectrum from bench-to-bedside-to-populations was partially inspired by UBC’s mandate to transform university-level systems and processes. It also embraces our goal to better prepare graduates for a variety of workforce career opportunities both within academia and beyond.

Strategies 6 through 10 capture the guiding principles of the new WACH program since its inception. Building on the diversity of research expertise, infrastructure, and resources already well established within the faculty of the Departments of Pediatrics and Obstetrics and Gynaecology both at the Oak Street Campus but also at all of the other UBC provincial sites, this program will catalyze new opportunities for interdisciplinary clinical and translational research across the four CIHR health research pillars and sub-specialties within Pediatrics and Obstetrics and Gynaecology. Moreover, these efforts will be facilitated by adjacencies to the BC Children’s and Women’s Hospitals, and the BCCHRI and WHRI. The program creates a strategically well-positioned partnership to facilitate our development into an internationally recognized academic health science centre. UBC students and trainees across the continuum (from undergraduates to postdoctoral fellows) will benefit as learners within this rich research ecosystem. Ethical research conduct and equity, diversity, and inclusion of under-represented, marginalized, and vulnerable populations represent core program values. These values are also among the competencies that students will acquire through curricular requirements and extra-curricular activities.

Faculty members with highly specialized expertise at the Oak Street campus and their students (current and recent graduates) were highly engaged in the co-creation of the interdisciplinary curricula, which spans the four CIHR health research pillars of biomedical research, clinical research, health services research, and population research. Case- and problem-based learning methodologies and new opportunities for experiential work-integrated learning opportunities have been incorporated into the curriculum. Structured student mentorship programs and a commitment to support and use Individualized Development Plans will help establish a learner-focused experience for all graduate students. The application of a new Competency Passport (ComPass)³ framework of metric-based competencies (Competence by Design) will ensure that the program’s graduates have not only become scientific experts in their area of concentration

³ The Competency Passport (ComPass) is adapted from CanMEDS, a framework that identifies the abilities physicians are required to possess, with permission from the Royal College of Physicians and Surgeons of Canada.

but that they are proficient as professionals, communicators, collaborators, leaders, advocates, and scholars (see Appendix C). This structure will better prepare health scientists for broad career options in academia and beyond. Dr. Eddy is planning an academic leave the year after completion of her second term as the UBC Head, Department of Pediatrics (beginning summer 2021) to develop an assessment methodology for the six core competencies of graduate student training using an evaluation based on “Entrustable Professional Activities” and “Milestones”. This work will be done in collaboration with faculty experts at the UBC Centre for Health Education Scholarship and will provide an assessment tool for graduate student competency that does not currently exist.

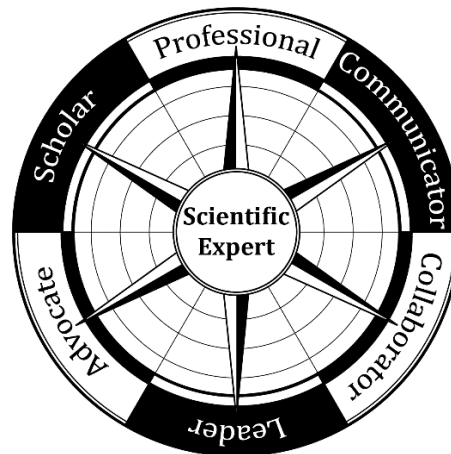


Figure 1 WACH Graduate Student Enhanced Scholar Program ComPass
(Image adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada.)

The WACH program has partnered with the UBC Public Scholars Initiative to integrate public engagement opportunities. Student supervisors in this program will be aligned with the values espoused by the Faculty of Graduate and Postdoctoral Studies’ *Reimagining the PhD* report (2017). This alignment includes knowledge translation, knowledge dissemination, and health science advocacy, which will be among the program’s core skills addressed in the ComPass. Alumni and emeriti will be among the mentors/coaches invited to help trainees explore career opportunities and to develop their professional competencies.

The program, working in partnership with BCCHRI and WHRI, will continue to work with Indigenous students, staff, and faculty members to implement new opportunities to increase the number of Indigenous students in our graduate program. We have developed new core curriculum content to address cultural awareness and competency, both within the learning environment and in research studies designed to address important health inequities. UBC Faculty members affiliated with our program, who are engaged with Indigenous communities in women+ and children’s health research, include Drs. Laura Arbour, Mariana Brussoni, Lori d’Agincourt, Patti Janssen, Sheona Mitchell-Foster, Jenny Morgan, Patricia Spittal, and Ian Pike. These individuals will be teachers and research leaders within our program. In addition, we have, and will continue to establish, relationships with education partners with expertise in Indigenous health. Our current partners include Dr. Nadine Caron (UBC Department of Surgery)

and the Simon Fraser University (SFU) Faculty of Health Sciences. Our goals are to recruit new Indigenous educators and researchers as new faculty; and to train Indigenous students. To facilitate this, we have designed the curriculum so that students conducting research in rural and remote communities can participate in the WACH program without having to be in Vancouver. These students will also bring a unique perspective to women+ and children's health research and enrich the overall environment of the WACH program.

Alignment with UBC Faculty of Medicine 2016-2021 Strategic Plan: Building the Future The WACH graduate research program developed a new student competency framework (ComPass), modeled after the Royal College CanMEDS framework and representing a new concept for graduate schools. We recognize that successfully implanting scientists in academic, governmental, and industry roles require competencies beyond scientific expertise, and designed a curriculum to address these unmet needs. In addition, the WACH integrated career development opportunities are investments that will help research trainees meet evolving societal and career requirements (Educational Pillar 1). Individualized Learning Plans, supported and monitored, and mentorship that extends beyond the roles of the traditional student supervisory committee will be a standardized component of the program.

The WACH program faculty, with input from strategic partners across UBC, have developed an innovative approach to graduate student research that embraces a continuum from bench-to-bedside-to-populations. The program's "home base" will be the Oak Street campus that will facilitate clinical and patient-oriented translational research and knowledge translation. Precision medicine is an area of strength and a research priority theme for both the BCCHRI and the WHRI. Program leadership has established a partnership with the UBC Heart Lung Innovation Centre's *Career Pathways for Researchers* initiative, and will continue to expand experiential learning opportunities across the Faculty of Medicine. After the program is launched, it will be a program enrichment goal to partner with appropriate BC industries to develop student internship opportunities and hopefully to bring industry leaders into the program in an educational capacity.

The WACH program is an "umbrella style" graduate student program that was jointly developed and will be co-led by the UBC Departments of Obstetrics & Gynaecology and Pediatrics. A shared governance structure has been developed and described in a memorandum of understanding between the two departments (see Appendix D). The administrative office will be based on the UBC Oak Street campus. There will be future opportunities to plan strategic joint faculty recruitments to meet emerging new opportunities within the program. The program has included well-being and leadership skills among the core competencies that students will develop through the program's core and elective curricular activities.

The WACH program proponents will continue consultation efforts with Indigenous partners to identify new opportunities for the program to better support the objectives of the renewed Indigenous Strategic Plans and to effectively address the health inequities facing British Columbians and others across the globe.

Indigeneity and Equity, Diversity, and Inclusion (challenges, opportunities, and successes) are incorporated into the core curriculum and woven through the ongoing learning and electives within the WACH program.

1.12 Related Programs at UBC and other BC Post-Secondary Institutions

The program will be the only MSc training program in BC and in Canada that provides training in both women+ and children's health sciences research across all four health research pillars.

UBC's Department of Obstetrics & Gynaecology in the Faculty of Medicine currently offers a **MSc degree** in Reproductive and Developmental Sciences (RDS). The program's learning objectives are to "provide students with a broad knowledge of mammalian reproductive and developmental biology, as well as in depth expertise in at least one area of research". In recent years, the RDS program has expanded from a biomedical research program to include perinatal epidemiology. The WACH program is rebranding the current RDS program to encompass its current activities and will further expand it to include women+ health and child health streams. The WACH program will cover a broader range of topics. The current RDS program will be transitioned into the WACH program. At the time of the WACH program inception, current RDS students will be given the opportunity to transfer to the WACH program or continue to complete their degree as an RDS student. The RDS program will close after current students complete their program or transition to the WACH program.

The Oak Street campus consistently has more than 350 research faculty and over 300 graduate students. These graduate students are enrolled in a variety of programs including Experimental Medicine (25%), Reproductive and Developmental Sciences (RDS) (13%), Medical Genetics (13%), Master of Public Health (MPH) (11%), Bioinformatics (9%), and Cell and Developmental Biology (6%)⁴. None of these programs offer the integrated professional development opportunities proposed in our new program. Some of the graduate students, who have traditionally enrolled in other Faculty of Medicine programs under the primary research supervision of Department of Pediatric faculty members, may also transition to the WACH program. The WACH Oversight Committee has pursued dialogue with other graduate programs and students to identify points of intersection & alignment between programs, and feedback to date has been positive. The WACH program is designed to train Scientists, but may attract some clinicians, primarily those seeking to become clinician scientists.

The SFU Faculty of Health Sciences offers a PhD specialization in Maternal and Child Health. However, the curriculum provides one general, interdisciplinary seminar course with contents not specific to women+ and children's health. The course offerings are geared towards population and public health with a focus on epidemiology or the social determinants of health. In contrast, the WACH program draws on the strong faculty expertise in basic science research in Pediatrics and Obstetrics & Gynaecology, with the addition of clinical research, health services research, and population health components.

1.13 Support from Other Post-Secondary Institutions

We conducted curriculum consultations with academic units within UBC and with other post-

⁴ Percentages of C&W students were calculated from a survey conducted in Spring 2019. The survey did not capture all students enrolled.

secondary institutions across the province. In addition to the support received from UBC Departments, Schools or Faculties, the following units have also provided support to the WACH proposal:

- SFU Faculty of Health Sciences, via Dean Dr. Tania Bubela
- SFU Faculty of Graduate and Postdoctoral Studies, via Dean and Associate Provost Dr. Jeff Derksen
- University of Northern British Columbia (UNBC) College of Arts, Social and Health Sciences, via Dean Dr. Shannon Wagner and Associate Professor Dr. Caroline Sanders
- University of Victoria (UVic) Faculty of Graduate Studies, via Dean Dr. David Capson

In particular, SFU Faculty of Health Sciences, which has significant strength in partnered Indigenous health research, has expressed strong interest in collaborations in research endeavours and graduate student training with the WACH program. The proposed program is expected to strengthen the existing relationship between SFU, BCCHRI, and WHRI.

1.14 Institutional Contacts

Dr. Allison Eddy, Professor and Department Head, Department of Pediatrics, James & Annabel McCreary Chair in Pediatrics, Faculty of Medicine allison.eddy@cw.bc.ca

Dr. Geoffrey Cundiff, Professor and Department Head, and the Dr. Victor Gomel Professor of Obstetrics & Gynaecology, Department of Obstetrics & Gynaecology, Faculty of Medicine geoff.cundiff@ubc.ca

Dr. Laura Sly, Associate Professor, Department of Pediatrics, Faculty of Medicine laurasly@mail.ubc.ca

Dr. Alexander Beristain, Associate Professor, Current Co-Director of the RDS Graduate Program, Department of Obstetrics & Gynaecology, Faculty of Medicine aberista@mail.ubc.ca

Dr. Angela Devlin, Associate Professor, Department of Pediatrics, Faculty of Medicine adevlin@bcchr.ubc.ca

Dr. Paul Yong, Assistant Professor, Current Co-Director of the RDS Graduate Program, Department of Obstetrics & Gynaecology, Faculty of Medicine PYong@cw.bc.ca

2. Program Description and Specification

2.1 Need for the Program

We conducted preliminary market research in June 2019 to identify labour market trends and to determine market demand for the proposed WACH program. The conclusion was that market demand for the program is strong. Specifically, healthcare is the second largest sector in BC, and is expected to grow between 2018 and 2028. According to the 2018 British Columbia Labour Market Outlook, several of the key national occupational classification (NOC) codes

identified for WACH graduates are expected to see significant growth, including NOC 4011 University Professors and Lecturers, NOC 4021 College and Other Vocational Instructors, NOC 2121 Biology and Related Scientists, NOC 2221 Biological Technologists and Technicians, NOC 4165 Health Policy Researchers, Consultants and Program Officers, and NOC 1254 Statistical Officers and Related Research Support Occupations.

In addition, graduate career outcomes are also positive. MSc graduate program alumni from BCCHR and WHRI end up in a variety of occupations, including positions as medical doctors, project managers, lab technicians, and PhD students⁵. We expect WACH graduates to follow career trajectories in the following sectors in addition to academia:

- Government agencies
- Biotechnology firms
- Consulting companies
- Nongovernmental organizations (NGOs) or non-profits related to women+ and/or children's health

The following Classification of Instructional Programs (CIP) code applies to this program: 51.1401 Medical scientist (MS, MSc, PhD) – programs that train students to conduct medical research and to become scientists.

2.2 Program Objectives

The broadened program scope and interdisciplinary focus of training across the four health research pillars (biomedical, clinical, health services, population health) fulfills the following objectives:

1. Enhancing research and scholarship in topics pertaining to women+ and children's health sciences in a single graduate program;
2. Leveraging the expertise in both departments to prepare students for a wider range of interdisciplinary research fields and job opportunities in academia and beyond;
3. Expanding the research capacity at the UBC Oak Street campus through augmenting the current discovery activities within our departments and in partnership with other departments, programs, and units;
4. Strengthening UBC's capacity as a leading research institution that supports interdisciplinary research;
5. Filling the gap in graduate training in women+ and children's health sciences research in British Columbia.

2.3 Program Learning Outcomes

Upon completion of the program, all graduates will be able to:

- **Analyze** the current state of knowledge in the field regarding the normal developmental trajectory in pregnancy and childhood and the biology of human development and disease.
- **Compare and contrast** unique factors that impact women+ and children's health,

⁵ Alumni career outcomes were collected from a survey conducted in Spring 2019.

including biological factors and social determinants of health.

- **Apply** principles of equity, diversity, and inclusion to research. This will include a focus on Indigeneity.
- **Create and communicate** new knowledge through an original scholarly contribution (i.e. a MSc thesis), and a variety of methods including writing a manuscript appropriate for a top-academic journal and preparation and delivery of presentations appropriate for advanced conferences in the field:
 - **Analyze** the literature to define unmet clinical needs and scientific knowledge gaps;
 - **Test** a hypothesis(es);
 - **Execute** experiments;
 - **Analyze** and **critically evaluate** their own data;
 - **Synthesize** their work and **contextualize** within the larger literature;
 - **Communicate** their findings both orally and in writing;
 - **Defend** their work among UBC experts in the field.

In addition, students will have the opportunity to:

- **Demonstrate career competencies** in extracurricular career development opportunities including seminars, workshops, networking, and experiential learning.

2.4 Program Requirements

2.4.1 MSc Admission Requirements

Successful applicants must meet UBC's graduate-level admission requirements⁶, including the English Language Proficiency Requirements⁷. Students admitted to the **MSc** program normally possess a **BSc, BA**, or professional undergraduate degree in a related area (e.g., MD, pharmacy, nursing, midwifery, dietetics, social work), with clear evidence of research ability or potential.

2.4.2 MSc Program Requirements

MSc students must take the following core courses:

- WACH 501 (3) Women+ and Children's Health
- WACH 502 (3) Seminars in Women+ and Children's Health

In addition, students will be required to take 6 credits of elective courses from the following, or from other graduate programs:

- WACH 511 (3) Women+ Health Research
- WACH 521 (3) Child Health Research
- WACH 522 (3) Pediatric Nutrition
- WACH 548 (1.5-6) C Directed Studies in Women+ and Children's Health

⁶ UBC master's degree admission requirements: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,340,182>

⁷ UBC Faculty of Graduate and Postdoctoral Studies English language proficiency requirements: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0>

- OBST 501 / WACH 531 (3) Reproductive Endocrinology
- OBST 502 / WACH 532 (3) Physiology of the Mother, Fetus and Newborn
- OBST 503 / WACH 533 (3) Fetal and Perinatal Metabolism
- OBST 507 / WACH 503 (3) Perinatal Epidemiology
- PATH 548C (3) – The Pathophysiology of Types I and II Diabetes
- MEDG 419 (3) – Developmental Origin of Human Disorders
- MICB 502 (3) – Advanced Immunogenetics

Please see Appendix B for WACH course descriptions.

Students must also register in the following until the MSc thesis is completed:

- WACH 549 (18) Master's Thesis

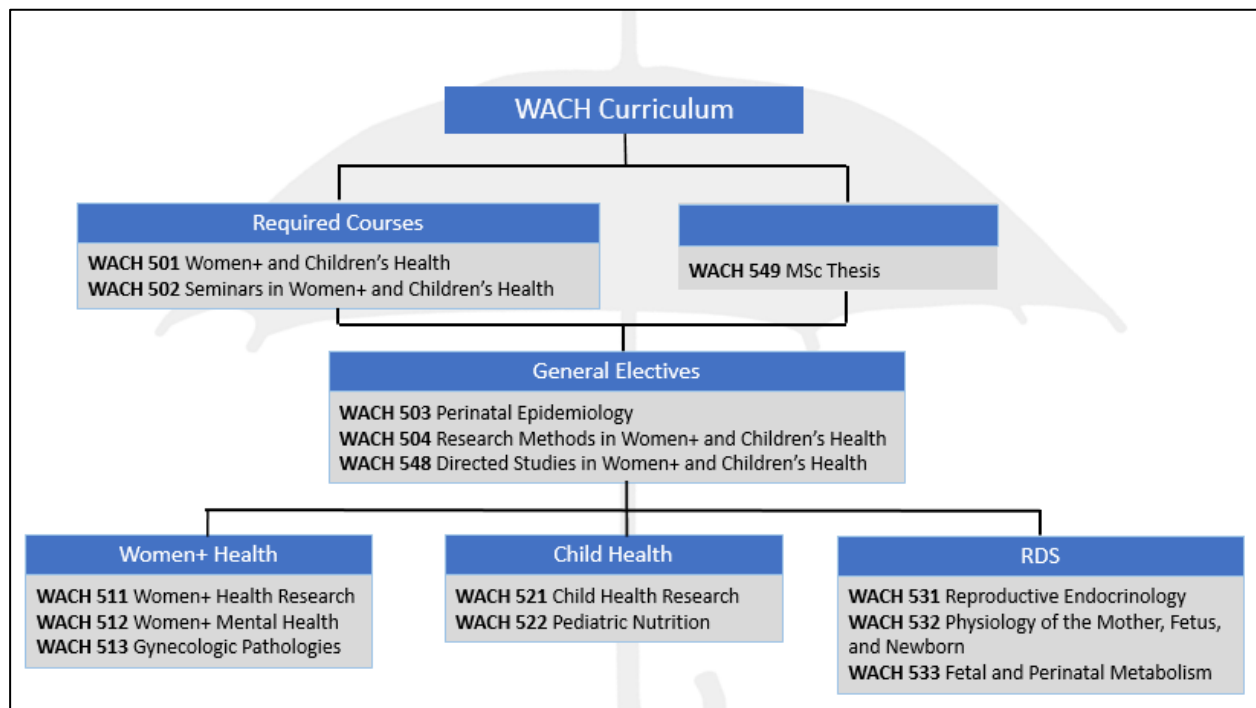


Figure 2 WACH curriculum and streams

Additional courses will be developed and submitted for approval that build on existing research expertise and student interests after the program is launched.

Original research supervised by a faculty member constitutes the major component of work towards the MSc degree. A final thesis will be submitted and an oral examination will be coordinated through the WACH program office. A final approved version of the thesis will be submitted to cIRcle and accepted by Graduate and Postdoctoral Studies. The format of this exam is detailed at <https://www.grad.ubc.ca/current-students/final-doctoral-examination>.

The major requirement for the MSc is completion of a research thesis meeting the Faculty of

Graduate and Postdoctoral Studies' requirements. The MSc is a two-year degree, but students may take longer depending on the nature of the research undertaken.

2.5 Linkages between Learning Outcomes and Curriculum Design

Learning outcomes	Where in the curriculum provides the training
<ul style="list-style-type: none"> Analyze the current state of knowledge in the field regarding the normal developmental trajectory in pregnancy and childhood and the biology of human development and disease. 	<ul style="list-style-type: none"> WACH 501 Women+and Children's Health WACH 502 Seminars in Women+ and Children's Health WACH 511 Women+ Health Research WACH 521 Child Health Research WACH 522 Pediatric Nutrition WACH 548 Directed Studies in Women+ and Children's Health OBST 501 / WACH 531 Reproductive Endocrinology OBST 502 / WACH 532 Physiology of the Mother, Fetus and Newborn OBST 503 / WACH 533 Fetal and Perinatal Metabolism OBST 507 / WACH 503 Perinatal Epidemiology All other elective courses (Section 2.4.2)
<ul style="list-style-type: none"> Compare and contrast unique factors that impact women+ and children's health, including biological factors and social determinants of health. 	<ul style="list-style-type: none"> WACH 501 Women+and Children's Health WACH 502 Seminars in Women+ and Children's Health
<ul style="list-style-type: none"> Apply principles of equity, diversity, and inclusion to research. This will include First People's Principles and Indigeneity. 	<ul style="list-style-type: none"> WACH 501 Women+and Children's Health WACH 502 Seminars in Women+ and Children's Health
<ul style="list-style-type: none"> Create and communicate new knowledge through an original scholarly contribution (i.e. a MSc thesis), and a variety of methods including writing a manuscript appropriate for a top-academic journal and preparation and delivery of presentations appropriate for advanced conferences in the field. 	<ul style="list-style-type: none"> WACH 549 MSc Thesis WACH 548 Directed Studies in Women+ and Children's Health

<ul style="list-style-type: none"> • Analyze the literature to define unmet clinical needs and scientific knowledge gaps; • Test a hypothesis(es); • Execute experiments; • Analyze and critically evaluate their own data; • Synthesize their work and contextualize within the larger literature; • Communicate their findings both orally and in writing; • Defend their work among UBC experts in the field. 	<ul style="list-style-type: none"> • WACH 549 MSc Thesis • WACH 548 Directed Studies in Women+ and Children's Health
<ul style="list-style-type: none"> • Demonstrate career competencies by engaging in extracurricular career development opportunities including seminars, workshops, networking, and experiential learning. 	<ul style="list-style-type: none"> • Graduate Student Enhanced Scholar Program

2.6 Relationship to Established Programs

The program will be the first of its kind in Canada that offers training across all four health research pillars in both women+ and children's health at either the MSc or PhD level. In Canada, there are programs that focus on either maternal health or pediatric health but not both fields of expertise together. In Canada, there are no existing programs offering graduate degrees in pediatric health science similar to the 73-year old University College London Great Ormond Street Institute of Child Health.

In British Columbia

The RDS graduate program currently offers **MSc** training. This program includes reproductive and developmental biology and perinatal epidemiology, as well as a range of in-depth expertise in women+ health issues, such as bioinformatics and implementation science. The current RDS biomedical stream will be rebranded to the RDS stream in the proposed WACH program, and the other current RDS elements will be rebranded into the women+ health stream.

As noted above, beyond UBC, the SFU Faculty of Health Sciences offers a PhD specialization in maternal and child health. Students are required to attend an interdisciplinary seminar course with contents that are not specific to women+ and/or child health. They are also required to take population and public health focused courses. In contrast, the proposed WACH program draws on the content expertise of our faculty and offers courses specific in these two areas. The UBC Oak Street campus adjacent to the BC Children's and Women's Hospitals has established resources and research capacity in women+ and child health. In addition, we require students

to take two core courses in women+ and child health to build a foundation of knowledge. We have also designed a career development guidebook to prepare graduates for jobs both in and outside of academia.

In Canada

Beyond British Columbia, the University of Alberta has MSc programs in Pediatrics and Obstetrics & Gynaecology, respectively. They offer both reading and seminar courses in Pediatrics, but no gynaecology-specific courses. A strength of their program is that they support rotations and a multidisciplinary research environment. However, our proposed program offers courses and seminars in both women+ and children's health, and supports interdisciplinary and translational learning as well as integrated professional development.

McGill University has an MSc program in Family Medicine. Although the program offers diverse research training in quantitative, qualitative, and mixed methods, it is not geared towards women+ and children's health. It primarily attracts healthcare professionals, particularly family doctors. In contrast, our proposed program is intended to appeal to all students interested in women+ and children's health research, including healthcare professionals.

Lastly, the University of Toronto offers a PhD degree in Women's Health. It draws on the strengths of 19 participating programs, which allows for interdisciplinary collaboration among researchers. There are program-specific mentors available and students can attend over 100 free professional development courses, workshops, and seminars for members of the University of Toronto. In contrast, the proposed WACH program is interdisciplinary and housed in the Departments of Obstetrics & Gynaecology and Pediatrics that will leverage the expertise of faculty and staff, and resources at the UBC Oak Street campus. A program administrator and the Research Education Team at BCCHR will support the career development activities. These activities happen on site at BCCHR, off site at the Faculty of Graduate and Postdoctoral Studies at the UBC Point Grey campus, and throughout the Lower Mainland.

Beyond Canada

Internationally, few graduate programs have a combined focus on women+ and children's health. For example, the University of Maryland has a PhD degree in Maternal and Child Health that emphasizes *"training in research, practice, and policy relevant to health problems and services for women, infants, children, adolescents, and their families"*. However, they do not provide an MSc degree option for this program, the student base is small and the professional development component prepares graduates primarily for faculty positions.

King's College in London, UK has an MSc degree in Women and Children's Health in the Faculty of Life Sciences & Medicine. It is the only postgraduate program in women+ and children's health in the UK. The curriculum focuses on *"the fundamentals of women and children's health, scientific and clinical research skills in practice, pediatric research: methods, statistical application and governance, and a research project in women and children's health"*. While the curriculum is similar to our proposed program, there is no integrated career development and the high tuition may create financial barriers for students.

Table 1 Related Graduate Programs at Canadian and International Institutions

	University	Program	PhD	MSc	Inter-disciplinary	Women's Health focus	Child Health focus	Comments
Canada	UBC	RDS	+	+		+		<i>Program to undergo revision</i>
	Simon Fraser	Health Sciences	+		+			No curricula specific to women's/child health
	Alberta	Pediatrics	+	+			+	
	Alberta	Obstetrics & Gynecology	+	+		+		
	McGill	Family Medicine	+	+	+			
	Toronto	Women's Health	+	+		+		Specialization
International	Maryland	Maternal and Child Health	+		+			Course-based; Population health focus
	South Florida	Medical Sciences		+		+		Course-based concentration
	College of London	Pediatrics and Child Health		+			+	Population health focus
	College of London	Women's Health	+	+		+		
	King's College, London	Women's and Children's Health		+	+			Course-based
	Oxford	Women's and Reproductive Health	+	+		+		
	Liverpool	Women's Health	+	+		+		
	Liverpool	Child Health	+	+			+	

2.7 Demand for Program

2.7.1 Evidence of Ongoing and Sustainable Student Demand

Café Scientifiques

Student interest in women+ and children's health graduate training is notable. In November 2018, two Café Scientifiques were held on the UBC Oak Street campus. Seventy participants including students, faculty, and staff contributed ideas to the design of the new graduate program, specifically about the curriculum, teaching and learning styles, career development, and "reimagining the thesis" initiative. The two workshops yielded 10 themes to guide the direction of the program. Some of these key results are: the necessity for instruction in biostatistics and research methods, the need for training in research ethics, and the gap in career readiness training that will enhance leadership and communication skills. This information informed our draft curriculum.

Survey data

From November to December 2019, we conducted a survey online to gather feedback on the proposed program and curriculum. The survey was sent to over 850 members affiliated with BCCHR and WHRI including graduate and undergraduate students, and alumni. There was huge support for the program based on the 192 responses collected. Highlights from respondents include:

- 87% supported developing the program (Figure 3)
- 65% supported the program name "Women's and Children's Health"⁸ (Figure 4)

⁸ Balancing the feedback from students, alumni, staff, faculty and employers, we changed the program name to "Women+ and Children's Health Sciences (WACH)".

- 49% would very likely or likely enroll in the program⁹ (Figure 5)
- The top three appeals of the program were i) “alignment with research interests,” ii) “alignment with personal interests,” and iii) “alignment with career interests”
- Respondents strongly supported the career development opportunities in the program, including the individual career development plan (95%), non-academic competencies/transferrable skills (87%), mentorship opportunities (95%), and internship opportunities (83%).

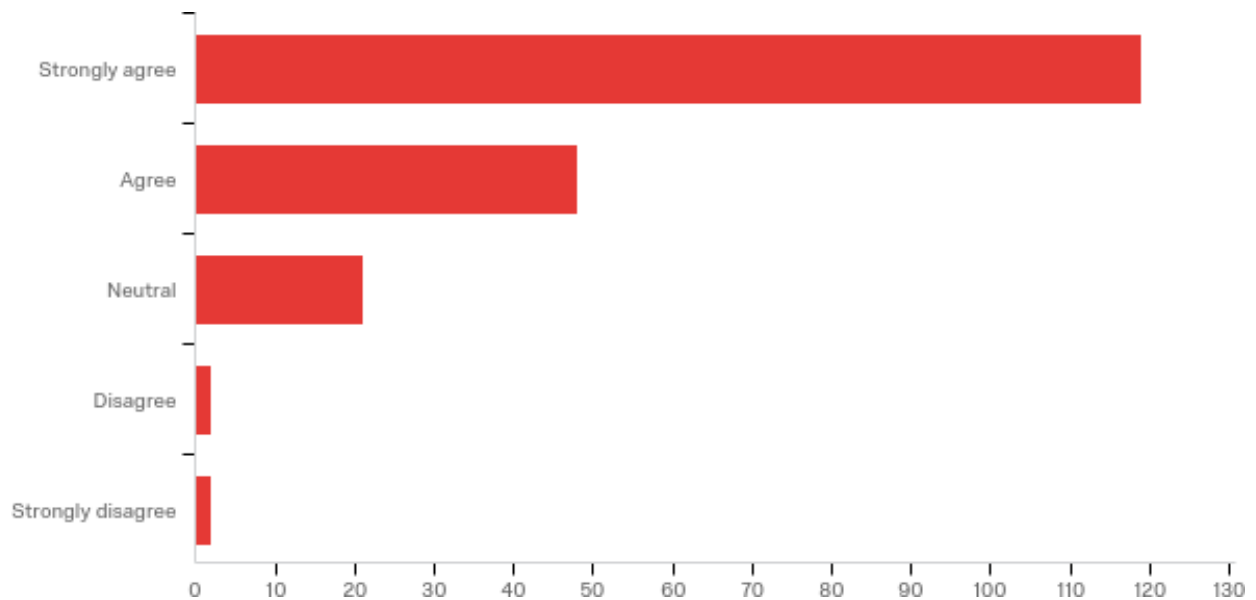


Figure 3 Support for the proposal to develop a graduate program that would offer both MSc and PhD degrees in Women’s and Children’s Health (WACH)

⁹ The top two reasons given by those who chose “unlikely/very unlikely to enroll” are i) “already have multiple degrees, not looking for another one,” and ii) “already in a graduate program.”

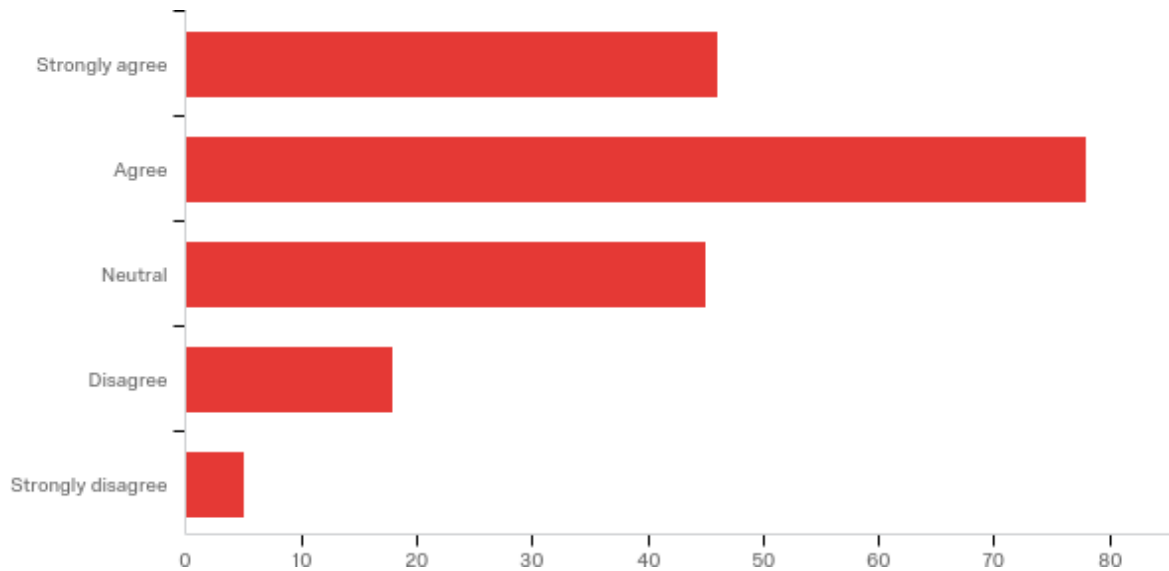


Figure 4 Responses to the statement: "Women's and Children's Health (WACH) is an appropriate name for the program"

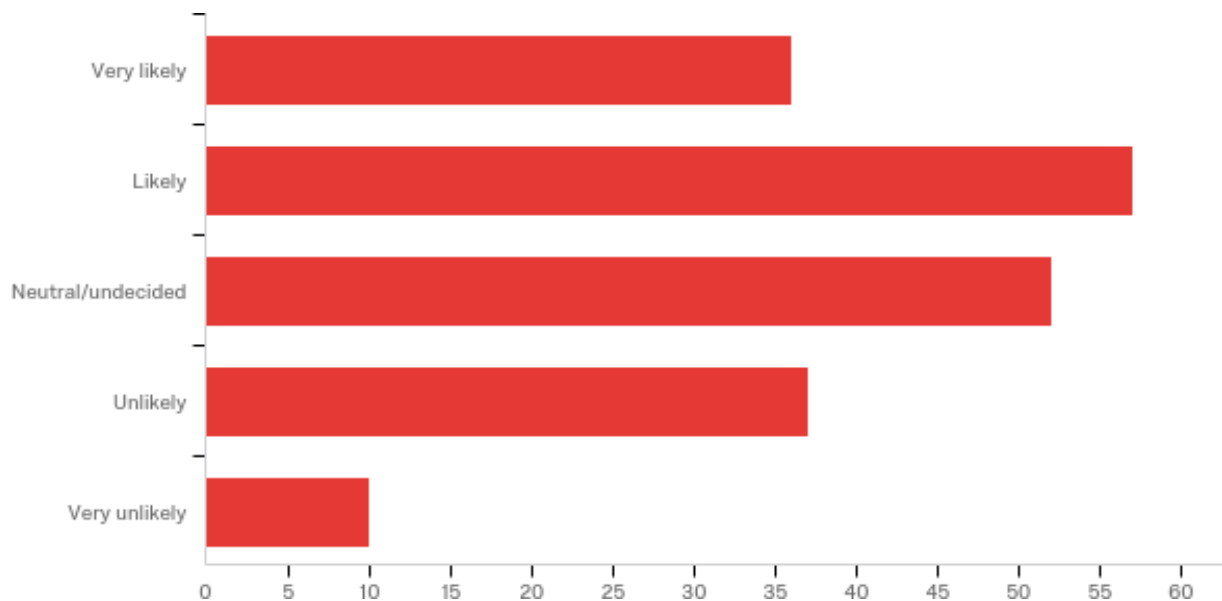


Figure 5 Likelihood to enroll in WACH were the option available

The student/alumni consultation also yielded valuable suggestions about the proposed program. Here, we describe the suggestions and explain how we have addressed them:

1. *"Women's health' in the program name is not a gender-inclusive term."* In response, we consulted the UBC Equity & Inclusion Office and the University of Michigan Centre for

the Education of Women+ (CEW+)¹⁰ and changed the program name to “Women+ and Children’s Health Sciences (WACH)”. We will also discuss equity, diversity, and inclusion issues of marginalized populations in different courses in the program.

2. *“The program should take into consideration Indigenous research methods and participation of Indigenous students and scholars.”* In response, we will designate a full class in the core course WACH 501 to focus on Indigenous issues. We will also incorporate Indigeneity contents in courses throughout the program.
3. *“Midwifery is highly relevant to women+ health and should be included in this program.”* In response, we will emphasize that the proposed program is a research-based program as opposed to a clinician-training program. However, midwives (and other professionals), who are interested in research, are welcome to enroll in this program.
4. *“The rationale for putting women+ health and children’s health in the same program is unclear.”* In response, we will emphasize that the rationale for WACH is to i) leverage the expertise in both departments to prepare students for a wider range of interdisciplinary research fields and job opportunities, ii) equip graduates with the knowledge and skills in both fields to take on careers in academia, government, industry, and NGOs, and iii) catalyze new collaborative research to address health disparities, social determinants of health, preconception to early life determinants of long-term health, and many other topics that are highly relevant to both women+ and children with significant overlapping domains.

Evidence of external support

From November 2019 to January 2020, we conducted employer consultations to gather feedback on the proposed program and curriculum. We received 13 responses in total with the following breakdown: government/academic institutions (2), government health authorities (2), non-profits (5), research funding organizations (1), biotech businesses (1), and fertility centres (2). Highlights of the consultations are as follows:

- Seven organizations (four health authorities/academic institutions, one biotech, one non-profit, and one fertility clinic) indicated interest in participating in mentorships and/or offering internships to our students
- Women's and Children's Health is a welcome, overdue program addition in British Columbia
- Multidisciplinary/interdisciplinary (research) training programs such as WACH prepare better graduates than a single discipline
- Possible job titles for our graduates include scientist, clinical/translational researcher, research manager, physician scientist, bioinformatician, product manager, and administrator.

¹⁰ The University of Michigan Centre for the Education of Women+ (CEW+):
<https://spg.umich.edu/policy/301.03>

Similar to the student/alumni survey, the employer consultations revealed some suggestions for the proposed program. Here, we describe the suggestions and explain how we have addressed them:

1. *“The program should include considerations of Indigenous women and children, and Indigenous research frameworks.”* In response, in WACH 501, there is one class dedicated to Indigeneity, as well as Indigenous contents that spiral through the entire curriculum in various courses taught by subject experts. Other equity, diversity, and inclusion topics such as socio-economic status and disability are also integrated into the curriculum.
2. *“The word “women” may be problematic with the new gender inclusivity policies.”* In response, we changed the program name to “Women+ and Children’s Health Sciences (WACH)”, and incorporated gender-inclusive language and contents throughout the curriculum.
3. *“To work outside of academia, training in career skills such as communications, knowledge translation skills, and an understanding of workplaces such as non-profits is needed.”* In response, in addition to rigorous research training, we have designed the Graduate Student Enhanced Scholar Program to encourage students to develop career skills applicable to industry, government, consulting, nongovernmental organizations (NGOs), and business.

2.7.2 Estimation of Program Demand

The existing RDS program will expand and become a part of the WACH graduate program. As such, the estimated program demand is also projected from current RDS application and registration numbers. Table 2 contains data for the MSc program from 2014-2018.¹¹ In 2018, there were 24 applications for the MSc program and 5 new registrations for a total enrolment of 21 students (admittance rate = 21%). From 2014 to 2018, the applications consistently outnumbered the offers.

Table 2 Enrolment Data of MSc Students in RDS Program, Department of Obstetrics & Gynaecology, UBC (2014-2018)

	2018	2017	2016	2015	2014
Applications	24	18	18	11	11
Offers	6	9	6	8	8
New registrations	5	7	5	6	6
Total enrolment	21	19	15	20	16

As stated in Section 1.11, in 2019 the UBC Oak Street campus had over 350 UBC-affiliated research faculty and over 300 UBC graduate students, in addition to UBC-funded support staff and undergraduate and postdoctoral trainees. Although the Department of Pediatrics has 449

¹¹ Data available on the UBC Faculty of Graduate & Postdoctoral Studies website:
<https://www.grad.ubc.ca/prospective-students/graduate-degree-programs/master-of-science-reproductive-developmental-sciences>

faculty members, including 160 hospital-based pediatric specialists and sub-specialists, 37 UBC academic faculty (15 are PhD scientists), and 200 community-based faculty throughout the province, it does not have a graduate program of its own. The Department of Obstetrics & Gynaecology, on the other hand, has 252 faculty members, including 24 faculty members focused on discovery-based research, and 38 MSc and PhD students in the RDS program. We expect that the proposed WACH program, which will house the current RDS stream, in addition to the new women+ health and child health streams, will attract significantly more students than the current RDS program.

2.8 Target Audience and Enrolment Expectations

The MSc degree is expected to attract:

- Recent graduates from a range of BSc and BA degree specializations, including microbiology & immunology, nutritional science, biology, computer science, pathology and laboratory science, sociology, psychology, and others.
- Graduates from professional undergraduate programs, including medicine (MD), dietetics (RD), nursing (RN), pharmacy (PharmD), midwifery (BMw), and others.

The program expects to admit 8 MSc students in the first year, building up to a total of 33 MSc students in year 5. We expect that up to 30 per cent of the students will be international, based on existing RDS enrolment numbers.

2.9 Resources

2.9.1 Budget, Tuition, and Fees

The WACH program will have tuition and fees that follow the standard UBC rules for graduate students in the Faculty of Graduate and Postdoctoral Studies. A new budget has been created describing the anticipated increases in revenues and expenses in relation to the RDS program.

2.9.2 Human Resources

Current and future academic faculty members in the Departments of Pediatrics and Obstetrics & Gynaecology will teach the core courses and electives, and supervise students. Their salaries are already covered under academic deliverables, leading to no new faculty costs. Clinical faculty teaching costs have been factored into the new budget. There will be new costs for the stipends of the Program Co-directors.

In the year before the launch of the program, a 0.5 FTE Program Manager will be hired to assist with the planning and implementation of the program. The Program Manager position will increase to 1.0 FTE starting from Year 1. In addition, a 0.5 FTE Program Assistant will be hired starting from Year 3 to accommodate growing student registrations. There will be Program Co-Directors, from the Departments of Obstetrics & Gynaecology and Pediatrics, who will receive a stipend in addition to academic salaries, starting at one year before program launch.

2.9.3 Space & Equipment

BCCHR and WHRI currently have more than 300 graduate students enrolled through the Faculty of Medicine. We expect that new students in the WACH program will gradually take up the carrels vacated by current graduating students, and the existing facilities in BCCHR and WHRI are sufficient to house the WACH program students for the foreseeable future.

The majority of teachers for the WACH program already have established laboratories with research equipment at BCCHR, WHRI, BC Children's Hospital and/or BC Women's Hospital. Additional laboratory space and equipment will be provided by BCCHR and WHRI, if necessary.

2.9.4 Library

The UBC Library has been consulted to discuss arrangements for appropriate resources. They have confirmed that resources will be available to support the WACH curriculum.

2.10 Program Evaluation

A WACH program annual review will be undertaken. The Program Co-Directors and Program Oversight Committee are responsible for conducting the annual Graduate Program review. A 5-year internal evaluation will be conducted by the UBC Graduate and Postgraduate Studies and shared with the Faculty of Medicine and the WACH Program Leadership. A 10-year decanal external evaluation will be conducted by external reviewers. The latter reviews will typically be conducted in conjunction with the formal Departmental Review processes.

3. Appendices

Appendix A WACH New Course Syllabi:

- WACH 501 Women+ and Children's Health
- WACH 502 Seminars in Women+ and Children's Health
- WACH 511 Women+ Health Research
- WACH 521 Child Health Research
- WACH 522 Pediatric Nutrition
- WACH 548 Directed Studies in Women+ and Children's Health

Appendix B WACH Course Descriptions

Appendix C Graduate Student Enhanced Scholar Program Guidebook

Appendix D Memorandum of Understanding between Department of Pediatrics and Department of Obstetrics & Gynaecology

Appendix E Memorandum of Understanding between Department of Pediatrics, Department of Obstetrics and Gynaecology, BC Children's Hospital Research Institute, and Women's Health Research Institute

Appendix F Guidelines for Supervisory Activities

Appendix G Enhancing Indigenous Inclusion in WACH

Appendix H Letter of Support, Dean Tania Bubela, Faculty of Health Sciences, SFU

UBC Curriculum Proposal Form Change to Course or Program

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: Women+ and Children's Health Sciences</p> <p>Degree Offered: MSc</p> <p>Members Professors M. Bedaiwy, L. Brotto, B. Carleton, G. Cundiff, S. Dell, A. Eddy, R. Goldman, R. Grunau, D. Huntsman, K.S. Joseph, T. Kissoon, P. C. K. Leung, D. Matsell, J. McAlpine, D. Money, T. Oberlander, I. Pike, S. Sanatani, K. Schultz, S. Stockler, G. Stuart, S. Turvey, B. Vallance.</p> <p>Associate Professors A. Beristain, J. Bettinger, T. Blydt-Hansen, M. Brussoni, A. Devlin, Q. Doan, R. Elango, R. Geoffrion, K. Harris, J. Hutcheon, J. Kwon, J. Lim, S. Lisonkova, C. Maxwell, G. Meckler, A. Rauscher, G. Reid, M. Sadarangani, L. Sly, P. Yong.</p> <p>Assistant Professors M. Anglesio, K. Brown, G. Hanley, S. Mitchell-Foster, A. Talhouk.</p> <p>Program Overview The goal of the graduate program in Women+ and Children's Health Sciences is to provide students with a broad knowledge of research in women+ and children's health sciences including biomedical, clinical, health services, biomedical, patient- and populations. Core concepts will include biomedical, public-oriented translational research with consideration of social determinants of health and cultural competence, including sex and gender and</p>	<p>URL: New URL requested</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create new calendar entry for the MSc program in Women+ and Children's Health Sciences (WACH)</p> <p>Rationale for Proposed Change: The BC Children's and Women's (C&W) Hospital campus is home to the Departments of Obstetrics & Gynaecology and Pediatrics, as well as the BC Children's Hospital Research Institute (BCCHRI) and the Women's Health Research Institute (WHRI). The common focus of our collective research endeavours is women+ and children's health. Despite this, there is no graduate-level training offered at UBC or in British Columbia that combines both research areas in one program. SFU's Faculty of Health Sciences has a PhD option to specialize in maternal and child health, but women+ and/or children's health specific courses are not available. As such, we propose a new graduate program titled "Women+ and Children's Health Sciences (WACH)" that would offer both MSc and PhD degrees. The rationale of the program includes:</p> <ol style="list-style-type: none"> 1. Leveraging the expertise in both Departments to prepare students for a wider range of interdisciplinary research fields and job opportunities Expanding the research capacity at the C&W campus by complimenting activities carried out

indigenous health, and research methodologies. In addition, students will develop in depth expertise in at least one of the following areas of research that represent existing areas of faculty expertise within our departments:

- Acute or chronic diseases
- Brain development and function
- Implementation science
- Developmental origins of health and disease
- Placental, embryonic, foetal, perinatal, infant, child and/or youth: Development, physiology, and/or pathophysiology
- Reproductive Biology
- Reproductive or childhood cancers
- Epidemiology specific to women+ or children
- Mental health specific to women+ or children
- Health services specific to women+ or children

Master of Science

Admission Requirements:

Successful applicants must meet UBC's graduate-level admission requirements [<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,340,182>], including the English Language Proficiency Requirements [<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,345,0>].

Program Requirements:

- Students are required to successfully defend an MSc thesis WACH 549 (18).
- A total of 30 credits are required to graduate from this program.
- Students are required to take 12 credits of coursework.
- Mandatory courses are WACH 501 (3) and WACH 502 (3).
- Elective courses include WACH 511 (3), WACH 521 (3), WACH 522 (3), WACH 531 (3), WACH 532 (3), WACH 533 (3),

by various departments and faculty members, and enriched by a large population of patients who come to this campus for care

3. Strengthening UBC's capacity as a leading research institution that supports interdisciplinary research.

The program aligns with the Faculty of Medicine 2016-2021 Strategic Plan: Building the Future, and the UBC 2018-2028 Strategic Plan: Shaping the Next Century. In addition, it aligns with the Ministry of Health's priority to "[deliver] on a renewed commitment to evidence-based research and analysis" and "to support holistic models of healthy child and family development". It also fits directly with the HealthyFamilies BC framework.

The program requirements include coursework and thesis research. In addition, optional career development activities have been developed to train students to become well-rounded individuals that could find employment in academia and beyond.

The anticipated start date of the MSc program is September 2022.

<p>WACH 534 (3), and WACH 548 (1.5-6), or others selected in consultation with the student's supervisor/supervisory committee and program director.</p> <ul style="list-style-type: none"> • Prior to graduation and in consultation with their research supervisors, students can choose one of the following research streams: Women+ Health, Child health, or Reproductive and Developmental Sciences (RDS). This stream will appear on the student's transcript, but not on their parchment. • Students are encouraged to participate in optional career development activities including developing an individual development plan (IDP), completing a competency passport (ComPass), and participating in a mentorship program. • Students' academic program must be approved by the supervisory committee and the program director. <p>The expected time to completion is 2 years.</p> <p>Contact Information: Department of Pediatrics Faculty of Medicine Rm 2D19, 4480 Oak Street BC Children's Hospital Vancouver, BC V6H 3V4 Telephone: 604-875-3177 Fax Number: 604-875-2890 Website: https://pediatrics.med.ubc.ca/</p> <p>Department of Obstetrics & Gynaecology Faculty of Medicine Suite 930, 1125 Howe Street Vancouver, BC Canada V6Z 2K8 Website: https://obgyn.ubc.ca/</p>	
<p>Proposed URL: Homepage > Faculties, Colleges, and Schools > The Faculty of Graduate and Postdoctoral Studies > Degree Programs > Women+ and Children's Health Sciences</p> <p>Proposed Calendar Entry: The Faculty of Graduate and</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,204,828,0</p> <p>Present Calendar Entry: The Faculty of Graduate and</p>

<p>Postdoctoral Studies</p> <p>Contents</p> <p>Reproductive and Developmental Sciences</p> <p>Resources, Environment and Sustainability</p> <p>School and Applied Child Psychology</p> <p>Science and Technology Studies</p> <p>Science Education</p> <p>Social Studies Education</p> <p>Social Work</p> <p>Society, Culture and Politics in Education</p> <p>Sociology</p> <p>Soil Science Special Education</p> <p>Statistics</p> <p>Surgery</p> <p>Teaching English as a Second Language</p> <p>Theatre</p> <p>Urban Design</p> <p>Visual Art</p> <p>Vocational Rehabilitation Counselling</p> <p>Women+ and Children's Health Sciences</p> <p>Zoology</p>	<p>Postdoctoral Studies</p> <p>Contents</p> <p>Reproductive and Developmental Sciences</p> <p>Resources, Environment and Sustainability</p> <p>School and Applied Child Psychology</p> <p>Science and Technology Studies</p> <p>Science Education</p> <p>Social Studies Education</p> <p>Social Work</p> <p>Society, Culture and Politics in Education</p> <p>Sociology</p> <p>Soil Science</p> <p>Special Education</p> <p>Statistics</p> <p>Surgery</p> <p>Teaching English as a Second Language</p> <p>Theatre</p> <p>Urban Design</p> <p>Visual Art</p> <p>Vocational Rehabilitation Counselling</p> <p>Zoology</p> <p>Type of Action: Add Women+ and Children's Health Sciences to the Faculty of Graduate and Postdoctoral Studies entry</p> <p>Rationale for Proposed Change: To accurately list the programs available in the Faculty of Graduate and Postdoctoral Studies</p>
<p>Proposed URL: Homepage > Course Descriptions > Courses by Subject Code > WACH Women+ and Children's Health Sciences</p> <p>Proposed Calendar Entry:</p> <p>URST Urban Studies</p> <p>URSY Urban Systems</p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=code</p> <p>Present Calendar Entry:</p> <p>URST Urban Studies</p> <p>URSY Urban Systems</p>

<p><u>VANT</u> <u>Vantage College</u></p> <p><u>VISA</u> <u>Visual Arts</u></p> <p><u>VRHC</u> <u>Vocational Rehabilitation Counselling</u></p> <p><u>VURS</u> <u>Visiting Undergraduate Research Students</u></p> <p>WACH Women+ and Children's Health Sciences</p> <p><u>WOOD</u> <u>Wood Products Processing</u></p> <p><u>WRDS</u> <u>Arts Studies in Writing</u></p> <p><u>WRIT</u> <u>University Writing Centre Courses</u></p> <p><u>ZOOL</u> <u>Zoology</u></p>	<p><u>VANT</u> <u>Vantage College</u></p> <p><u>VISA</u> <u>Visual Arts</u></p> <p><u>VRHC</u> <u>Vocational Rehabilitation Counselling</u></p> <p><u>VURS</u> <u>Visiting Undergraduate Research Students</u></p> <p><u>WOOD</u> <u>Wood Products Processing</u></p> <p><u>WRDS</u> <u>Arts Studies in Writing</u></p> <p><u>WRIT</u> <u>University Writing Centre Courses</u></p> <p><u>ZOOL</u> <u>Zoology</u></p> <p>Type of Action: Create subject code for Women+ and Children's Health Sciences (WACH) program</p> <p>Rationale for Proposed Change: The Departments of Pediatrics and Obstetrics & Gynaecology in the Faculty of Medicine are jointly proposing to create a new PhD program in Women+ and Children's Health Sciences, as an expansion and reconfiguration of the existing Reproductive and Developmental Sciences (RDS) PhD program. The RDS program will transition to the WACH program over a few years, and the OBST subject code will no longer be used. As a result, a new subject code WACH is required for the proposed Women+ and Children's Health Sciences program.</p>
<p>Proposed URL: <u>Homepage > Course Descriptions > Courses by Subject Name > WACH Women+ and Children's Health Sciences</u></p> <p>Proposed Calendar Entry:</p> <p><u>URSY</u> <u>Urban Systems</u></p> <p><u>UROL</u> <u>Urological Surgery</u></p> <p><u>VANT</u> <u>Vantage College</u></p> <p><u>VURS</u> <u>Visiting Undergraduate Research Students</u></p> <p><u>VISA</u> <u>Visual Arts</u></p>	<p>URL: http://www.calendar.ubc.ca/vancouver/courses.cfm?page=name</p> <p>Present Calendar Entry:</p> <p><u>URSY</u> <u>Urban Systems</u></p> <p><u>UROL</u> <u>Urological Surgery</u></p> <p><u>VANT</u> <u>Vantage College</u></p> <p><u>VURS</u> <u>Visiting Undergraduate Research Students</u></p> <p><u>VISA</u> <u>Visual Arts</u></p> <p><u>VRHC</u> <u>Vocational Rehabilitation</u></p>

<u>VRHC</u>	<u>Vocational Rehabilitation Counselling</u>	<u>Counselling</u>
<u>WACH</u>	<u>Women+ and Children's Health Sciences</u>	<u>WACH</u> <u>Women+ and Children's Health Sciences</u>
<u>WOOD</u>	<u>Wood Products Processing</u>	<u>WOOD</u> <u>Wood Products Processing</u>
<u>ZOOL</u>	<u>Zoology</u>	<u>ZOOL</u> <u>Zoology</u>
		<p>Type of Action: Create subject name for Women+ and Children's Health Sciences (WACH) program</p> <p>Rationale for Proposed Change: The Departments of Pediatrics and Obstetrics & Gynaecology in the Faculty of Medicine are jointly proposing to create a new PhD program in Women+ and Children's Health Sciences, as an expansion and reconfiguration of the existing Reproductive and Developmental Sciences (RDS) PhD program. The RDS program will transition to the WACH program over a few years, and the OBST subject name will no longer be used. As a result, a new subject name WACH is required for the proposed Women+ and Children's Health Sciences program.</p>

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 501 (3) Women+ and Children's Health Biomedical, clinical, translational, and population research; research approaches and opportunities across the four health research pillars (biomedical, clinical, health services, population health). <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new required course for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It is a core course in the program that enables students to:</p> <ul style="list-style-type: none"> • Describe the current state of knowledge in key research areas in women+ and children's health including biomedical, clinical, health services, and population health • Apply and interpret appropriate, rigorous statistical analyses in each of the key research areas • Identify and apply principles of equity, diversity, and inclusion to research. This will include sex and gender considerations and Indigeneity • Analyze unique factors that impact women+ and children's health, including biological factors and social determinants of health, and • Evaluate interdisciplinary opportunities that intersect with students' own research focus

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 502 (3) Seminars in Women+ and Children's Health Biological and social determinants of health, health equity and inclusion. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new required course for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It is a core course in the program that enables students to:</p> <ul style="list-style-type: none"> • Describe broad research themes in women+ and children's health including biomedical, clinical/translational, health services, and population health • Analyze biological and health system disparities that exist for women+ and children, locally and globally • Analyze the origins of health inequities for women+ and children and evaluate current systems in place to improve women+ and children's health • Create and frame research questions including within the context of health disparities that exist for women+ and children • Apply appropriate research methods to address research question(s), and • Evaluate and interpret rigorous statistical analyses pertinent to research question(s)

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 511 (3) Women+ Health Research Sexual development, transgender medicine, reproduction and pregnancy, chronic and acute diseases, and social determinants of health. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course in the Women+ Health stream for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Differentiate female physiology and pathophysiology across the different lifestage trajectories including development, menarche, reproduction, pregnancy, and menopause • Evaluate unique factors that impact research in women+ health and disease such as gender specific implications for research • Analyze and apply principles of equity, diversity, and inclusion to women+ health research • Evaluate how different research approaches offer different insights into women+ health and how translational approaches improve the impact of research on women+ health, and • Apply and interpret appropriate statistical methods to women+ health research

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 521 (3) Child Health Research Biology of human development, child growth and puberty, adolescent health, childhood chronic and acute diseases, gender diversity in pediatrics, social environment and child health, and pediatric research in partnership with Indigenous communities. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course in the Children's Health stream for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Describe the biology of human development across the different lifestage trajectories including prenatal, infancy, toddler/preschool, childhood, and adolescence • Differentiate unique factors that impact child health and disease and considerations when conducting research at different developmental time points • Compare and contrast sex-specific differences in development • Analyze and apply principles of equity, diversity, and inclusion to pediatric research, and • Evaluate experimental methods, research design, and statistical approaches used in child health research. Determine the most appropriate approach/method for a given research question.

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca</p> <p>Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 522 (3) Pediatric Nutrition Dietary assessment and nutrient requirements in children and youth, assessment of growth and adiposity, application of nutritional biochemistry and animal models, energy balance, macronutrient and micronutrient metabolism and research, restricted diets in children, nutritional interventions in children. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: This is a new elective course in the Children's Health stream for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Differentiate nutrient requirements and dietary assessment across the different lifestage trajectories including prenatal, infancy, toddler/preschool, childhood, and adolescence • Describe the biology of nutrient absorption and physiology/metabolism during development • Evaluate experimental methods, research design, and statistical approaches used to assess the role of diet and nutrition in child health and disease. Determine the most appropriate approach/method for a given research question • Compare and contrast sex-specific differences in nutrient physiology/metabolism, and • Analyze and apply principles of equity, diversity, and inclusion to nutrition research.

Category: 1

<p>Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022</p>	<p>Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca</p>
<p>Proposed Calendar Entry: WACH 548 (1.5-6) c Directed Studies in Women+ and Children's Health Student-directed literature-based or experimental investigation of a topic. <i>This course is not eligible for Credit/D/Fail grading.</i></p>	<p>URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry Rationale for Proposed Change: This is a new elective course for the proposed Women+ and Children's Health Sciences (WACH) PhD program. It enables students to:</p> <ul style="list-style-type: none"> • Evaluate the current state of knowledge in a key research area pertinent to women+ or children's health • Synthesize current literature identifying critical knowledge gaps and unmet clinical needs Analyze state-of-the-art techniques that may be used to address research questions identified to improve health outcomes for women+ or children, and • For students undertaking a research component, create new knowledge by addressing knowledge gaps experimentally.

Category: 1

Faculty: Medicine Department: Pediatrics; Obstetrics & Gynaecology Faculty Approval Date: Nov 17, 2020 Effective Session (W or S): W Effective Academic Year: 2022	Date: May 7, 2020 Contact Person: Dr. Allison Eddy Phone: (604) 875-2315 Email: allison.eddy@cw.bc.ca Contact Person: Dr. Geoffrey Cundiff Phone: (604) 806-9966 Email: geoff.cundiff@ubc.ca
Proposed Calendar Entry: WACH 549 (18) MSc Thesis <i>This course is not eligible for Credit/D/Fail grading.</i>	URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry Rationale for Proposed Change: This is a new entry for the proposed Women+ and Children's Health Sciences (WACH) MSc program. Completion of an MSc thesis is a requirement to graduate from the program. Students must register in this course until their MSc thesis is completed.
Proposed Calendar Entry: WACH 531 (3) Reproductive Endocrinology Neuroendocrine regulation of reproduction, regulation of the ovarian and testicular function. <i>This course is not eligible for Credit/D/Fail grading. Equivalency: OBST 501.</i>	URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry Rationale for Proposed Change: The existing RDS course OBST 501 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 501 and WACH 531.
Proposed Calendar Entry: WACH 532 (3) Physiology of the Mother, Fetus and Newborn Functional development of the placenta and major organ systems in the fetal and newborn period in man and animals. <i>This course is not eligible for Credit/D/Fail grading. Equivalency: OBST 502.</i>	URL: N/A Present Calendar Entry: N/A Type of Action: Create a new course entry Rationale for Proposed Change:

	<p>The existing RDS course OBST 502 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 502 and WACH 532.</p>
<p>Proposed Calendar Entry: WACH 533 (3) Fetal and Perinatal Metabolism Nutrient metabolism and requirements during fetal and perinatal development and research methods used to assess requirements; developmental origins of health and disease; gestational obesity and diabetes; nutritional supplements during pregnancy. <i>This course is not eligible for Credit/D/Fail grading. Equivalency: OBST 503.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: The existing RDS course OBST 503 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 503 and WACH 533.</p>
<p>Proposed Calendar Entry: WACH 503 (3) Perinatal Epidemiology Indicators of maternal/newborn well-being across population subgroups, changing trends in obstetrical intervention, perinatal morbidity, and the analysis of perinatal data. <i>This course is not eligible for Credit/D/Fail grading. Corequisite: One of OBST 502, WACH 532. Equivalency: SPPH 537, OBST 507.</i></p>	<p>URL: N/A</p> <p>Present Calendar Entry: N/A</p> <p>Type of Action: Create a new course entry</p> <p>Rationale for Proposed Change: The existing RDS course OBST 507 will become an elective course in the RDS stream of the proposed Women+ and Children's Health Sciences (WACH) PhD program. It will be cross-listed as OBST 507 and WACH 534.</p>

Appendix B WACH Course Descriptions

WACH 501 (3) Women+ and Children's Health

Biomedical, clinical, translational, and population research; research approaches and opportunities across the four health research pillars (biomedical, clinical, health services, population health)

WACH 502 (3) Seminars in Women+ and Children's Health

Biological and social determinants of health, health equity and inclusion

WACH 511 (3) Women+ Health Research

Sexual development, transgender medicine, reproduction and pregnancy, chronic and acute diseases, and social determinants of health

WACH 521 (3) Child Health Research

Biology of human development, child growth and puberty, adolescent health, childhood chronic and acute diseases, gender diversity in pediatrics, social environment and child health, and pediatric research in partnership with Indigenous communities

WACH 522 (3) Pediatric Nutrition

Dietary assessment and nutrient requirements in children and youth, assessment of growth and adiposity, application of nutritional biochemistry and animal models, energy balance, macronutrient and micronutrient metabolism and research, restricted diets in children, nutritional interventions in children

WACH 548 (1.5-6) C Directed Studies in Women+ and Children's Health

Student-directed literature-based or experimental investigation of a topic

OBST 501 / WACH 531 (3) Reproductive Endocrinology

Neuroendocrine regulation of reproduction, regulation of the ovarian and testicular function.

OBST 502 / WACH 532 (3) Physiology of the Mother, Fetus and Newborn

Functional development of the placenta and major organ systems in the fetal and newborn period in man and animals.

OBST 503 / WACH 533 (3) Fetal and Perinatal Metabolism

Knowledge of fetal growth and development, physiology, pathology of labour.

OBST 507 / WACH 503 (3) Perinatal Epidemiology

Indicators of maternal/newborn well-being across population subgroups, changing trends in obstetrical intervention, perinatal morbidity, and the analysis of perinatal data.

PATH 548C (3) The Pathophysiology of Types I and II Diabetes

Physiology of pancreatic islets and the underlying mechanisms of glucose dysregulation in both types 1 and 2 diabetes

MEDG 419 (3) Developmental Origin of Human Disorders

Genetic and epigenetic determinants of development from conception to birth. Topics include development of the neural tube, face, heart, endoderm, blastocyst, embryonic stem cells, gastrulation, genomic imprinting, placental complications, chromosomal abnormalities and prenatal diagnosis. Discussions based on published research articles

MICB 502 (3) Advanced Immunogenetics

Recent advances in immunological mechanisms and human immunology

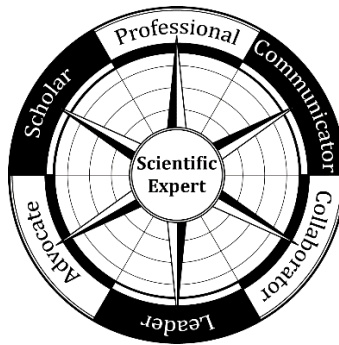
Appendix C Graduate Student Enhanced Scholar Program Guidebook

Women+ and Children's Health Sciences Program

Department of Pediatrics | Department of Obstetrics & Gynaecology

Faculty of Medicine

GRADUATE STUDENT ENHANCED SCHOLAR PROGRAM



(Image adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada.)

Version November 2019

ACKNOWLEDGEMENTS

Department Heads: Dr. Geoffrey Cundiff, Dr. Allison Eddy

Oversight Committee: Dr. Alex Beristain, Dr. Geoffrey Cundiff, Dr. Angela Devlin, Dr. Allison Eddy, Andi Martin, Dr. Dan Rurak, Dr. Laura Sly

Steering Committee: Dr. Alex Beristain, Dr. Lori Brotto, Dr. Geoffrey Cundiff, Dr. Angela Devlin, Dr. Allison Eddy, Dr. Soren Gantt, Dr. Asif Khowaja, Dr. Tex Kissoon, Andi Martin, Dr. Dawn McArthur, Dr. Gina Ogilvie, Simona Powell, Dr. Wendy Robinson, Dr. Dan Rurak, Dr. Laura Sly, Dr. Wyeth Wasserman, Dr. Paul Yong

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With guidance from the Faculty of Graduate and Postdoctoral Studies and the Faculty of Medicine.

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OVERVIEW

The Graduate Student Enhanced Scholar Program is designed to encourage and facilitate Faculty of Medicine (FoM) graduate students in transitioning from their graduate training to careers in academia and beyond. Recognizing a growing number of health research graduates pursue non-academic careers, the Departments of Pediatrics and Obstetrics & Gynaecology seek to encourage trainees to develop universal employability skills, explore career options in alignment with their interests, passions, and skills, and make a plan to secure employment upon graduation.

Program Duration

This program can be completed over the course of the student's graduate program, whether it is a Master of Science or Doctor of Philosophy degree, at the discretion of their research supervisor.

Program Components

- I. Individual Development Plan
- II. Competency Passport
- III. Mentorship

THE PROGRAM

I. Individual Development Plan - adapted from the Canadian Institutes of Health Research (CIHR)

An Individual Development Plan (IDP) is a tool that supports graduate students in actively preparing for the career(s) of their choice by exploring career paths, establishing career goals, and identifying skill gaps, culminating in an action plan to achieve their career goal(s). The use of an IDP presents an opportunity for self-evaluation, and also allows graduate students and postdoctoral fellows (PDFs) to map their progress over time. Finally, IDPs serve as a communication tool between trainees and mentors (supervisor or other mentor(s)) regarding the training outcomes and expectations of both parties.

IDP components generally include self-assessments, career exploration, goal determination, plan development, refinement, and implementation. Two common IDP templates include the CIHR IDP and Science Careers' myIDP. Either one can be selected according to the trainee's preferences, but orientations will use the CIHR IDP as an instructive tool - found here:

http://www.cihr-irsc.gc.ca/e/documents/training_idp_form-en.pdf

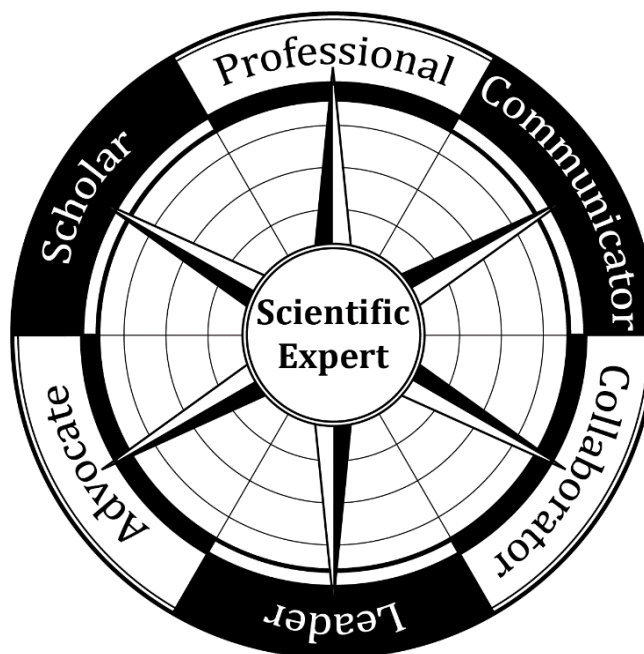
Please note: The IDP is not intended to be an assignment that is completed. Rather, it is a tool that undergoes continual change as trainees' understanding of themselves and their goals come into better focus over time. A summary of the student's activities in the IDP, including

mentorship and extracurricular accomplishments, could be included as an appendix in the student's thesis.

II. Competency Passport

The Graduate Student Enhanced Scholar Program acknowledges the importance of developing important transferrable skills (competencies) to supplement core research training undertaken with a FoM supervisor. The degree to which the below-listed competencies need to be addressed should be aligned to the trainee's IDP and in consultation with the trainee's supervisor and mentor. A trainee may be deemed to have already achieved some degree of competency in one or more of the areas prior to beginning the program, in which case they should focus on other areas for development.

Drawing from the Royal College of Physicians and Surgeons of Canada's CanMEDS, recent health research pedagogical literature, and consultations with UBC faculty, alumni, and students, six categories of competencies consistently emerge. These competencies constitute the core qualities of the next generation of scientific experts. Positioning these competencies on a radial 'skill wheel' illustrates how competency development can be tracked discretely - like a passport. Hence, the Competency Passport (*ComPass*) serves as a tool to conceptualize and visualize core skills needed to turn graduate trainees into scientific experts equipped with skills applicable in academia and beyond.



(Image adapted from the CanMEDS Physician Competency Diagram with permission of the Royal College of Physicians and Surgeons of Canada.)

The table below describes each *ComPass* competency in more detail, and provides examples of mandatory and recommended activities, and workshops held offsite and at the BC Children's

Hospital Research Institute (BCCHR). Some activities may help you develop more than one competency. Consult your peers, mentors, supervisor, or program manager for ideas on other competency-developing opportunities.

Competency	Description	Activities	Recommended Workshops
Scholar	<p>Graduates will gain broad conceptual knowledge related to women+ and children's health and deep knowledge related to their specific field of study, to enable meaningful intra- and inter-disciplinary scientific interactions. Graduates will develop critical thinking, experimental, and computational skills required in their field of study. Furthermore, graduates will advance the scientific enterprise and health outcomes including translation across the spectrum of implementation science, while learning about and adhering to responsible conduct of research principles (ethics), as well as developing teaching and mentoring skills. Graduates will establish a pattern of lifelong learning in their broad scientific discipline.</p>	<p>Mandatory Activities</p> <ul style="list-style-type: none"> • Complete a formal research ethics training course (e.g. RCR) • Pass your comprehensive examination (PhD students) • Defend your thesis/dissertation <p>Recommended Activities</p> <ul style="list-style-type: none"> • Write a review paper that synthesizes knowledge in your field • Consistently attend a journal club (at least 50% attendance) • Contribute to research outside of your translational science domain (e.g. basic/clinical/population/systems) • Write a fellowship or research grant funding proposal • Attend seminar series at BCCHR 	<p>BCCHR</p> <ul style="list-style-type: none"> • Preparing an Ethics Submission • Biostatistics • BCCHR Studentships & Fellowships • Translating Research into Policy • Instructional Skills • Animal Welfare & Ethics (if appropriate) • Proposal Development <p>Offsite</p> <ul style="list-style-type: none"> • Statistics (GPS¹⁴)

¹⁴ Graduate Pathways to Success program offered by the Faculty of Graduate and Postdoctoral Studies

Communicator	Graduates will develop oral and written communication skills and strong knowledge dissemination skills to assimilate and articulate information to other scientists, clinicians, agencies, patients, communities, and to society at large.	Mandatory Activities <ul style="list-style-type: none"> • Present your thesis/dissertation Recommended Activities <ul style="list-style-type: none"> • Contribute original writing to a manuscript • Present research findings locally and at national/international conferences • Present at journal clubs and student-run workshops • Participate in 3-Minute Thesis • Participate in Let's Talk Science • Participate in a panel discussion • Participate in Mini Med School • Write a newspaper article on someone else's research • Write a blog 	BCCHR <ul style="list-style-type: none"> • Digital Communications • Presentation Skills • Storytelling your Research • Interacting with the Media • Visual Thinking • Complex Ideas, Simple Phrases Offsite <ul style="list-style-type: none"> • UBC Writing courses • Business Writing for Today's Professional (GPS) • Establishing Yourself as an Expert through Strategic Communication (GPS) • Strategies for Presenting Your Research in 3 Minutes (GPS) • What are you researching again? Vivid talks for varied audiences (GPS)
Collaborator	Graduates will develop collaborative and team science skills that enable self- and disciplinary awareness and integration of information across disciplines and research pillars, and with community partners to achieve a translational approach to research that will improve health care and health research.	Recommended Activities <ul style="list-style-type: none"> • Participate in a team project • Contribute to research in a lab outside your own • Reach out to others for insight on your research • Work together with an expert outside your field 	BCCHR <ul style="list-style-type: none"> • Sign-up, Pair-up, Drink-up • MITACS: Networking Offsite <ul style="list-style-type: none"> • Essentials of Productive Teams (GPS) • Soft Skills for Hard Times (GPS)
Leader	Graduates will develop leadership and management skills that include	Recommended Activities	BCCHR <ul style="list-style-type: none"> • Project Management

	formulating research questions and strategic plans, managing group dynamics and communication, organizing and planning, decision making, problem solving, and resolving conflicts.	<ul style="list-style-type: none"> • Serve as a mentor to junior trainees • Volunteer on a student or research leadership council • Organize workshops/ research days • Initiate and lead a non-research-based project 	<ul style="list-style-type: none"> • Conflict management Offsite <ul style="list-style-type: none"> • Financial Literacy for your Professional Career and Personal Wellbeing (GPS) • Foundations of Project Management (GPS) • Leading with Emotional Intelligence (GPS) • Time Management (GPS)
Advocate	Graduates will develop advocacy skills, including promoting healthcare; health research; and equity, diversity, and inclusion in both health care and research endeavors (including under-represented, disadvantaged, and vulnerable populations).	Recommended Activities <ul style="list-style-type: none"> • Volunteer with a health-related agency or community organization • Participate in the PublicScholars Initiative • Participate in patient-oriented research 	BCCHR <ul style="list-style-type: none"> • Ethical Engagement with Communities Offsite <ul style="list-style-type: none"> • UBC 23 24 ICS
Professional	Graduates will create a fluid individual development plan (IDP) and use reflexivity to develop self-awareness about their personal values, interests, and limitations so that they can identify and cultivate the skills needed for personal career readiness. Responsible, respectable, and ethical conduct will be among the core professional values nurtured.	Mandatory Activities <ul style="list-style-type: none"> • Use, and iteratively evolve, an IDP Recommended Activities <ul style="list-style-type: none"> • Conduct an informational interview with a professional 	BCCHR <ul style="list-style-type: none"> • Self-Care 101 • Non-Academic Career Panel Offsite <ul style="list-style-type: none"> • Assertiveness (GPS) • Breaking Patterns of Procrastination (GPS) • Cops in the Head: Rehearsing Courage, Enacting Confidence (GPS) • Leveraging your Strengths to Strategize Success (GPS) • Overcoming Perfectionism (GPS) • Roadmap to Resilience in Graduate School and Beyond (GPS)

			<ul style="list-style-type: none"> • The Non-Academic Job Search for Graduate Students and Postdocs (GPS)
Scientific Expert	The unifying competency. Graduates will gain skills and experience in communication, collaboration, leadership, advocacy, professionalism, and scholarship.	<ul style="list-style-type: none"> • Develop all six other competencies 	

III. Mentorship

The primary goal of mentorships in this program is to gain an expert's perspective on one's career readiness. The degree of engagement with mentors can range from casual coffee meetings to ongoing IDP development. Accordingly, mentorship styles can range from informal to formal. The Graduate Student Enhanced Scholar program gives trainees the flexibility to choose which style works best for them, although mentorship training and documentation of meetings is strongly encouraged.

Trainees are encouraged to network with individuals at their research site and beyond, and initiate and negotiate mentorship expectations from the outset. Appropriate mentor candidates include: their research supervisor (principal investigator), supervisory committee members, postdoctoral fellows, industry contacts, and senior graduate students. Mentorship activities may include: working on an IDP, job shadowing, attending professional development events, meeting for coffee, etc.

Trainees should meet with their mentors at least once within the first 6 months of their program to complete the Mentoring Agreement. Afterwards, meetings should occur at least twice per year to review the IDP and evaluate their competency development. Meetings should be documented using the Mentor Meeting Template. Refer to your IDP for additional meeting discussion points.

MENTORING AGREEMENT

Please complete the mentoring agreement and return to [program administrator].

NB: All members of a mentoring pair should sign one copy of this 2-page agreement. Once signed, copies of the form can be made for each member of the pair.

MENTORING FORMAT & PLAN:

It is helpful to discuss and agree upon expectations and the format of mentoring sessions at the outset. Modifications can be made as needed during the program. Please take some time to discuss your expectations with your mentor.

Mentoring Format & Plan
How frequently do you intend to meet over the next year?
Approximately how long do you intend these meetings to be?
Where/how will you meet (in person, teleconference or a combination of both)?
Who will be responsible for scheduling meetings?
How will the agenda for your meetings be set?
What resources will you need to make your meetings successful?
What is your preferred mode of communication between mentoring sessions?
What topics or issues are "out of bounds"? (e.g. lending money or discussing financial matters)
Any other requirements or expectations?

AGREEMENT TERMS:

We agree to openly discuss - at any time during the mentorship relationship - areas of success or weakness, and actions that we will take moving forward. We understand that [program administrator] can be approached at any time for assistance in all matters relating to the mentorship relationship, including any difficulties that may arise.

We acknowledge that this is a no-fault agreement and that there may come a time when either party wishes to end the relationship early. Should this occur we agree to give the other party as much notice as possible, and we will make an effort to reflect on the relationship and take positive actions to benefit from the relationship as much as possible.

We also agree to be bound by a duty of confidentiality and will:

1. Keep conversations confidential and not to reveal information disclosed during the mentoring relationship to a third party;
2. Respect the mentor's or mentee's right to confidentiality except when this right conflicts with your responsibility to the law, or when the maintenance of confidentiality would result in significant risk of substantial harm to themselves or others; in such cases, you are responsible for taking all reasonable steps to inform the mentor or mentee that confidentiality will be breached; and
3. Maintain confidentiality beyond this mentoring relationship.

Name	Signature
Mentor	
Mentee	

You can return the signed agreement to [program administrator] by email.

Email: [program administrator]

MENTOR MEETING TEMPLATE**Mentor:** _____**Meeting Date:** _____**What are the key points from this meeting?****What goals am I planning on working on between now and our next meeting?****What are the anticipated challenges to implementing these changes and how will I address them?****What topics do I want to explore further at the next meeting?****What will I need to make the next meeting effective?****Additional notes:**

ADDITIONAL RESOURCES

UBC Resources:

UBC Community Leadership Program | <http://clp.ubc.ca/>

UBC Centre for Health Education Scholarship | <https://ches.med.ubc.ca/>

UBC Graduate Outcomes | <http://outcomes.grad.ubc.ca/>

UBC Graduate Pathways to Success | <https://www.grad.ubc.ca/current-students/professional-development/workshops-events>

UBC Knowledge Exchange Unit | <https://innovation.ubc.ca/how-engage/knowledge-exchange>

UBC Learning Exchange | <https://learningexchange.ubc.ca/>

UBC Public Scholars Initiative | <https://www.grad.ubc.ca/psi>

UBC Responsible Conduct of Research | <https://grad-postdoc.med.ubc.ca/current-students/research-conduct-course/>

IDP Resources:

CIHR IDP | <http://www.cihr-irsc.gc.ca/e/50516.html>

myIDP | <http://myidp.sciencecareers.org/>

Other Resources:

CanMEDS | <http://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e>

iBiology | <https://www.ibiology.org/career-development/professional-development/>

University of Toronto 10,000 PhD's | <http://www.sgs.utoronto.ca/about/Pages/10,000-PhDs-Project.aspx>

NIH BEST | <http://www.nihbest.org/>

Beyond the Professoriate | <https://beyondprof.com/>

University Affairs | <https://www.universityaffairs.ca/>

PHSA Learning Hub | <https://learninghub.phsa.ca/Learner/Home>

VOLUNTEERING OPPORTUNITIES

BCCHR

Discovery Days in Health Sciences – this is a one-day event that gives secondary school students and teachers the opportunity to explore a variety of career options in medicine and the health sciences. Organized by the Canadian Medical Hall of Fame and hosted by BCCHR, the day comprises a dynamic keynote lecture, hands-on workshops and a career panel discussion.

<https://bcchr.ca/discovery-days>

Contact: Research Education Office reseduc@bcchr.ca

Gairdner High School Symposium – this is a half-day event held each fall that gives secondary students and teachers the opportunity to hear from Gairdner award-winning scientists and attend a behind-the-scenes tour of BC Children's Hospital's research facilities. This event is hosted in conjunction with the Center for Molecular Medicine and Therapeutics (CMMT) and the Canada Gairdner Foundation.

<https://bcchr.ca/gairdner>

Contact: Research Education Office reseduc@bcchr.ca

Healthy Starts Community Outreach Society (COS) - trainees on this committee are involved in various community outreach and knowledge translation activities.

Contact: Healthy Starts Research Theme Manager

Mini Med School BC – each year this travelling program uses big ideas, big discoveries and big names to engage high school students, teachers and the general public in learning and discussion about health research topics. Participants learn about the latest in biomedical and clinical research in a learning environment that fuses lectures with live demonstrations to inspire and motivate further learning.

<https://bcchr.ca/minimedbc>

Contact: Research Education Office reseduc@bcchr.ca

Mini Med School Vancouver – each year this program at BCCHR uses big ideas, big discoveries and big names to engage high school students, teachers and the general public in learning and discussion about health research topics. Participants learn about the latest in biomedical and clinical research in a learning environment that fuses lectures with live demonstrations to inspire and motivate further learning.

<https://bcchr.ca/events/mini-med-school/mini-med-school-vancouver>

Contact: Research Education Office reseduc@bcchr.ca

Research Open House – this is an interactive morning event at BC Children's Hospital that offers high school students an opportunity to visit research labs, interact with research trainees and participate in research activities.

<https://bcchr.ca/research-open-house>

Contact: Research Education Office reseduc@bcchr.ca

Canadian Foundation for Women's Health (CFWH)

This is a national not-for-profit fundraising foundation for women's sexual and reproductive health. Whether you have been personally affected by a women's health issue, want to give back to your community or are looking for career experience or personal improvement, CFWH needs your skills and commitment. You can volunteer for the short or long term, part-time or full-time.

<http://cfwh.org/how-you-can-help/>

Genome BC

Geneskool – this program provides a variety of resources and programs for students in Grades 9 through 12 that make learning about genomics fun.

<https://www.genomebc.ca/education/what-is-geneskool/>

Society for Canadian Women in Science and Technology (SCWIST)

Volunteers are integral to advancing and achieving the organisation's mission. Volunteers are recruited using a formal screening process that may include an interview. Types of volunteering are in the areas of communications, fundraising, event planning, and one-on-one mentoring of children and youth. Membership with SCWIST is required to become a volunteer.

<https://www.scwist.ca/get-involved/volunteer/>

Sunny Hill Health Centre

The Volunteer Resources Department matches your skills and interests in supporting patients and families. The areas where volunteers contribute their time and skills include: adapted aquatic therapy, auxiliary board member, therapeutic recreation group activities, and thrift shop at Sunny Seconds.

<http://www.bcchildrens.ca/our-services/sunny-hill-health-centre/volunteer-with-us#Apply>

The Auxiliary to BC Children's Hospital

This is a self-governing membership organization independently organized to support the care provided for patients. The Auxiliary is founded by persons from the community who agree to work together to assist a health care institution in promoting the health and welfare of the community.

<http://www.bcchauxiliary.com/>

UBC

Community Leadership Program (CLP) – this is an innovative leadership development opportunity designed for emerging staff, faculty, and graduate student leaders offered in collaboration by UBC Human Resources and the Centre for Community Engaged Learning.

<http://clp.ubc.ca/>

Let's Talk Science Outreach – this is a program that connects educators and youth with outstanding volunteers to deliver a wide variety of meaningful science, technology, engineering and mathematics (STEM) learning experiences in both school and community settings.

<http://outreach.letstalkscience.ca/ubc>

Multidisciplinary Undergraduate Research Conference (MURC) – this is a conference for UBC undergraduate students to showcase their research in front of their fellow UBC students, family, and friends. Volunteers are given the opportunity to network with other student leaders and researchers on campus and learn about the research being conducted by their peers. Volunteers will be supported by the MURC Committee and UBC Centre for Student Involvement and Careers Staff.

<https://students.ubc.ca/career/events-workshops/multidisciplinary-undergraduate-research-conference>

URO Research Experience (REX) – this program connects undergraduate students with multidisciplinary research opportunities via programs, events, and various research-related services. It helps students to get a foot in the door, find a summer lab job, or get a manuscript published.

<https://www.roubc.com/about-us/>

Vancouver Coastal Health (VCH)

VCH hosts volunteers to support patients, clients and residents in communities across the North Shore, Powell River, Richmond, Sea-to-Sky, Sunshine Coast and Vancouver. Types of volunteer opportunities are in community and public health, hospitals, and residential care facilities.

<http://www.vch.ca/get-involved/volunteer>

Appendix D Memorandum of Understanding between Department of Pediatrics and Department of Obstetrics and Gynaecology

Memorandum of Understanding

Between

Department of Pediatrics, Faculty of Medicine, University of British Columbia,

And

Department of Obstetrics and Gynaecology, Faculty of Medicine, University of British Columbia

This Memorandum of Understanding (MOU) sets the terms and understanding between the Department of Pediatrics and the Department of Obstetrics and Gynaecology, University of British Columbia, Faculty of Medicine regarding the governance, leadership, administration, funding and evaluation of a new Graduate Program in *Women+ and Children's Health Sciences (WACH)*.

Background

The UBC Department of Obstetrics and Gynaecology established a Graduate Program (MSc and PhD) in Reproductive and Developmental Sciences (RDS) in the 1980s. With the goal of expanding the scope of the program beyond traditional basic sciences to capture research faculty expertise and graduate student interests in clinical and epidemiological research, the RDS program was undertaking transformational work, while at the same time that the Department of Pediatrics was in the early stages of developing a Graduate Program in Children's Health. Given that the primary locations of the respective research programs are on the Oak Street campus – BC Women's Hospital and Research Institute and BC Children's Hospital and Research Institute - and the many areas of research overlap and existing interaction between women+ and children's health, the two departments have worked closely together to obtain approval to start an innovative new "umbrella-style" graduate research program in *Women+ and Children's Health Sciences (WACH)*. Not only will this integrated graduate program provide a strong sense of community for UBC graduate students training on the Oak Street campus (noting that faculty members from both Departments also conduct research and supervise graduate students at other UBC Research Institutes), but the program has introduced a multi-faceted "Enhanced Scholar Program" to improve student learning experiences and preparation for careers both within and outside of academia after graduation.

Governance

This is a UBC graduate program under the joint responsibility of the Pediatric and Obstetrics & Gynaecology Departments. At the time the Program is officially launched (likely ready for student enrolment in the fall of 2022), the RDS Program will be transitioned into the WACH Program. Students already enrolled in the RDS Program will have the option to remain as an RDS student until graduation or transfer into the WACH program. The Heads of the Department of Pediatrics and the Department of Obstetrics and Gynaecology will share ultimate responsibilities for the oversight, administration, finances, and evaluation of the WACH Program. The Department Heads will be aided in this work by the Program Oversight Committee, with members to include themselves, the Program Co-Directors, the Program Manager and both Department Senior Administrative Directors. Ad hoc Oversight Committee members may include: Executive Directors of the BC Children's Hospital Research Institute (BCCHR) and the Women's Health Research Institute (WHRI) and their Senior Directors, Senior Department Finance Managers, Course Directors, Enhanced Scholar Program leads and student representatives. It is anticipated that all major decisions can be made at the Oversight Committee level, but in the unlikely event that an unresolved conflict arises, it will be resolved through a conflict resolution process that will

include appropriate representatives from the UBC Faculty of Medicine and the Faculty of Graduate and Postdoctoral Studies.

Program Directorship

The WACH Program will be co-lead by two directors, one selected by the Department of Pediatrics and the other by the Department of Obstetrics and Gynaecology. There may be situations where a Department prefers to have two faculty members share the role, though this is generally a less effective leadership structure. Directors are typically appointed for a renewable 5-year term. It is essential that the appointed Program Co-Directors can work well with each other. The Co-Directors will have specific responsibilities as defined by the Program Director Terms of Reference Document.

Program Committees

When the program launches, the following committees will be constituted with faculty and student representation from both Departments: Admissions Committee, Awards Committee, Curriculum and Enhanced Scholar Program, Evaluation/Review/Renewal Committee, and Annual Academic Day Program Committee.

Program Operational Administration

We fully acknowledge that excellent administrative support for program operations is an essential component of a successful graduate program. WACH will build on the administrative structure of the RDS Program, beginning with a Program Manager (0.5 FTE) in year zero and increasing to 1.0 FTE in year one and adding a Program Assistant (0.5 FTE), when required, to accommodate increased student enrolment. The need to increase the FTE for the Program Assistant work will be determined by student numbers. The Faculty of Medicine uses 1.0 administrative FTE per 80 graduate students (2019) as a reference. The WACH Oversight Committee will be responsible for hiring into these positions and determining whether the Human Resources team in the Departments of Pediatrics or Obstetrics & Gynaecology will process the appointment. Annual performance evaluations will be the primary responsibility of the Program Directors, in consultation with the Oversight Committee Members. Job descriptions for both of these roles have been developed. A formal orientation process for all research supervisors and students, supplemented by an orientation handbook (updated annually), will be a priority.

Administrative Space

At the time the program is launched, the Program Manager and Program Assistant will occupy space supplied by the Department of Obstetrics & Gynaecology. As the program grows and requires more space, the Departments will work together to identify new space – potentially UBC Departmental space or WHRI/BCCHR research admin space.

Financial Model

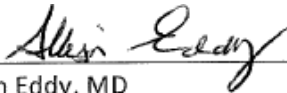
The Departments of Pediatrics and Obstetrics & Gynaecology co-share financial responsibility for the WACH Program. Given that the UBC fiscal year begins April 1, a formal budget meeting will be scheduled each fall to review the budget for the current year and discuss and approve the budget for the next year. This meeting will include the Pediatrics and Obstetrics & Gynaecology Department Heads, WACH Program Co-Directors, Senior Departmental Administrators, Senior Department Finance Managers, and the WACH Program Manager. A budget report will also be prepared quarterly for review by this group.

The initially approved WACH budget proposal should be used as a framework as the program matures. It is based on a few key shared guiding principles:

1. The core program should be self-funded, with student tuition fees being the primary revenue source.
2. In a year when the program has a surplus, these funds will remain within the WACH program and be used to fund the most compelling program need/opportunity in the next fiscal year, as determined by the Oversight Committee and prioritized to enrich student learning experiences. Guidelines to inform this decision-making process will be developed and updated on a periodic basis by the Oversight Committee.
3. In a year when the program has a deficit, it is expected that the Departments (with or without assistance from the research institutes) will develop a plan to manage the deficit. In general, the solution should be apportioned to departments based on the number of faculty members who are actively supervising graduate students (and adjusted by their total MSc [x0.5] and PhD student commitments [x1.0]). Should the program witness an increase in the number of WACH students with primary faculty supervisors appointed to Departments other than Pediatrics and Obstetrics & Gynaecology (a growth trajectory that we support), the Oversight Committee may recommend that these faculty members and their Department Heads be asked to contribute to deficient management deliberations.
4. The program is committed to exploring innovative partnerships with industry to enhance training and career opportunities outside of academia. This might include contributions such as guest lecturers and internship experiences (potentially funded by industry). Any corporate partnership will be compliant with UBC rules regarding conflict of interest and independence from industry.

Program Evaluation

A WACH program annual review will be undertaken. The Program Co-Directors and Program Oversight Committee are responsible for conducting the annual Graduate Program review. A 5-year internal evaluation will be conducted by the UBC Graduate and Postgraduate Studies and shared with the Faculty of Medicine and the WACH Program Leadership. A 10-year decadal external evaluation will be conducted by external reviewers. The latter reviews will typically be conducted in conjunction with the formal Departmental Review processes.



Allison Eddy, MD
Head, Department of Pediatrics, UBC
Chief of Pediatrics, BC Children's Hospital

Date: April 23, 2020



Geoffrey Cundiff, MD
Professor and Head, Department of Obstetrics & Gynaecology

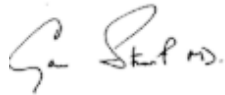
April 22, 2020
Date: _____

Addendum

Both Departments agree to offset departmental deficits accumulated by Year 0 and Year 1 of the WACH Program by using WACH Program surpluses in Year 2 and 3 (if required) to offset the deficit created by the original investment of both Departments. Any remaining Departmental deficits after Year 3 will be covered by each Department and any surplus from Year 4 of the WACH Program onwards will go toward program enrichment activities. The operational details will be determined by the Program Oversight Committee.

Date: July 23, 2020

Allison Eddy, MD
Head, Department of Pediatrics, UBC
Chief of Pediatrics, BC Children's Hospital

Date: 31 July 2020

Gavin Stuart, MD
Professor and Head, Department of Obstetrics & Gynaecology

Appendix E Memorandum of Understanding between Department of Pediatrics, Department of Obstetrics and Gynaecology, BC Children's Hospital Research Institute, and Women's Health Research Institute

Memorandum of Understanding

Between

Department of Pediatrics, Faculty of Medicine, University of British Columbia,

And

Department of Obstetrics and Gynaecology, University of British Columbia,

And

The BC Children's Hospital Research Institute and Women's Health Research Institute

This Memorandum of Understanding (MOU) sets the terms and understanding between the Department of Pediatrics and the Department of Obstetrics and Gynecology, University of British Columbia, Faculty of Medicine with the BC Children's Hospital Research Institute (BCCHR) and the Women's Health Research Institute (WHRI) regarding the governance, leadership, administration, funding and evaluation of a new Graduate Program in *Women+ and Children's Health Sciences (WACH)*.

Research Institutes Affirmations

1. WACH is viewed as high importance for the academic health missions of WHRI and BCCHR and an opportunity to enrich the graduate student community on the Oak Street Campus.
2. WHRI and BCCHR will seek to coordinate efforts, allowing for the potential integration of events, such as shared research days, workshops, celebrations, graduate student trainee organizations, and other events that will enhance graduate student learning experiences.
3. WACH students are welcome to use student spaces across the C&W campus, such as the David Hardwick Reading Room and the UBC learning commons.
4. WACH students based at C&W campus are welcome to draw upon the core services such as the Research & Technology Development Office (RTDO) which assists students and supervisors to develop competitive research proposals. If broader access to all WACH students is sought, we would expect to have an appropriate contribution from WACH to the budget of the RTDO to cost-recover these services.
5. The leadership of BCCHR and WHRI will encourage interactions between their institute education teams and the WACH team to find synergies (e.g. orientation days, high school outreach programs, etc.) and shared training enhancement opportunities for graduate students.
6. We will work together to improve support and experiences for UBC students, such as expanding counseling services at the C&W campus, extending C&W staff wellness opportunities to students, and seeking social and recreational/exercise spaces.
7. We will provide space for the program as it grows, and to coordinate access to appropriate classroom and training space.

Departmental Affirmations

1. WACH is a research-intensive graduate program that highly values collaborations and graduate student training opportunities made possible by the opportunity to work as investigators and scientists at WHRI and BCCHR.
2. The WACH Department Heads and Program Co-Directors (or their delegates) will participate in any research institute activities that impact graduate students, including the examples mentioned in the section above.
3. The WACH Department Heads and Program Co-Directors will meet annually with the research institute leadership tables (i.e. Research Leadership Council at BCCHR; Executive at WHRI) to provide updates on the program and share plans for the coming year.
4. Oak Street-based WACH research supervisors and mentors and their students will be expected to be active engaged members of the research institutes' communities, including participation in strategic planning, committees, campus-wide educational activities and community outreach initiatives upon request.
5. As the WACH program matures (with a positive annual budget predicted beginning in 2025-26), we will partner with WHRI and BCCHR leadership to develop novel initiatives that will enhance the graduate student experience and enrich the entire Oak Street campus research community.

WACH; Brief Background

The UBC Department of Obstetrics and Gynaecology established a Graduate Program (MSc and PhD) in Reproductive and Developmental Sciences (RDS) in 1986. With the goal of expanding the scope of the program beyond traditional basic sciences to capture research faculty expertise and graduate student interests in clinical and epidemiological research, the RDS program was undertaking transformational work, while at the same time that the Department of Pediatrics was in the early stages of developing a Graduate Program in Children's Health. Given that the primary locations of the respective research programs are on the Oak Street campus – BC Women's Hospital and Research Institute (WHRI) and BC Children's Hospital and Research Institute (BCCHR) - and the many areas of research overlap and intersections between women's and children's health, the two departments have worked closely together to develop an innovative new "umbrella-style" graduate research program in *Women+ and Children's Health Sciences (WACH)*. Not only will this integrated graduate program provide a strong sense of community for UBC graduate students training on the Oak Street campus, but the program has introduced a multi-faceted "Enhanced Scholar Program" to improve student learning experiences and preparation for careers both within and outside of academia after graduation.

WACH Advisory Role for Research Institutes

This is a UBC graduate program under the joint responsibility of the Pediatric and Obstetrics & Gynaecology Departments. The Heads of the Department of Pediatrics and the Department of Obstetrics and Gynaecology will share ultimate responsibilities for the oversight, administration, finances, and evaluation of the WACH Program. The WACH Program will be co-lead by two directors, one selected by the Department of Pediatrics and the other by the Department of Obstetrics and Gynaecology.

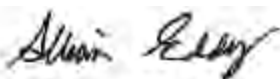
They will be aided in this work by the **Program Oversight Committee**, with members to include the co-directors, the Program Manager and both Department Senior Administrative Directors. Ad hoc Oversight Committee members may include: Executive Directors of the BC Children's Hospital Research Institute (BCCHR) and the Women's Health Research Institute (WHRI) and/or their Senior Directors or delegates, Senior Department Finance Managers, Course Directors, Enhanced Scholar Program leads and student representatives.

Program Committees

When the program launches, the following committees will be constituted with faculty and student representation from both Departments: Admissions Committee, Awards Committee, Curriculum and Enhanced Scholar Program, Evaluation/Review/Renewal Committee, and Annual Academic Day Program Committee. Recommendations from the Research Institute Executive Directors for membership on these committees will be valued.

Program Evaluation

A WACH program annual review will be undertaken. The Program Co-Directors and Program Oversight Committee are responsible for conducting the annual Graduate Program review. A 5-year internal evaluation will be conducted by the UBC Graduate and Postgraduate Studies and shared with the Faculty of Medicine and the WACH Program Leadership. A 10-year decadal external evaluation will be conducted by external reviewers. The latter reviews will typically be conducted in conjunction with the formal Departmental Review processes.



Allison Eddy, MD
Head, Department of Pediatrics, UBC
Chief of Pediatrics, BC Children's Hospital

Date: July 9, 2020



Geoff Cundiff, MD
Head, Department of Obstetrics & Gynecology

Date: June 30, 2020



Wyatt Wasserman, PhD
Executive Director
BC Children's Hospital Research Institute

Date: July 2, 2020



Lori Brotto, PhD
Executive Director
Women's Health Research Institute

Date: July 8, 2020

Appendix F Guidelines for Supervisory Activities

(I) Guidelines for granting supervisory privileges to non-Faculty of Graduate and Postdoctoral Studies (FG+PS) members

Rationale: The WACH program is co-housed in the Departments of Pediatrics and Obstetrics & Gynaecology. Within our departments, there are a number of research-intensive faculty with UBC partner track or clinical appointments. These scientists and investigators may be experienced and qualified in graduate supervision or may be interested in gaining experience and developing the skills required to shepherd graduate students through their programs. We are fully supportive of these individuals supervising in our program and will support individuals, who wish to develop skills required to make the supervisory experience rewarding for them and their future graduate students.

First and foremost, supervisors in the program must have a research focus. Ideally, this would be an externally funded research program but may also be a funded research project. Importantly, all supervisors must adhere to all UBC policies and requirements pertinent to graduate student training, including UBC's current minimum funding package.

Non-FG+PS faculty members with significant supervisory experience including serving on student's committees, participating in students exams (MSc defenses, PhD comprehensive exams, and PhD defenses), and who have successfully supervised students through graduation requirements, will be given supervisory privileges.

For non-FG+PS member faculty, who do not have supervisory experience, we recommend participating in the following activities to increase their graduate student supervisory experience:

1. Serve on the supervisory committee for MSc and/or PhD students (≥ 2).
We recognize that greater than or equal to 50% of the members of a supervisory committee must be FG+PS members and we will adhere to that UBC policy (≥ 2).*
2. Serve as a committee member examiner at an MSc defense, PhD comprehensive examination, and PhD defense. Depending upon approval by the program (for MSc) or FG+PS (for PhD), non-FG+PS faculty members may also serve as a University Examiner for MSc defenses, PhD comprehensive examinations, and PhD defenses.
3. Co-supervise an MSc student alongside an experienced faculty member, who is a member of FG+PS. If the first student is accepted into a PhD program or wishes to transition from the MSc to the PhD program, this is reasonable with support from the co-supervisor.

The Academic Review Committee will review requests for supervisory privileges from non-FG+PS members, which should include a cover letter highlighting cumulative graduate student training experience and the UBC Academic CV.

*The WACH Program Manager will establish and keep a list of supervisors in the WACH program and their research interests. This will be a valuable tool in identifying opportunities to gain supervisory experience.

**See attached: Supervisor-mentee expectations agreement

(II) The Graduate Program in Reproductive and Developmental Sciences

Agreement between Graduate Student and Supervisor

According to U.B.C. Policy 85, graduate student supervisors are to outline issues such as stipends, supervision, research data & publications to new members of their research team.

Policy 85. The University of British Columbia (UBC) is responsible for developing awareness among all students and members of faculty and staff involved in teaching and scholarly activities of the need for the highest standards of integrity, accountability and responsibility. UBC holds scholars responsible for scholarly and scientific rigor and integrity in teaching and research, in obtaining, recording and analyzing data and in presenting, reporting and publishing results. Research conditions for all involved in a research team should be outlined in a letter from the principal investigator before team members become engaged. Letters are to include issues as compensation, supervision, authorship, records of data, ownership and/or use of data, publication rights, and commercialization.

Accordingly, this agreement must be read and signed by the prospective graduate student and his/her proposed research supervisor. This agreement should be reviewed annually, prior to the beginning of each academic year. Upon completion, a copy of the agreement should be retained by each party, and the original should be forwarded to the RDS Program Coordinator, Mrs. Roshni Nair [rnair@cw.bc.ca], for review by the Director of the RDS Program (Dr. Dan Rurak; drurak@cw.bc.ca) and placement in the student's file. **COMPLETION OF THIS FORM IS A CONDITION FOR THE ACCEPTANCE OF A STUDENT INTO THE GRADUATE PROGRAM IN REPRODUCTIVE AND DEVELOPMENTAL SCIENCES.**

Student Name: _____ Student Number: _____

Degree Program: _____ Date: _____

Financial Support. Faculty members of the RDS Graduate Program are committed to supporting full-time graduate students financially during the course of their training. The minimum level of financial support is \$20,000 per annum, for a minimum duration of 2 (M.Sc. students) or 4 (Ph.D. students) years. After these minimum durations, continued funding is at the discretion of the Research Supervisor. If termination of a student's funding is contemplated due to lab funding / financial difficulties, the Research Supervisor must inform the student of this possibility in writing (copy to the Program Coordinator) at least 3 months prior to the end date of the student's stipend. Students are expected to pay tuition from their stipend.

The minimum funding package may include a maximum of two 0.5 Teaching Assistantships per year. Note that students are required to apply for as many scholarships/awards for which (s)he is eligible. Students who receive a scholarship/award (excluding any tuition waiver) equal to or more than \$8,000/yr will receive a minimum top-up of \$3,000/yr above the minimum funding level for the duration

of their scholarship/award (*i.e.* these students will receive a minimum funding package of \$23,000/yr). Students who receive a scholarship/award equal to or more than \$16,000/yr will receive a minimum top-up of \$6,000/yr above the minimum funding level for the duration of their scholarship/award (*i.e.* these students will receive a minimum funding package of \$26,000/yr). In the case of students receiving scholarships/awards totaling \$35,000/yr or greater, any top-up is at the discretion of the Research Supervisor. When a scholarship/award ends, continuation of the top-up is at the Research Supervisor's discretion.

The sources of support indicated below (*e.g.* Scholarship, Teaching Assistantship, Research Assistantship, Other) will be available to you, subject to satisfactory academic and research progress and unless unforeseen factors (*e.g.* termination of research grant, reductions in T.A. budgets) intervene. **ALL FINANCIAL SUPPORT IS CONTINGENT UPON SATISFACTORY ACADEMIC AND RESEARCH PERFORMANCE AND IS SUBJECT TO YEARLY REVIEW.**

Supervision. The responsibilities of Supervisors and Graduate Students can be found at <https://www.grad.ubc.ca/handbook-graduate-supervision/supervisor-responsibilities> and <https://www.grad.ubc.ca/handbook-graduate-supervision/graduate-student-responsibilities>, respectively. Further information can be found in the *Handbook of Graduate Supervision* (<https://www.grad.ubc.ca/handbook-graduate-supervision>) which students and Research Supervisors are encouraged to read. You are expected to conduct research under the general guidance of your Advisory Committee. Your Committee should meet regularly, at least once per year, and a formal report of each meeting must be forwarded to the RDS Program Coordinator.

Records of data/Authorship. Original records must remain with the lab. Students may take copies with them when they have completed their program to assist in writing papers. If there are outstanding papers when you leave the lab, you will have one calendar year to draft a manuscript. If, at the end of that time, you have not produced a manuscript, it will be written for you, and your position in the author list may change.

Intellectual Property. Both parties acknowledge that, according to current U.B.C. policies, the creator(s) of intellectual property has rights to full or partial ownership of that property. Full details of U.B.C.'s intellectual property policies can be found at <http://universitycounsel.ubc.ca/policies/index/> (note especially policies 87 and 88). These resources should be consulted prior to any agreement being reached between a supervisor and a student concerning the disposition of intellectual property.

Conflict Resolution. The Faculty of Graduate and Postdoctoral Studies (G+PS) at U.B.C. recommends that every effort should be made to resolve differences and disputes as close as possible to the source of the problem. The following steps should be taken in order. Each level will want to make sure that all reasonable efforts have been exhausted at all previous levels prior to launching a formal investigation. Informal advice can be offered by G+PS at any step; additional information is provided in the *Handbook of Graduate Supervision*.

- 1) *The student and supervisor (or other party, e.g. the student's Advisory Committee) should first discuss problems frankly and seek solutions.*
- 2) *If a problem cannot be resolved at this level, it should normally be referred next to the RDS Program graduate advisor, Dr. Timothy Rowe (trowe@mail.ubc.ca), and RDS director, Dr. Dan Rurak.*
- 3) *The problem and all steps taken to resolve the problem may progress to a review by G+PS.*
- 4) *If no resolution can be achieved, the problem may ultimately be taken to the Dean of Graduate and Postdoctoral Studies. The Dean will check to ensure that each previous level of problem resolution has been explored to the fullest extent before proceeding to other levels.*

Agreement. The undersigned agree that the preceding accurately describes the present plan for your degree program and recognize that it may require change because of unforeseen circumstances (including, but not limited to, performance in course work and research). Both parties note that this document is subordinate to Graduate Regulations, University Policies and Procedures and contracts with CUPE 2278 and with other parties.

THIS AGREEMENT SHOULD BE REVIEWED ANNUALLY and any changes to the agreement should be forwarded to the Director of the RDS Graduate Program, with a brief explanation.

Research Supervisor: _____

Date: _____

Student: _____

Date: _____

Upon completion, a copy of this agreement should be retained by each party and the original should be forwarded to the RDS Program Coordinator [rnair@cw.bc.ca] for review by the Director of the RDS Program and placement in the student's file.



THE UNIVERSITY OF BRITISH COLUMBIA

(III) Reproductive and Developmental Sciences

Supervision Manual

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RDS Program Contacts

	Contact	Roles/When to Contact
Program Co-Director Dr. Paul Yong	pyong@cw.bc.ca	<ul style="list-style-type: none"> • Chair RDS Steering Committee • Recruitment of students • Determines Admissions Committee • Final Decision for MSc and PhD student applications • Ensures Supervisors/Students are aware of, and adhere to applicable policies and procedures • Point of contact for Student/Supervisor inquiries/concerns
Program Co-Director Dr. Alexander Beristain	alexander.beristain@ubc.ca	<ul style="list-style-type: none"> • Chair Graduate Program Awards Committee • Chair Curriculum Committee • Recruitment of students • Oversees the Basic Science core of the program
Program Assistant Natalie Twohey	natalie.twohey@cw.bc.ca 604-875-2424 x3108	<ul style="list-style-type: none"> • Point of contact for all administrative questions • Liaison with G+PS • Form submission

Education Manager Leah Solomon	solomon@cw.bc.ca	<ul style="list-style-type: none"> Unresolved items after first contacting Program Administrator or Program Directors
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Principles of Quality Supervision

The UBC Faculty of Graduate and Postdoctoral Studies (G+PS) lists the [Seven Principles of Excellent Graduate Student Supervision](#) as:

1. Students' learning benefits from individualized supervisory approaches.
2. Students' learning develops with both dialogue and guidance.
3. Students' multi-faceted growth as scholars is supported by supervisors.
4. Students learn from role models.
5. Communication is key to teaching and learning and to relationship-building.
6. Scholarly and other communities are central to students' development.
7. Reflection makes one a better supervisor.

These principles will be discussed in the RDS Supervisors' Workshop, and at regular campus-wide [supervision workshops](#). Use the link above for further details on the principles, examples of each principle in practice, and key G+PS resources to support supervisors.

Supervisor Responsibilities

Supervisor responsibilities include:

- Preparing a program of study for the student.
- Arranging for and attending all supervisory committee meetings and examinations when applicable, ensuring that these are held in accordance with G+PS and RDS Program regulations.
- Reviewing, and expediting submission of, manuscripts produced by the student.
- Reviewing the thesis/dissertation in both draft and final form, and ensuring defense (final oral exam) and graduation are scheduled/completed in a timely manner.

Supervisors, with the support of the RDS Program, should promote the academic and professional progress of the student by:

- Providing an environment that is conducive to research and in which the student can grow intellectually.
- Maintaining a respectful environment that in which the human dignity of each individual is valued, and the diverse perspectives, ideas and experiences of all members of the community are able to flourish.
- Ensuring that there are sufficient material and supervisory resources for each graduate student.
- Providing appropriate guidance to the student on the nature of research and the standard expected.
- Ensuring appropriate biosafety and Human Research Ethics Board approvals are obtained as necessary.
- Establishing, with the student, a realistic timetable for completion of various phases of the program.
- Considering the graduate student a junior colleague.
- Working with the student to establish the supervisory committee as soon as possible after the start of the program and ensuring that it maintains contact and formally meets at least once a year with the student.
- Ensuring that the student is adequately supervised by the provision of an acting supervisor, when going on leave or an extended period of absence.

Supervisors should actively participate in the RDS program and interact with fellow supervisors by:

- Participating in at least one of the RDS committees (e.g. Admissions, Awards, etc.), as requested.
- Serving on graduate student supervisory committees as a member or chair, when requested.
- Serving as an examiner, when requested.
- Attending at least one RDS Supervisor workshop.
- Leading an RDS (OBST) graduate course, or lecture/participate in a RDS (OBST) graduate course, in consultation with the RDS Director(s).
- Attending their student's presentations in the OBST 506 seminar course.

Please see the Terms of Reference for RDS Membership for details on the expectations for full and associate members (Appendix B.)

The sections below will address specific RDS policies and guidelines relevant to providing quality supervision and supporting a student's progress through their program.

Graduate supervision can be a complex form of pedagogy, and the RDS program is continually growing and evolving.

Please do not hesitate to bring questions or complex situations to the attention of the Program Co-Directors and Program Assistant.

Admissions

Applicants to the RDS program are required to secure a research supervisor prior to applying. This means that a faculty member has agreed to act as their research supervisor and provide the required minimum stipend (\$20,000/a), should the applicant be admitted to the RDS program.

It should be clear to both applicants and supervisors that admission is not guaranteed, but subject to the applicant meeting the minimum admissions requirements, and receiving approval from the RDS Admissions Committee and the Faculty of Graduate and Postdoctoral Studies.

Minimum Admissions Requirements

- MSc program: minimum 4 year degree (BSc) in biological sciences, or area of study appropriate for proposed research project
- PhD program: minimum MSc (or in some cases, MD) in biological sciences or related area
- B+ average

International applicants must meet the minimum academic requirements for the country in which their education was completed, and meet the [minimum English proficiency test scores](#).

Other considerations:

- How did the applicant perform in courses most relevant to their proposed course of study?
- Are the reference letters positive and detailed? Do they comment on qualities likely to make the applicant a successful graduate student?
- Does the student indicate academic and/or professional goals that are in line with the RDS program?

How to Choose a Great Graduate Student

It is highly recommended that you interview a potential graduate student, either in person, by phone or virtual meeting platform (e.g. Skype).

Questions for you to consider when making a decision to offer supervision:

- Do you have the time, resources and knowledge to supervise this student?
- Does this student have an adequate academic background and experience to be successful?
- Are the student's goals and expectations consistent with expected outcomes?
- Will you be able to work well with this student? Do you have compatible communication styles? How might you address any personal, cultural or structural challenges this student may face?
- Are there adequate resources to support this student, such as:
 - Funding for student stipend (minimum \$20 000/a) and research costs
 - Colleagues who can serve on a supervisory committee
 - Opportunities to participate in research, teaching, and extracurricular activities
 - Engagement in a community of scholars

Please feel free to consult with the Program Co-Director if you are unsure of how to proceed. The Program Assistant can verify the admissions requirements and answer questions from applicants.

Applications Circulated to Supervisors

In rare cases where an applicant has not secured a supervisor prior to applying, and they are deemed a strong candidate by the Admissions Committee, this application will be circulated to RDS faculty for their consideration.

If you have a vacancy and are interested in offering a spot to the applicant, you will be put in contact with them. You can then determine suitability of this fit for both yourself and the applicant as per above, knowing that the RDS program will make an offer of admission contingent on a supervisor being secured.

Faculty of Graduate and Postdoctoral Studies Approval

In 2016, admissions authority was delegated to UBC graduate programs. This means that each graduate program reviews applications, determines eligibility, and is authorized to issue offers of admission.

These offers are still subject to approval by the Faculty of Graduate and Postdoctoral Studies (G+PS).

Two situations of note in which G+PS approval is critical are:

- The institution used for the basis of admission is not yet 'confirmed for admission.' This means that there is not yet enough information available to determine if the institution is admissible, and G+PS will further review the transcripts before confirming/denying the offer of admission.

- A rationale is required to support the admission of this student (low GPA, low English proficiency scores, etc.)

Please note: A rationale is also required for students admitted on an ungraded MD/MBBS (or equivalent) degree.

FAQ

How can I respond to so many emails from interested applicants?

It is useful to have a stock response for when you do not have vacancies, or when interested applicants do not warrant further conversation:

Thank you for your interest in the ____lab/research team. I do not currently have any openings for graduate students. Openings may become available in ____.

Or

Thank you for your interest in the ____lab/research team.

Admissions to the Reproductive and Developmental Sciences program are very competitive. I am currently looking for a (MSc/PhD) student interested in conducting research on ____, and able to demonstrate their potential as a graduate student with: high grades in ____ or similar coursework, and prior research/wet lab experience.

If you have such experience, please respond with your transcripts, CV, and area of research you are interested in.

What if a student brings their own funding?

It is possible to accept students who are sponsored by their home countries or home institutions. This funding must meet or exceed the RDS minimum stipend (\$20 000/a), and must be confirmed in writing.

What if a student claims self-funding (non-institutional)?

We cannot accept 'self-funded' students. These are applicants who offer to waive their right to a stipend.

The RDS program requires that all students receive the minimum stipend from their supervisor or an independent awarding agency. This ensures that students are chosen on academic merit, regardless of personal finances.

Can I accept a student, conditional on their securing an external award?

Yes. Please indicate to the student (using the Memo of Acceptance in Appendix B) that you are willing to act as their supervisor, contingent on their admission, and contingent on their securing an external award.

Please note:

- Supervisors are required to supplement or 'top up' external awards that fall below the \$20 000/a minimum stipend.
- Award announcement timelines may alter the timeline for making official offers of admission.

How do I indicate agreement to supervise an applicant?

Please use the Memo of Acceptance in Appendix B to indicate your willingness to supervise an applicant. You may also note any conditions to this agreement.

If your ability or willingness to supervise an applicant changes, please contact the Program Assistant as soon as possible.

What if I would like to make offers to multiple students but have only one spot (as some applicants may accept positions elsewhere)?

This is acceptable, but supervisors must ensure the formal acceptance is not offered to more than one student per spot, and that the students that are unsuccessful are informed of the fact as soon as possible.

What are the admissions timelines?

Typical timeframes for the three admissions periods are:

Start Date	Application Opens	International Deadline	Domestic Deadline	Admissions Decisions Sent
January	Early May	Late June	Late July	October
May	Early September	Late October	Late November	January – February
September	Early November	Late January	Late February	April – May

Specific dates can be found here: <https://obgyn.ubc.ca/education/graduate-studies/prospective-students/how-to-apply/>

Why do international students have an earlier deadline?

Setting the application deadline one month earlier for international applicants means that we can get the ball rolling on these applications earlier. The Program Assistant reviews all applications for completeness and eligibility. The applicant may need to be contacted for further information or documentation, and this happens more often in the case of international applicants.

It is important to be able to give admissions decisions promptly to international applicants, to maximize the time available for them to arrange the logistics of their immigration.

Getting Started: Supervisor Training

Mandatory Training

1. TCPS 2 CORE training is expected for all individuals who engage in research involving humans. PI's and supervisors are required to be familiar with TCPS 2 guidelines and are responsible for ensuring that any trainees conducting research under their supervision adhere to the guidelines and policies. Any graduate students, and medical residents are required to have completed the on-line tutorial before submitting an application for REB approval. This training is free and requires about 2 hours to complete.

- <https://ethics.research.ubc.ca/education-training/online-tutorials-training>

Certificates of completion do not need to be included in the REB application, but copies should be printed and retained by the study supervisor to ensure compliance.

Investigators conducting research funded by NIH or any other US agency may be required to complete the training through the NIH office of extramural research

- [Protecting Human Research Participants \(PHRP\)](#)

2. Privacy & Confidentiality

a. UBC Fundamentals Training: There are two parts, both of which must be completed.

- <https://privacymatters.ubc.ca/fundamentals-training>

b. The PHSA Privacy and Confidentiality online course is required by all staff, students, volunteers or others who are involved in clinical research studies at Children's & Women's. (<1hr).

- Access via [PHSA Learning Hub](#)

3. CITI Responsible Conduct of Research

How should you conduct your research? What practices should you follow? Researchers are expected by the public, their colleagues, their institutions, and their funding sources to behave with integrity. The Responsible Conduct of Research (RCR) collection of courses provides the learner with a solid foundation of knowledge relating to the norms, principles, and rules governing responsible research practice.

Recommended for all staff.

- <https://about.citiprogram.org/en/series/responsible-conduct-of-research-rcr/>

4. Biospecimen Research Methods. Required if working with biospecimens, as per UBC Ethics.

- <https://www.edx.org/course/biospecimen-research-methods>

5. Safety Programs Training (UBC). It is required that supervisors complete all applicable sections, with Safety Supervision at UBC for required for all.

- <http://srs.ubc.ca/training-and-general-education-courses/safety-programs-training>

6. Biosafety Training (UBC). Required, if applicable.

- <https://srs.ubc.ca/training-and-general-education-courses/research-safety-training-courses/biological-safety-training/>

7. Bullying and Harassment Training. Mandatory for all supervisors.

- https://hse2.ubc.ca/custom_login/

Additional Training

Ethics education and training will help to improve the quality and efficacy of your application. For new researchers we recommend that you familiarize yourself with the basic ethics process here at UBC. The CREB board has two webinars designed to assist you with a basic understanding of the UBC REB process.

- [An Introduction to the UBC Ethics Review Process and the Clinical Research Ethics Board](#)
- [Common Challenges in Ethics Submission](#)

The CREB and VCHRI are currently offering a number of ethics training options for researchers wishing to find out more about how to navigate RISE (hands on workshop), informed consent and the secondary use of data. These sessions are open to any member of the Department of Medicine.

For more information about current training programs please consult the [VCHRI webpage](#).

Getting Started: The Student – Supervisor Expectations Checklist

You will find the RDS Student-Supervisor Expectations Checklist in Appendix B. **You should complete this checklist with each incoming graduate student within their first two months. A copy of the completed checklist must be sent to the Program Assistant for the student's file.**

This checklist is a valuable tool, and can be used to guide an important conversation with your student about each of your roles and responsibilities, mutual expectations, and workplace and academic norms.

The RDS program encourages you to address each item thoroughly and openly, ask and answer questions, and add any extra items important to establishing a quality working relationship and mentorship, such as:

- The student's and supervisor's roles with regard to data collection and analysis.
- Expectations about work hours.
- Who trains the student to do technical work.
- Standard hours for office space or laboratory, and policy for work done outside these hours.
- Safety training that must be completed.

- Dress code or appropriate laboratory attire.
- Presentations at conferences and meetings: how many are expected, whether funding is available.

You may revisit this checklist at any time if you are experiencing difficulties with a student, or need to realign expectations. We also ask that the expectations checklist is completed **annually** and attached to the student's progress report for annual supervisory committee meetings.

Research Conditions

In addition, [University Policy 85](#) requires that **research conditions for all involved in a research team be outlined in a letter from the principal investigator before team members become engaged.**

Letters should cover issues such as compensation, supervision, authorship practices, records of data, ownership and/or use of data, publication rights, and commercialization. The student-supervisor expectations checklist may assist supervisors in meeting this University requirement, or letters detailing research conditions may be appended to the checklist.

An example can be found in Appendix B.

Program Guidelines

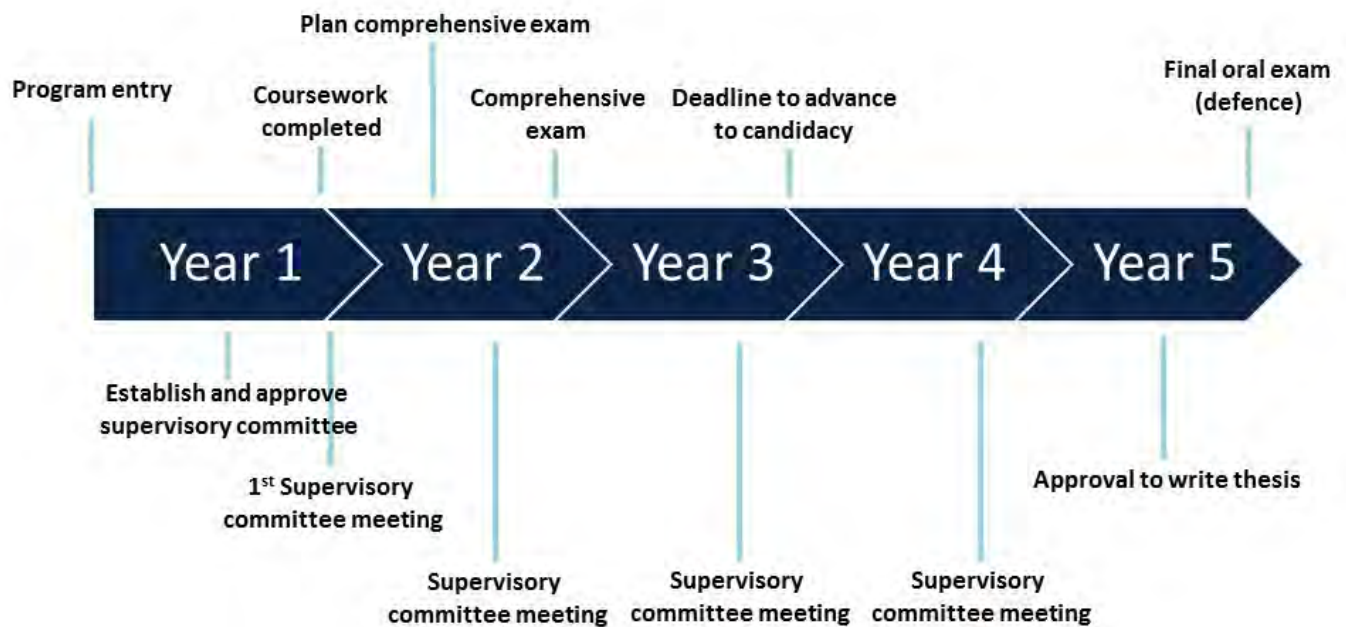
Typical program timelines for MSc and PhD students are shown below. Significant deviations (longer or shorter programs) should be discussed at supervisory committee meetings.

MSc



PhD

Some PhD programs may be completed in less time, i.e. 4 years.



Setting the Research Project

The topic and scope for the student's research project should be established as early as possible, and at latest by the end of the first year (ie. this is when the research proposal written by the student is due). The student should be ready to present their research proposal for approval at their first supervisory committee meeting.

For MSc students, the research project is typically already well-defined by the supervisor, although consultation with the student as to their specific goals and interests may influence the direction or scope. It is also appropriate to offer the student the choice of several available projects. A MSc research project should be accomplishable in 2 years, have a clear research question, include a component of literature review, and include data collected by the student.

For PhD students, the research project should be developed in consultation between the student and supervisor. The research proposal should be ready to be presented for approval at the first supervisory committee meeting. A PhD research project should include an original contribution to scientific or medical knowledge.

Please note that the supervisor should keep the research and tasks assigned to the student aligned with their research topic, and career trajectory/development. Supervisors should be in communication with the student regarding their career goals, and should be careful not to assign tasks that are not aligned with the student's career goals, or which do not have significant educational value. If you are unsure of whether work you wish to assign is appropriate, please feel free to confirm with the Program Co-Directors.

Examples of appropriate tasks:

- Data collection and analysis
- Literature review
- Grant preparation
- Manuscript writing and submission
- Preparation of presentations

Coursework

MSc

Minimum 30 credits:

- 18 credits – OBST 549 – MSc thesis and oral exam
- 3 credits – OBST 506 – Mandatory for all RDS students (including RDS Journal Club)

Students will present twice in OBST 506. Supervisors should attend their students' presentations, and join in the discussion. Students are responsible for communicating the dates of these presentations.

- 6 credits – Two additional OBST courses
- 3 credits – One additional course, OBST or external

Courses should be selected in discussion with the supervisor. **Deviations from the “two additional OBST courses” are possible, with permission from the Program Co-Director.**

PhD

Minimum 21 credits:

- 18 credits – OBST 649 – PhD dissertation and oral exam
- 3 credits – OBST 506 – Mandatory for all RDS students

Students will present twice in OBST 506. **Supervisors should attend their students' presentations, and join in the discussion.** Students are responsible for communicating the dates of these presentations.

Additional coursework may be selected in consultation with the supervisory and supervisory committee.

PhD students are also required to pass a comprehensive examination.

External Seminars and Professional Development

The RDS program recognizes that the academic landscape is changing, becoming more competitive, and involves researchers from all four health research pillars. Graduate students not only need to excel in academics and research, but also develop skills in communication, leadership, knowledge translation, networking and professionalism that will help them in their future careers.

While graduate students are a key component of a functioning laboratory or research environment, and while schedules are often complicated and crowded, **we urge supervisors to support RDS graduate students in attending seminars and workshops that develop their skills and knowledge base**, such as:

- [Graduate Pathways to Success](#) workshops (G+PS)
- [UBC Library](#) workshops
- Relevant research institute seminars, research rounds, and academic days: BCCHRI, WHRI, VCHRI
- OBST 506 seminars and the RDS Journal Club (following OBST 506 every second week)
It is strongly encouraged that non-first year students and faculty attend these seminars as well.
- OBGYN Department conference ([DA Boyes Society Meeting](#) – first Thu/Fri of November) and [OBGYN Annual Academic Day](#) (May)

Some strategies to mitigate student and supervisor stress, and promote balance:

- Discuss with the student their goals and areas for improvement, and support them in looking for opportunities to address these using the resources above. Planning ahead is critical to ensure the needs of both student and supervisor are met.
- Identify the skills and seminar topics you think would be of the most value for the student. Your expertise and guidance will help students narrow their options to the most useful.
- Support students in attending workshops/seminars available at times/locations that will offer the least disruption.
- Work with the student to generate a schedule that avoids lengthy experiments on Thursdays, or assign work that can be done remotely/with laptop alone. The student can then travel to and attend the OBST 506 seminar/RDS Journal Club, and use the rest of the afternoon for productive work without returning to the lab.
- If important workshops on a certain topic are difficult to schedule in a way that does not disrupt student activities, let the Program Assistant know. Sometimes it may be possible to invite the speaker to a more central location, incorporate this material into other RDS meetings, or find an equivalent offering elsewhere.

Supervisory Committee

The supervisory committee is established by the research supervisor and student, in conjunction with the Program Co-Directors. The committee should be formed as soon as possible.

The Program Assistant can assist with scheduling supervisory committee meetings, as initiated by the student and/or supervisor.

The supervisory committee must meet at least annually, with the first meeting taking place before the end of the student's first year. It is strongly recommended that the student's research proposal be presented at the first meeting by the end of their second term of registration.

Because a MSc project typically takes two years, the schedule may be more like: first meeting at end of first year, second meeting at 18-20 months, defense.

Supervisory Committee Composition

The supervisory committee must have a minimum of four (MSc) or five (PhD) members, including:

- The supervisor (or co-supervisors)
- A Chair, who is appointed by the Program Director

The Chair is a member of the RDS faculty with significant experience in the supervision of graduate students, who will ensure that the meetings proceed according to protocol.

- An additional RDS faculty member
- A G+PS faculty member from either the Faculty of Medicine or the Faculty of Science who is not a full member of the Department of Obstetrics and Gynaecology
- PhD supervisory committees require an additional faculty member (from 1 of the 2 categories above)

Other members may be suitable for inclusion on the supervisory committee. Please consult with the Program Directors if you are unsure.

Inclusion of supervisory committee members not meeting the criteria above require:

- MSc: approval of the RDS Program Director
- PhD: approval of the Faculty of Graduate and Postdoctoral Studies

The Program Assistant will facilitate the approval of supervisory committee members.

Additional information: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/non-members-faculty-graduate-postdoctoral-studies-supervisory>

Responsibilities of the Supervisory Committee

- Provides general supervision of the student's research and academic studies. Reviews the student's program of study.
- Reviews and approves the student's research proposal.
- Reviews student's research progress and confirms that there is sufficient material for inclusion in the thesis.
- Makes note of any concerns in the above areas to the Program Co-Directors.
- Certifies that the student's thesis is ready for final examination. At least two members will be asked to serve as examiners for the final oral examination (defense).
- Additionally, two members (who are not the Chair) will be asked to serve as examiners for the comprehensive examination for PhD students.

Agenda for Supervisory Committee Meetings

Annual meetings of the supervisory committee are designed to be a supportive endeavor through which the students can demonstrate progress in their studies and research, and seek guidance from experts. However, it is also an important tool for helping the student who is experiencing difficulties with their research project or academic progress. It should be clear to all that the mandate of the committee is to help the student in as many ways as possible.

In preparation for the meeting, the student should distribute the following to each of the committee members, Program Directors, and the Program Assistant, at least 1 week before the meeting:

1. A complete progress report/research proposal (Graduate Student Annual Progress Report)
2. Student-Supervisor Expectations Checklist
3. Research proposal
4. Additional documents, including papers in press and accepted abstracts

The student should report on their academic and research progress, including further research work necessary to complete the project, in a presentation of 20-30 min. The supervisory committee reviews and evaluates this information, asks questions, and offers guidance and direction. The Chair submits a written report to the Program Assistant as soon as possible following the meeting. This report is circulated to the student and supervisory committee members for their records.

If there are concerns identified regarding the student's progress, the Program Director will follow up and help to determine an appropriate course of action. In extreme cases, this may result in voluntary or recommended withdrawal for unsatisfactory academic progress.

A final supervisory committee meeting is required in order for PhD candidates to be given permission to write their dissertation. In order to proceed with writing the dissertation and planning the defense, a quorum must approve this course of action. This quorum consists of: the supervisor, Chair, and two other members. The committee can record this decision using the Supervisory Committee Meeting – Chair's Report.

Roles of the Supervisory Committee Chair

- Moderates and contributes to the discussion in meetings and examinations.
 - Summarizes the opinions of the committee.
- Helps the committee come to consensus decisions.
 - If there is a lack of consensus, the chair helps determine an appropriate course of action (for example, scheduling additional meetings, or taking an average of suggested marks for a MSc final oral exam)
- Files a written report for the student's file.
- For PhD students, serves as the Comprehensive Examination Chair and completes the Comprehensive Exam Report detailing the minutes and results.
 - If there is a tie vote, the Chair will cast the deciding vote.
- In the case of significant disputes or problems, the Program Directors should be informed.
- The Program Director and Chair are also asked to help organize annual supervisory committee meetings in the event that the Program Assistant is unable to obtain compliance from the parties involved.

Comprehensive Examination

It is a G+PS requirement for PhD students advance to candidacy by 36 months from their start date. A key requirement for candidacy is the successful completion of the comprehensive examination.

In the RDS program, the comprehensive exam is an oral exam with 4 examiners, to assess the student's knowledge of their chosen field of study, the general area of reproductive and developmental sciences, and the student's ability to communicate their understanding and critical thinking in English.

Upon successful completion of the comprehensive exam, the RDS Program will recommend to G+PS that the student be advanced to candidacy (assuming the other requirements of completion of coursework and approval of research proposal have also been met.)

It is important that doctoral students realize the importance of the comprehensive exam, a critical milestone for doctoral students. This exam is at least as important as the final oral exam/defense. The exam is intended to determine whether the student has the knowledge base and critical thinking skills to make an original contribution to their area of research. This is a crucial mechanism for ensuring that students do not begin dissertation work that they are not prepared to complete and defend successfully.

By the time of the defense, the PhD candidate will likely be, with the possible exception of their supervisor, more knowledgeable about their project than any of the examining committee members. This is not the case with the comprehensive exam.

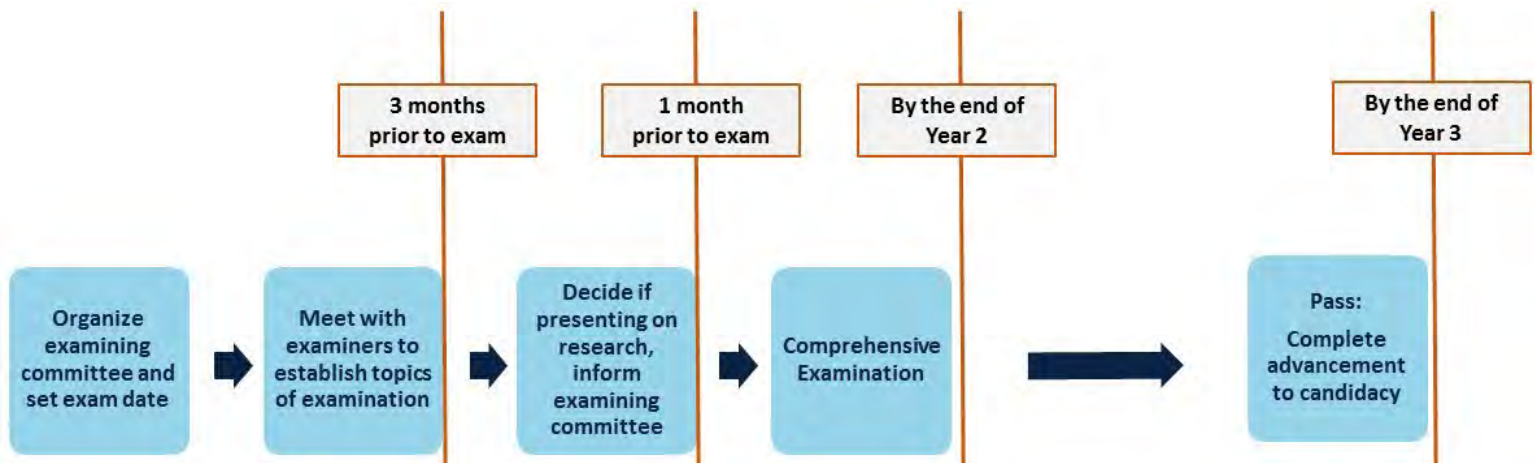
A student who fails 2 attempts will not be permitted to continue as a PhD student.

Supervisors should:

- Familiarize themselves with the RDS guidelines for the comprehensive exam.
- Support their students in preparing for this exam in a timely manner.
- Ensure that students understand the importance and weight of the exam.
- Supervisors may attend the comprehensive exam, but do not ask questions, and are not members of the examining committee.
- Inform the PA and PD(s) if they have any concerns with a student's progress toward the comprehensive exam.

See Appendix B for:

- Guidelines – Comprehensive Exam (PhD)



Final Exams

MSc Oral Examination (Defense)

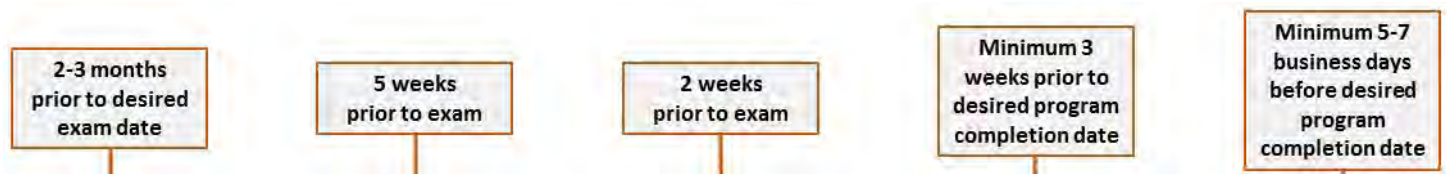
The RDS program requires a final oral examination (defense) at the Master's level. This exam is not subject to G+PS-level policies, but should adhere to the policy/procedures included in Appendix B.

Supervisors should:

- Familiarize themselves with the RDS requirements and procedure for the MSc oralexam.
- Support their students in preparing for this exam in a timely manner.
- Make recommendations for appropriate external examiners.
 - External examiners for MSc exams can be academic or clinical faculty members outside of the RDS faculty, with expertise in the student's research topic.
- Be the first reviewer of the thesis.
- Advise the student and provide guidance on the preparation of their oral presentation, communication with examiners, and professional conduct in the exam.
- Serve as an examiner.
- Inform the PA and PDs if they have any concerns with a student's progress towards graduation.

See Appendix B for:

- MSc Oral Examination – Guidelines
- MSc Oral Examination – Conduct and Chair's Report
- MSc Oral Examination – Planning Tool



Doctoral Oral Examination (Defense)

The Faculty of Graduate and Postdoctoral Studies requires a final oral examination (defense) at the doctoral level. This exam is subject to G+PS-level policies and procedures, which must be followed closely. As planning the doctoral exam is a complex process, it is recommended that you review both the guidelines included in Appendix B, and the more detailed resources available online with [G+PS's Doctoral Exam Guide](#).

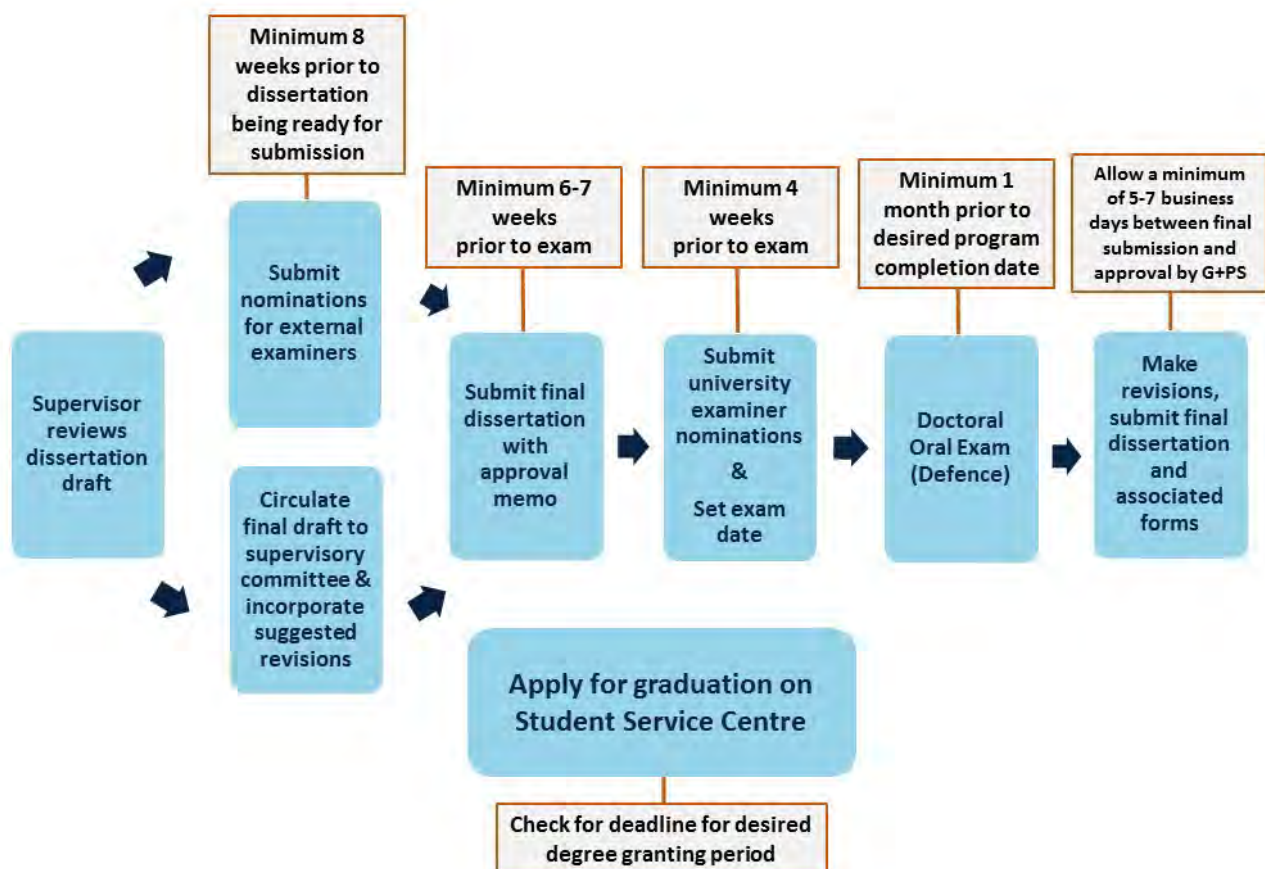
Supervisors should:

- Familiarize themselves with the requirements, procedure, and timeline for the PhD oral exam.
- Support their students in preparing for this exam in a timely manner.
- Make recommendations for appropriate university and external examiners.
 - There are strict eligibility and arm's length requirements for both types of examiners, so please thoroughly review these to prevent recommendations being rejected.
- Be the first reviewer of the dissertation.
- Advise the student and provide guidance on the preparation of their oral presentation, communication with examiners, and professional conduct in the exam.
- Decide if you would like to invite the external examiner to attend in person, and work with PA to arrange travel, copying the Graduate Doctoral team on all communications.
 - The supervisor is responsible to covering the external examiner's travel expenses, and may apply for \$500 from the Doctoral External Examiners Transport Fund.

- Work with the Program Assistant to ensure the [Off-Site Final Doctoral Oral Examinations Graduate Program Responsibilities](#) are accomplished, if necessary.
- Serve as an examiner.
- Inform the PA and PD(s) if they have any concerns with a student's progress towards graduation.

See Appendix B for:

- Doctoral Oral Examination – Planning Tool



- 1 year in the MSc program
- 9 credits at the 500-level or above, with first class standing (80% or better)

Transfers need to be approved by the research supervisor and Program Director, and supported by the supervisory committee.

Students entering the doctoral program after partial completion of a master's degree must:

- Demonstrate research ability/potential
- Complete a total of 12 credits, with a first class average, during their first 2 years of study. Of these, 9 credits must be 500-level or above, with first class standing.

The start date of the PhD program will be the date of first registration in the MSc program. This is important to keep in mind for candidacy and graduation deadlines.

Additional information and form: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-masters-doctoral-programs-without-completing-masters>

Transfer from PhD to MSc

PhD students may apply for a transfer to the MSc program, with the support of their research supervisor and Program Director. This should be initiated early in a student's program, be appropriate for their professional goals, and include a recommendation from the RDS program documenting the reasons for the transfer. Such transfers may have implications for student funding.

Additional information and form: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-doctoral-masters-programs>

Transfer between Graduate Programs

In exceptional cases, students may transfer between closely-related programs, with the support of both the current and receiving programs, and an academic justification from the receiving program's Program Co-Director. Transfers involving a change of discipline are treated as new admissions.

Additional information and forms: <https://www.grad.ubc.ca/faculty-staff/policies-procedures/transfer-between-closely-related-programs>

Student Transfer between Supervisors

While rare, circumstances may arise that necessitate a supervisor and student ending their working relationship.

These include, but are not limited to:

- Supervisor retires, leaves UBC, or is on an extended leave
- Incompatibility
- Funding issues
- Student changes area of interest

Such circumstances need to be brought to the attention of the Program Directors and Program Assistant as soon as possible.

The process for moving forward will depend on the nature of the situation. Generally, student-initiated changes in supervision require the student to identify a suitable new supervisor, with the support of the Program.

Students are not permitted to continue in the program without a supervisor, and may be required to withdraw if they are not able to identify an alternative supervisory arrangement.

Conflict Resolution

A productive student-supervisor relationship is key to the success of the student and the research team, and can be rewarding for both parties. However, conflict within this relationship does sometimes arise. There may be many sources of conflict, including misaligned expectations, conflict over timelines, personality conflicts, etc. While difficult, it is worthwhile to prevent conflicts where possible, and resolve conflicts that do arise.

There is no single formula that will resolve all conflicts, but below are some general practices and principles that may help prevent or resolve conflicts:

- Clarify roles and expectations early, and revisit regularly. (Student-Supervisor Expectations Checklist)
- Resolve conflicts early, before they escalate. Some individuals may respond to conflict by avoiding or ignoring the situation. While some conflicts may naturally diminish, avoiding the situation can often result in an escalation of the conflict. It is best to resolve the conflict early by employing constructive resolution strategies.

- Conflicts often arise due to a lack of communication between the student and supervisor. Establish a meeting/check in schedule early, and cancel only as necessary. Be clear about when students can expect responses and feedback to submitted work or emails.
- If you are not sure the student is correctly recalling the information communicated to them, you may ask them to take minutes at your regular meetings. These can be sent to you afterwards to ensure you have the same understanding, and to provide a record for subsequent discussions.
- Have open and respectful discussions. Express empathy towards the other's situation. Clearly articulate the existing conflict and its impact, make reasonable requests of the student, and/or discuss what each of you may do to resolve the conflict.
- Remember that the goal is not to win an argument, but to resolve conflict and increase the productivity and ease of your student-supervisor relationship.
- Be aware that sometimes conflict may be due to stressful or difficult situations in the student's personal or professional lives. Kind inquiries may increase understanding, and provide opportunities to offer assistance or direct the student to appropriate resources (see below).

Not all conflicts can be easily resolved. Some are very complex in nature, may be resistant to resolution, or may simply benefit from the involvement of a third party.

Seek help when necessary!

If you are experiencing a serious, complicated, protracted, or concerning conflict with a student, please contact the PA to arrange a meeting with the Program Directors.

Assisting Graduate Students in Distress

If you are concerned about a student's wellness, please consult the resources available for UBC graduate students:

- [G+PS: Assisting Graduate Students in Distress](#)
 - [Comprehensive Guide for Faculty and Staff](#)
- [UBC Graduate Student Support and Services](#)

Please be aware that services available, their hours and locations may change from time to time, so it is important to check the links above for the most up-to-date information.

Please seek support from the RDS Program or G+PS if you have a serious concern about a student and are not comfortable having these conversations, or feel that additional or urgent support is needed.

Appendix A: Resources for Supervisors

1. Faculty of Graduate and Postdoctoral Studies

[G+PS Handbook of Graduate Supervision](#)

[G+PS Principles of Graduate Supervision](#)

[G+PS Graduate Supervision Workshops](#)

2. Department of Obstetrics and Gynaecology

[Reproductive and Developmental Sciences Program website](#)

- [Admissions Requirements](#)
- [Application Instructions](#)
- [RDS Program Policies for Students](#)

[Department Policies and Guidelines](#)

- [Guidelines on Workplace Bullying and Harassment](#)

3. Faculty Wellness

[Employee and Family Assistance Program](#)

The Employee and Family Assistance Program (EFAP) is a confidential and voluntary counselling support service that provides you and your family with the help you need to resolve a wide range of personal, work, health or life issues. Expert information and immediate support resources are available in-person and by phone, video, web or mobile app.

Available 24 hours, 7 days a week: 1-800-387-4765

[UBC Faculty Association](#)

If you experience a problem, face an issue, or need information to help resolve a difficulty in your working life at UBC, we're here to help. The Faculty Association is your legal representative in all employment-related matters. This means that you have the right to:

- Consult with the Association at any time;
- Provide the Association with any information or documentation related to your work at UBC;
- Request that the Association officially represent you in any dealing with the university administration.

Appendix B: RDS Forms & Policies

Appendix B is provided in a Zip file.

RDS forms can also be found online at: <https://obgyn.ubc.ca/education/graduate-studies/current-students/program-policies/>

G+PS forms can be found online by searching: <https://www.grad.ubc.ca/forms>

1. Memo of Acceptance
2. Terms of Reference for RDS Membership
3. Student-Supervisor Expectations Checklist
4. Supervisory Committee Meeting – Annual Student Progress Report
5. Supervisory Committee Meeting – Chair's Report
6. Comprehensive Examination – Guidelines
7. Comprehensive Examination – Chair's Report
8. MSc Oral Examination – Planning Tool
9. MSc Oral Examination – Conduct and Chair's Report
10. PhD Oral Examination – Planning Tool

Appendix G – Enhancing Indigenous Inclusion in WACH

Meeting re: Enhancing Indigenous Inclusion in WACH

Oct 22, 2020

In attendance: Drs. Sheryl Lightfoot, Allison Eddy, and Laura Sly

LS and AE introduced the WACH program and provided an overview to SL.

We listed current connections and ideas about Indigenous offerings, partnership, and plans and asked for additional ideas. Through our discussion, we identified multiple tangible pieces that we can cite in our program proposal to enhance opportunities for recruitment, retention, and support of Indigenous students. I have organized these below and included ideas from our previous discussions.

To recruit Indigenous students:

1. partner with the award-winning BCCHRI research education program, “Mini Med School” to reach our future students in their grade 11 year. Recent program evolution has enhanced ties with UBC-Okanagan and their Indigenous students; on-line delivery and videotaping, necessitated by Covid-19, has provided the opportunity to develop a blended learning model for the program that we will maintain to reach out to remote communities that includes Indigenous students, who may not have been reached in previous years.
2. offer 8 week summer student research positions to a cohort of 3 Indigenous students to provide an opportunity to come and work in a research laboratory. A similar program exists at BCCHRI but is not specifically targeted to Indigenous students.
3. participate annually in the Longhouse lunches, where we will provide information about our program to prospective Indigenous students, who are currently undergraduates
4. participate in the Indigenous Undergraduate Research Mentorship Program to provide one on one mentorship to Indigenous undergraduate students, who may be interested in pursuing a research career
5. inform and advertise Indigenous undergraduate scholarships to program faculty and undergraduate students to ensure optimal uptake of prestigious Nationally-funded awards (e.g. NSERC Indigenous student Ambassadors NISA)

To support and retain Indigenous students (if you build it, they will come):

1. provide tuition support for all Indigenous students at program launch (dedicated from GSI funds available in the program)
2. provide entrance awards for Indigenous students (\$5K/student dedicated from GSI funds)

3. provide scholarships for Indigenous students. We anticipate that the program will be operating with a budget surplus by year 5. As per established agreements between the host Departments of Pediatrics and Obstetrics & Gynaecology, surplus funds will be re-invested in the program to enhance student learning opportunities. A portion of these funds will be dedicated to a scholarship (\$30K per year for 4 years) for an Indigenous student. We will continue to seek additional partnerships to increase scholarship offerings for Indigenous students.
4. required courses and elective/selective offerings will be offered as blended learning models. Specifically, courses will be offered in-person, live on-line, or in taped sessions. This multi-delivery mode will enable learners in all remote communities (including Indigenous students and students studying in Indigenous communities) to participate in all course opportunities. This will remove geographical barriers and reduce financial barriers associated with travel and living in the Vancouver area for students, whenever possible.
5. we will facilitate formation of a student group for Indigenous students, providing them with appropriate meeting space (in partnership with the BCCH and BCCHRI) and budget for food and social events meetings (\$2.5K per year from GSI funds to start). Non-Indigenous students with interest in learning about Indigenous culture, ways of knowing, ways of being, may be included in this group if there are not sufficient numbers of Indigenous students in the community to create a cohort of students.
6. we will facilitate peer mentorship (as well as scholarly mentorship, which is part of our Enhanced Scholars Program for all students) for Indigenous students.

Medium-Long Term Goal:

We recognize that students need inspirational and aspirational role models. Though we have many faculty members, who partner with Indigenous communities to do women+’s and children’s health research, we do not have Indigenous Faculty members. There is only 1 Indigenous Faculty member in the Department of Pediatrics, and her role is largely clinical. Similarly, in the Department of Obstetrics and Gynecology, there is a paucity of Indigenous Faculty. Our Departments are committed to the recruitment of outstanding Indigenous Faculty members. In partnership, we are currently actively seeking out opportunities to hire new Faculty and are committed to identifying and recruiting an Indigenous, research-intensive Faculty member.

Appendix H – Letter of Support, Dean Tania Bubela, Faculty of Health Sciences, SFU



FACULTY OF HEALTH SCIENCES
SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

August 13, 2020

Dear Dr. Allison Eddy and Dr. Geoff Cundiff,

I am writing to offer my support for the proposed Women+ and Children's Health Sciences (WACH) graduate program in the Faculty of Medicine at the University of British Columbia.

The interdisciplinary Faculty of Health Sciences at Simon Fraser University intersects with many of the goals of WACH and can contribute to expanding its relevant knowledge domains, including: developmental trajectories, infectious diseases, mental health and substance use, indigenous health, planetary health, policy and systems research, big data, health sciences and public health education, and big data. Faculty members with active researchers in these knowledge domains include:

- Dr. Angela Kaida (Women's Health Research Institute Executive Committee member and Scientific Advisor; Canada Research Chair in Global Perspectives on HIV and Sexual and Reproductive Health);
- Dr. Charlotte Waddell (University Professor and Director of the Children's Health Policy Centre in the Faculty of Health Sciences);
- Dr. Pablo Nepomnaschy (Associate Professor and Director of the Maternal and Child Health Laboratory, BCCHRI-affiliated researcher with expertise on the effects of stress on growth, development and health across the human life course); and
- Dr. Nadine Provencal (Assistant Professor, BCCHRI-affiliated researcher with expertise in epigenetics of early life adversity)

All are enthusiastic about collaborating with you on the proposed WACH graduate program, which could benefit graduate students across our institutions. In FHS, we train MSc and PhD students in women+ and child health research, in disciplines that range from epigenetics to health policy.

Collaboration could include FHS faculty representation on your Steering Committee to provide input into program development and to contribute to the program upon its launch. Contributions could include lectures in your annual seminar course, WACH 502, and participation in your annual research day. Specifically, our faculty members have complementary expertise in women's and children's health and could contribute teaching and mentorship in: qualitative research methods, randomized controlled trial methods, systematic review methods, child mental health epidemiology and public health surveillance, social determinants of health, mental health for women, children's mental health, child health policy, developmental origins of health and disease, epigenetics, and reproductive and sexual health and policy, both locally and globally.

We are eager to create new opportunities for FHS graduate students engaged in women+ and child health research to take courses offered by your program via the Western Deans' Agreement – so they can also benefit from the envisioned broader trainee and mentorship community.

We wish you all the best in this exciting endeavour.

Yours sincerely,



Tania Bubela, BSc (Hons), PhD, JD, FCAHS, FRSC
tbubela@sfu.ca

BLUSSON HALL, ROOM 11300
8888 UNIVERSITY DRIVE
SIMONFRASER UNIVERSITY, BURNABY BC
CANADA, V5A 1S6



Date 7th April 2020

Dear Neville

Thank you for the opportunity to review the proposed Master of Science (MSc) Program and PhD in Women+ and Children's health sciences.

The reviewer recognises that the proposal is linked to the Department of Pediatrics and Department of Obstetrics and Gynaecology at UBC, both highly esteemed within the Faculty of Medicine.

A strong emphasis throughout both program design and delivery is the concept of 'interdisciplinary' collaboration and learning. Providing clarity around the meaning attributed to this concept within the curriculum could help both readers and prospective students. For example, while graduates from a range of disciplines (i.e., dietetics (RD), nursing (RN), pharmacy (PharmD), midwifery (BMw); should social work be included here?) are cited throughout the document, others are absent (i.e., health & human geographers). Faculty from across these areas are absent within instructional staff lists provided. While these programs fall outside the Faculty of Medicine how they are embedded within an interdisciplinary proposal is unclear.

Inter, multi or transdisciplinary working is a cornerstone in the proposal focused on "strengthening UBC's capacity as a leading research institution that supports interdisciplinary research" thereby producing research scientists. The proposal demonstrated clear ways in which a holistic student approach is considered i.e., supporting students to flourish in the areas of science, presentation skills, grant writing acumen, and research skills. The potential for social, computer, and implementation science focus on women+ and child health within this curriculum is a little more difficult to see. Strengthening this would be helpful in light of key statements linked to areas of research interest such as precision health (WHRI).

The proposals highlight mid-to-longer term outputs focused on the development of professional skills that can transfer to careers in industry, government, and non-government organizations. The proposal acknowledges that understanding the complexity and impact of partnerships with industry or business on innovations and careers is yet unknown. Considering the current opportunity to develop an original program in Canada – consultation with incubator and accelerator programs i.e., UBC's prior use of Hackathons, industry, and academic health science networks was difficult to find in the document.

Thoughtful consideration had been applied to future careers with evidence of the more common trajectories. However, outside of the Bio Scientist / Medical Laboratory Technologists etc. there remained some uncertainty as to how the programs could meaningfully support managers in healthcare, when the Business School is absent from the curriculum. While the aim is to develop research-academic vs. clinical-academic careers if interdisciplinary professional graduate students are



to engage in this program bridging research to practice, understanding complexity and systems science could bolster environmental and future social policy outputs and impact.

How such programs can support both urban and rural contexts is worth consideration since Indigenous health and diversity are well placed in the program.

The proposal appeared weighted to acute care provision. Considering the social pediatric discourse and outputs from BCCH and the program leadership this was surprising. Primary care was noted twice in the document both times in the reference list. If the drive to situate social pediatrics in the mainstream of curriculum development and interprofessional approaches at UBC has been a long-standing goal perhaps it could be more visible in the curriculum. Furthermore, mental health for women+ and child was noted twice in the proposed syllabus. In light of the rising trends in Canada and globally, and recent pandemic events is this sufficient within the existing program structure?

Review of the team clearly identifies the level of skill and expertise held by the instructional staff.

The level of work in the proposal to identify the current limitations in graduate studies in this area is comprehensive. The cost of programs outside Canada is noted (\$10-40,000 + CAN). The scoping exercise to garner interest is clearly reported. While the recruitment tables provide information as to the stable applicant pool, is there data to evidence graduation numbers and any indication as to the professional vs. non-professional undergraduate degree applicant anticipated numbers or caps?

Thank you for the opportunity to review this exciting proposal.

Kind regards,

A handwritten signature in cursive script that reads 'Caroline Sanders'.

Dr Caroline Sanders, MBE, RN.

Associate Professor

School of Nursing

University of Northern British Columbia.



19 May 2021

To: Vancouver Senate

From: Senate Library Committee

Re: Annual Report 2020-2021

The Committee devoted its main energies to the primary role defined for it by its terms of reference, namely “To advise and assist the Librarian in developing a general program of library services for all the interests of the University.”

The University Librarian, Susan Parker, will present an overview of UBC Library operations in her Annual Report to Senate, in October 2021.

Over the 2020/2021 academic year the Committee met seven times. I offer sincere thanks to each member of the Committee for their thoughtful input. At each meeting, the Committee received extensive briefings from the University Librarian, other colleagues from the Library, and members of other Senate committees. As a result the Committee did work in the following areas:

- The Librarian’s Annual Report to Senate
- Monthly COVID-19 updates
- Irving K. Barber Learning Center space usage statistics
- Presentation on Geospatial Data from the Map Cabinet: Digitizing British Columbia’s Mid-Century Forest Cover
- Presentation on The Harry Hawthorn Foundation and Collection
- Presentation on Geodisy: a Geodata Search Interface
- Library Budget and Collections Strategies
- Open Athens Software Implementation

In conclusion, the Committee would like to thank those guests who gave presentations and brought their expertise to the Committee over the course of the year. The Committee wishes to also thank UBC Librarians, other members of the Library staff, the Office of the Senate, and Enrolment Services for their flexibility and unwavering dedication in the face the COVID-19 pandemic.

Respectfully submitted,
Shigenori Matsui, Chair
Senate Library Committee



To: Senate
From: Nominating Committee
Re: Final Report of the Ad-Hoc Committee to Review Student Appeal Procedures and Structures
Date: 11 May 2021

The Nominating Committee transmits the Final Report of the Ad-Hoc Committee to Review Student Appeal Procedures and Structures and is please to recommend that Senate resolve as follows:

That Senate receive the report of the Ad-Hoc Committee to Review Student Appeal Procedures and Structures;

That the Senate Nominating Committee be directed to oversee the consideration of the recommendations therein as specified in Recommendation 6.2 of the report;

That Ad-Hoc Committee to Review Student Appeal Procedures and Structures be discharged with the thanks of Senate for its work.

To: Senate, via Senate Nominating Committee

From: Ad-Hoc Committee to Review Student Appeal Procedures and Structures

Re: Final Report

Date: 6 May 2021

Introduction

Earlier this academic year, the Senate established an Ad Hoc Committee to consider comments and concerns raised over the past triennium regarding how the University's quasi-judicial appeals tribunals function. Appointed to this Ad Hoc Committee were Ms Natasha Rygnestad-Stahl (Chair), Dr C. W. (Toph) Marshall, and Dr Lance Rucker. The terms of reference for the Ad Hoc Committee are as follows:

1) To review the policies and procedures for appeals of academic and non-academic discipline, academic standing, and admissions with particular attention to:

- the means whereby appeal panel members gain knowledge of principles of administrative justice, procedural fairness and issues of equity as they relate to appeals;
- the composition of the committees (both the absolute and relative numbers of students, faculty, and convocation members), including but not limited to the desire to constitute hearing panels with a diversity of members;
- the procedures followed before, during and after an appeal is considered, and the time allowed for each step;
- the infrastructural support provided to the Senate Office and the Appeals Committees, including:
 - support to appellants throughout the appeal process, from learning about the grounds for appeal and appropriately preparing an appeal through to receiving an understanding the decision;
 - the support provided for the wellbeing of both appellants and appeal panel members.

2) To submit a report to the Senate Nominating Committee by April 15, 2021 with recommendations with a view to ensuring fairness and transparency of process, specifically:

- recommendations for changes, as appropriate, to the committees' compositions, policies and procedures;
- recommendations for changes, as appropriate, to the infrastructural support provided for the appeals processes by the Senior Administration through the Senate Office; and
- any recommendations deemed appropriate for matters to be subject to a further, external review

As Senators are aware, the Senate has three committees which consider appeals: the Committee on Appeals on Academic Standing, the Committee on Student Appeals on Academic Discipline, and the Admissions Committee. References in this report to "Appeals Committees" only refer to the first two bodies. Recommendations applicable to the Admissions Committee will make specific reference to that body given the differences in structure and process used for consideration of appeals by admissions applicants versus appeals for current and former students related to matters of academic standing and academic discipline..

The Senate Ad Hoc Committee has met on ten occasions since January. The Committee has consulted with the chairs of both the academic standing and academic discipline appeals committees, as well as the chair of the admissions committee. The Committee has also met with the Ombudsperson and academic governance officers from both the UBC Vancouver and UBC Okanagan Senate Appeals Committees. Feedback was also solicited from the last two triennium's membership of both Appeals Committees and several past and current members.

The Committee appreciates that this final report is being presented one month later than expected and appreciates Senate's understanding as it works through this complex series of matters.

Recommendations of the Ad Hoc Committee on Student Appeals Processes and Structures

1.0 Training

1.1

Enhancements are needed to the training regimen offered to members of Appeals Committees. In particular, the Ad Hoc Committee believes that sufficient mandatory training opportunities must be offered so as to make it reasonable to have all members of Appeals Committees attend a full training workshop prior to hearing a matter.

1.2

While Admissions Committee members should not be required to attend the same training regimen as offered to the Appeals Committees, all senators should be welcome and encouraged to attend, including members of the Admissions Committee.

1.3

The Ad Hoc Committee has noted that varying amounts of training have been offered to appeals committee members over the past decade. The Ad Hoc Committee believes that to properly address the amount of training material needed by Appeals Committee members, an in-depth two-day training course (or its equivalent) should be offered at least annually for all Appeals Committee members; in year 1 of the triennium this should occur in the fall, and in years 1, 2 & 3 in the spring, to allow participation and proper training for student senators for their following year-long term on the Senate.

1.4

In addition to the detailed introductory training offered in S 1.3 above, additional in-service training should be offered at least once per term to allow for detailed focus on issues and application for matters both generally and as arise from time to time at each committee. If necessary, additional training should be organized on specific matters prior to a hearing if an appeals committee feels this is needed to adjudicate a matter under appeal.

1.5

In addition to the current focus on administrative law and procedural fairness, both annual and in-service training should be expanded, as appropriate for each Appeals Committee, to include trauma-informed approaches, student mental health issues, sexual assault, cultural competency,

anti-bias, principles of equity and inclusion, and more practical information such as practice and conduct at hearings and the roles of committee/panel chairs, members, and staff.

1.6.

In addition to the annual and in-service training recommended above, specialized mandatory training for Appeals Committee chairs and vice-chairs should be developed, especially in regard to procedures and the writing of reasons. This should be supplemented, where possible, with one-on-one coaching and mentorship from previous chairs. The Ad Hoc Committee suggests that this should be at least two half-days near the start of their terms of office and additionally as required.

1.7

Recognizing that the aforementioned training may be less relevant for the Admissions Committee given their paper hearing format, the Ad Hoc Committee recommends that the Admissions Committee should develop its own robust and effective training regimen that is made available to its members annually and on an as-needed basis. Training should also include current information about admissions procedures generally at the University and for specific programs as needed.

1.8

Where possible, on-line and printed training resources should also be made available both for review and to benefit those who cannot attend in-person sessions.

1.9

Hearing, procedural, and reporting templates should be maintained for chairs and vice-chairs of Appeals Committees and of the Admissions Committee to assist with both the conduct of hearings and reporting of decisions and reasons for decisions.

2.0 Appeals Committees and Panels

2.1

The Ad Hoc Committee does not believe that the UBC Vancouver Appeals Committees should be joined (such as they are at the Okanagan campus) given the differences in the jurisdictions between the two campuses and the mandates and relative differences in scale between the campuses.

2.2

The Ad Hoc Committee believes that the current compositions, sizes, and quorums of the Appeals Committees and the Admissions Committee are appropriate.

2.3

The Ad Hoc Committee notes that the full membership of appeals committees is generally not present for every appeal. Instead, a quorum (or just above a quorum) of an appeals committee is convened as a panel to consider matters and that panel may not have the same diversity of members as the full committee. To encourage a diversity of backgrounds on appeals panels while

ensuring timely consideration of appeals, every Appeals Committee panel should have a breadth of senate membership. In particular, the composition of each panel should include at least one student, one faculty member, and one convocation senator.

2.4

Currently, senators who act on student academic standing or discipline matters at the faculty level (for example deans, associate deans academic, or associate deans students) are excluded from membership on the Appeals Committees in practice in order to avoid potential conflicts of interest. This restriction should be codified.

2.5

The Ad Hoc Committee notes that presently, Appeals Committee chairs and vice-chairs are generally elected triennially, and that these persons can have a large impact on both the processes and the conduct of matters before the Appeals Committees. As the Appeals Committees generally only meet for hearings or for training, they do not have regular opportunities for reflection on how they are functioning as committees. To ensure that these officers have the support and confidence of their committees, the Ad Hoc Committee recommends that this be changed to an annual (re)election for chairs and vice-chairs of each committee.

2.6

When considering an admissions appeal, the Admissions Committee should not be chaired by someone with a current faculty appointment or staff position in that faculty, or a student registered in that faculty.

2.7

The Admissions Committee Terms of Reference state that “Assistant or Associate Deans are to recuse themselves from the hearing of student appeals if the faculty decision under appeal is one of their own faculty”. The Ad Hoc Committee believes “...and be absent from all committee discussions of the case” should be added to the Admissions Committee terms of reference, to clarify that mere abstention on voting is not sufficient to constitute recusal.

2.8

The Ad Hoc Committee notes that there is an inconsistency in the *University Act* between the wording of various disciplinary powers due to a legislative amendment 40 years prior. As under S. 61 any matter of student discipline is subject to appeal to the Senate rather than just academic discipline, the Ad Hoc Committee believes that the name of the “Committee on Student Appeals on Academic Discipline” should be changed to “Committee on Appeals of Student Discipline”.

3.0 Resources for Appellants

3.1

The Ad Hoc Committee believes that appellants and potential appellants need better guidance on appeals matters. The Ad Hoc Committee recognizes that there may be legal and ethical considerations around anyone employed by the University providing advice that may influence appellant positions in appeals matters, but also recognizes the need of appellants to have better

advice. The Ad Hoc Committee recommends that the Nominating Committee should develop further mechanisms to provide this advice in consultation with the Registrar and the Appeals Committees, perhaps using former members of the Appeals Committees as a resource.

3.2

While recognizing the need for specific language in appeals regulations, the Ad Hoc Committee proposes that plain language explanations of the appeals process and the individual steps and procedures for an appeal should be developed to describe and educate appellants, respondents, and committee members of appeals processes. These should be made available online generally and to potential appellants.

3.3

All faculty-level final decisions on matters of academic standing must include language noting both that finality at the faculty level as well as the Senate appeals process and resources available to students.

4.0 Committee Functioning

4.1

Greater clarity is needed regarding the roles of a panel chair, panel members, and panel secretary in the drafting and review of reasons for decisions for each of the appeals committees and for the admissions committee.

4.2

Mechanisms must be created to ensure more timely consideration of appeals by Appeals Committees, including availability and completion of training of Appeals Committee members, and availability of appellants, respondents, and witnesses.

4.3

The Ad Hoc Committee believes that timely hearing of appeals is a crucial aspect of fairness, and to that end, that a hearing must normally be scheduled to occur within three months of the filing of an appeal. If an appeal is not heard within three months of it being filed, an appellant should be allowed to file a petition to the Appeals Committee asking for a summary judgment in their favour, and this should normally be allowed except in cases where the delay is due wholly or in part on the actions, lack of actions, or availability on behalf of the appellant (including but not limited to any counsel or witnesses they may have). When considering such a petition, the Committee shall consider submissions from the Registrar as to the scheduling of the matter.

4.4

The Ad Hoc Committee believes that “blended” hearings where some persons are in attendance in person and some remotely are not advantageous to committee functioning. The Ad Hoc Committee suggests that should the Registrar or the Chair permit an appellant to attend remotely, the hearing should be conducted entirely remotely.

4.5

Specific language should be added to appeals regulations reminding all attending, either in person or remotely, of the confidentiality of proceedings and the absolute prohibition of audio, visual or other recording or broadcasting of hearings. Presently, while confidentiality is stated in the rules, there is no explicit reference to a prohibition on recordings or broadcasting. This prohibition should also be restated by the chair at the start of each hearing.

4.6

The Ad Hoc Committee believes that the Appeals Committees rules should specify timelines for the distribution of reasons for decisions to appellants and respondents. The Ad Hoc Committee suggests that reasons for decision should take no more than two months from the conclusion of the hearing to be finalized and distributed to the parties.

4.7

The Ad Hoc Committee recognizes that proceedings may require a language competency level beyond that normally used by students. There should be no prejudice against an appellant hiring professional translators if needed. Notice of the use of a translator must be given the Committee and the respondent at least fourteen (14) days prior to the hearing. The Committee or the respondent may elect to provide their own translators should an appellant use a translator.

4.8

The Ad Hoc Committee supports and encourages the Agenda and Nominating committees' efforts to develop a Code of Conduct and Conflict of Interest regulations for the Senate. When such a Code is developed, the Ad Hoc Committee recommends that it explicitly covers the Appeals Committees and the Admissions Committee, in addition to regular Senate business.

4.9

The Ad Hoc Committee has noted instances before the Committee on Student Appeals of Academic Discipline where it has been clear that the respondent faculty does not support either the recommendation made to, or the decision made by, the President. To address this, the Ad Hoc Committee believes that the Committee on Student Appeals of Academic Discipline's rules should be amended to have the respondent on each matter be a person designated by the President, rather than assuming that it will be the initiating faculty for academic matters, and further that should the faculty not be a respondent, that it be allowed to make submissions to the Committee on Student Appeals of Academic Discipline on the matter at hand.

4.10

The Ad Hoc Committee has noted that the Committee on Student Appeals of Academic Discipline has referenced in several decisions that it is unable to substitute its own judgment under two of the six possible grounds for an appeal currently established. The Ad Hoc Committee agrees that there may be times that sending a matter back for a reconsideration is the most reasonable or correct course of action, and even that this may be the most frequent remedy for issues earlier in a process, but would recommend that these limitations be removed and that the Committee on Student Appeals of Academic Discipline always be able to substitute its judgment where it would find that appropriate, except under the ground "The student has material evidence that was not reasonably available at the time of the President's Committee hearing".

5.0 Faculty-Level Processes

5.1

Noting the importance of a final decision from a faculty to the Senate appeals process, the Ad Hoc Committee recommends that each faculty examine their internal appeal procedures with the goal of having written and transparent policies available to students which describe the process to appeal within the faculty, and when and how a final decision will be made.

5.2

The Ad Hoc Committee has noted that in some instances, internal faculty processes have taken over a year to provide students with responses to appeals to a dean. The Committee recognizes that each case may be different and some may take more time than others to adjudicate; however, as noted above, a timely consideration of matters is an important aspect of fairness. In the past, the Committee on Appeals on Academic Standing has been willing to consider matters in the absence of a final decision of a faculty where it felt that the faculty had not made a timely decision. The Ad Hoc Committee believes that this practice should be codified and that the Registrar should be enabled to accept a notice of appeal where a faculty has not provided a student with a timely final decision.

6.0 Implementation

6.1

The Ad Hoc Committee realizes that some of the above recommendations, in particular those regarding more robust training, will require a substantial investment in both staff time and financial resources from the University. The Ad Hoc Committee is also aware that training has been an area cut from the Senate budget in the past when faced with “across the board” reductions to the Senate budget as an alternative to terminating staff. The Ad Hoc Committee believes that quasi-judicial matters must be properly supported by the University and thus recommends that the Registrar must make budget submissions to enable the recommendations of this report, and should those recommendations not be accepted by either the central administration or the Board of Governors, this must be brought to the attention of the Senate. The Ad Hoc Committee believes that such investment is crucial to establishing fair and just procedures for appellants and that such investment will help avoid the possibility of more expensive remedies subsequently.

6.2

The Ad Hoc Committee recommends that the Senate Nominating Committee be responsible for the implementation of this report, and in particular, the transmittal of various recommendations to relevant parties and the monitoring of actions taken in response. The Nominating Committee should report back regularly to Senate on implementation and provide a final report to Senate by April 2022 noting which recommendations have been acted upon and which have not. If a recommendation is not acted upon, reasons should be sought from the relevant decision maker to be shared with the Senate.

To: Senate
From: Nominating Committee
Re: Committee Adjustments
Date: 11 May 2021

The Senate Nominating Committee has met to consider adjustments to the membership of Senate committee given our new student members as well as a request for reassignment. The Nominating Committee is pleased to recommend that Senate resolve as follows:

That Laia Shpeller and Anisha Sandhu be appointed to the Senate Academic Building Needs Committee until 31 March 2022 and thereafter until replaced, to replace Cole Evans and Alex Gonzalez;

That the term of Morgan Lorenz on the Senate Academic Building Needs Committee be extended to 31 March 2022 and thereafter until replaced;

That Jackson Schumacher be appointed to the Senate Academic Policy Committee until 31 March 2022 and thereafter until replaced, to replace Justin Zheng;

That the terms of Julia Burnham and Esahana Bhagu on the Senate Academic Policy Committee be extended to 31 March 2022 and thereafter until replaced;

That Keanna Yu and Dawson Born be appointed to the Senate Admissions Committee until 31 March 2022 and thereafter until replaced, to replace Dante Agosti-Moro and Justin Zheng;

That Julia Burnham and Anisha Sandhu be appointed to the Senate Agenda Committee until 31 March 2022 and thereafter until replaced, to replace J. Max Holmes and Christopher Hakim;

That Kanika Khosla, Emmanuel Cantiller, and Sebastian Cooper be appointed to the Senate Appeals on Academic Standing Committee until 31 March 2022 and thereafter until replaced, to replace Alex Gonzalez, Danny Liu, and Natasha Rygnesstad-Stahl;

That the term of Dante Agosti-Moro on the Senate Appeals on Academic Standing Committee be extended to 31 March 2022 and thereafter until replaced;

That Shivani Mehta and Xiutong Tony Jiang be appointed to the Senate Awards Committee until 31 March 2022 and thereafter until replaced, to replace Arezoo Alamzadeh-Mehrizi and Chalaya Moonias

That Jackson Schumacher, Leonard Wang, Georgia Yee, and Eshana Bhangu be appointed to the Senate Curriculum Committee until 31 March 2022 and thereafter until replaced, to replace Tarique Benbow, Cole Evans, Danny Liu and Diane Nguyen;

That the term of Anisha Sandhu on the Senate Curriculum Committee be extended to 31 March 2022 and thereafter until replaced;

That Xiutong Tony Jiang, Morgan Lorenz, Shivani Mehta, and Leonard Wang be appointed to the Senate Library Committee until 31 March 2022 and thereafter until replaced, to replace Eshana Bhangu, Tarique Benbow, Chalaya Moonias, and Nick Pang.

That Lisa White and Dee Goyal be appointed to the Senate Research and Scholarship Committee until 31 March 2022 and thereafter until replaced, to replace Julia Burnham and Tyler Yan;

That Keanna Yu, and Dawson Born be appointed to the Senate Student Appeals on Academic Discipline Committee until 31 March 2022 and thereafter until replaced, to replace Julia Burnham and Natasha Rynestad-Stahl;

That the term of Dante Agost-Moro on the Senate Student Appeals on Academic Discipline Committee be extended to 31 March 2022 and thereafter until replaced;

That Lisa White, Georgia Yee, and Emmanuel Cantiller be appointed to the Senate Teaching & Learning Committee until 31 March 2022 and thereafter until replaced, to replace Christopher Hakim, Arezoo Alemzadeh Mehrizi, and Diane Nguyen;

That Laia Shpeller and Kanika Khosla be appointed to the Senate Tributes Committee until 31 March 2022 and thereafter until replaced, to replace Danny Liu and Tyler Yan.

That Sebastian Cooper be appointed to the Council Budget Committee until 31 March 2022 and thereafter until replaced, to replace Christopher Hakim;

That the term of Eshana Bhangu on the Council Budget Committee be extended to 31 March 2022 and thereafter until replaced;

That Dante Agosti-Moro be appointed to the Council Elections Committee until 31 March 2022 and thereafter until replaced, to fill a vacancy;



That the term of Julia Burnham on Council of Senates Vancouver Senate Committee Four be extended to 31 March 2022 and thereafter until replaced;

*That Dante Agosti-Moro and Eshana Bhangu be elected to the Council of Senates;
and*

That Robert Boushel be appointed to the Senate Research and Scholarship Committee until 31 August 2023 and thereafter until replaced, to replace Charles Menzies.



To: Senate
From: Nominating Committee
Re: Amendments to the Composition of the Senate Teaching & Learning and Academic Policy Committees
Date: 11 May 2021

The Senate Nominating Committee has considered a request from the Academic Policy and Teaching and Learning Committees to add their respective chairs to the other committee to help address areas of mutual interest. The Nominating Committee agrees with the proposal and is pleased to recommend that Senate resolve as follows:

That the Chair of the Academic Policy Committee be added to the Teaching & Learning Committee as an ex officio voting member; and

That the Chair of the Teaching & Learning Committee be added to the Academic Policy Committee as an ex officio voting member.

29 April 2021

To: Nominating Committee

From: Teaching and Learning Committee and Academic Policy Committee

Re: Request for Additions to Committee Memberships

Further to Academic Policy Chair Kin Lo's April 15, 2021 email to Chair Paul Harrison regarding committee composition:

The Teaching and Learning Committee requests the following:

That the Nominating Committee add the Chair of the Academic Policy Committee as an ex-officio member of the Teaching and Learning Committee;

The Academic Policy Committee requests the following:

That the Nominating Committee add the Chair of the Teaching and Learning Committee as an ex-officio member of the Academic Policy Committee.

As evidenced this past year, there is the potential for considerable overlap between these committees. The committees took one joint motion to Senate and future joint motions are foreseeable as areas of mutual interest continue to be identified.

Committee members were in agreement that each Chair would have valuable contributions to make to each other's committees especially in terms of cross-committee collaboration and reducing redundancies. The committees recognise that this is not the only conversation of this type happening across UBC's campuses. This proposed composition can be considered analogous to the situation of the chairs of the Curriculum and Admissions Committees.

There was a desire on the part of the committees to formalize this relationship, with its attendant contributions, and to not just facilitate it by the exchange of agendas or miscellaneous invitations to meetings.

Respectfully submitted,

Dr. Joanne Fox, Chair
Teaching and Learning Committee

Dr. Kin Lo
Academic Policy Committee

To: Senate
From: Nominating Committee
Re: Proposals for a Committee and/or Structure of Senate to Address Equity, Diversity, and Inclusion Considerations
Date: 11 May 2021

As senators may be aware, the final report of the Senate Ad Hoc Committee on Academic Diversity and Inclusion included the following recommendation:

Recommendation: That the Nominating Committee recommend to Senate the creation of a structure or committee to address academic diversity and inclusion, and continue the ongoing work of SACADI.

For the past year, the Senate Nominating Committee has had many discussions on how to advance this recommendation, including meetings with the former Chair of SACADI and other former SACADI members. At issue is if a structural change should be made to Senate procedures to have EDI considerations made by all standing committees of Senate in their deliberations, if another committee should be established to focus on EDI considerations (and if so if it should be standing or for a fixed term), or both. While a majority of the Committee has indicated support for a structural change rather than a new committee (standing or ad hoc), there is a strong minority sentiment in favour of a new committee and no consensus has yet been found. Among those in support of a committee there is also disagreement on if this should be a new ongoing standing committee, or a longer-lived ad hoc committee (E.g., to the end of the 2025 triennium). The Nominating Committee brings this matter to Senate to seek further input with the hope of understanding the will of Senate on how to proceed. There have been lengthy discussions on both proposals and we expect these discussions will be raised again at Senate. At the risk of over-simplifying perspectives, the arguments for and against each idea may be summarized as follows:

The proponents of the structural change have suggested that these considerations need to be imbedded in the operations of all Senate committees as part of their ongoing responsibilities in considering the academic governance of our institution. The opponents of this idea have suggested that Senate's committees do not necessarily have the expertise, interest, or capacity to consider such matters independently.

The proponents of the committee proposal have suggested that a focused group would be the best way to bring attention and expertise to this area, and that to date some Senate Committees have not shown interest in this work. Opponents of the committee idea have suggested that these values should be embedded in everything that senate does rather than siloed into a separate committee that risk being either ignored or viewed as a policing function. They have also noted the administrative overhead of another Senate committee for both senators and staff.



Attached to this proposal are two drafts. The first – the structural suggestion – is for a change the Rules and Procedures of Senate to set out EDI considerations as an obligation for all Senate committees. The second is a proposed new committee. The Nominating Committee would appreciate the views of senators on both proposals.

Proposed Change to Rules and Procedures of Senate:

“In addition to their specific terms of reference, all standing committees are responsible for considering the following for any decisions or recommendations made by the committee:

- the University’s expressed values of excellence, integrity, respect, academic freedom and accountability,
- the mental health and well-being of University members, and
- equity, inclusivity and fairness.”

Proposed Committee Terms of Reference

“Academic Equity Committee

Terms of Reference

To consider and to provide advice and recommendations to the Senate for areas of general interest, or its committees for those areas under their terms of reference, on academic matters related to equity, diversity and inclusion at the University, including, but not limited to:

- recommendations outlined in the “Senate Ad Hoc Committee on Academic Diversity and Inclusion Final Report” (July 2020);
- on-going development and review of policies and procedures that help elevate historically and systemically marginalized communities at UBC;
- development of best practices surrounding equity, diversity and inclusion in the Senate.

Composition

- 8 members appointed by the Senate on the recommendation of the Senate Nominating Committee to ensure that at least that number of other Senate Committees is represented (voting):
- Such other voting members as may be appointed by the Senate from time to time on the recommendation of the Senate Nominating Committee to ensure that the Committee’s membership includes at least 3 students, 3 faculty members and 1 convocation member.
- Ex officio:
 - Chancellor (voting)
 - President (voting)
 - Registrar or Designate (non-voting)
 - Dean of the Faculty of Graduate & Postdoctoral Studies or Designate (non-voting)
 - Associate Vice-President Equity & Inclusion or Designate (non-voting)
 - Director of the First Nations House of Learning or Designate (non-voting)
 - Director of the Centre for Accessibility or Designate (non-voting)
 - Director of the Centre for Teaching, Learning & Technology or Designate (non-voting)

Quorum: 5 voting members.”



19 May 2021

To: Vancouver Senate

From: Vancouver Senate Research and Scholarship Committee

Re: Establishment of the Language Sciences Institute

The Senate Research and Scholarship Committee has reviewed the attached proposal from the Faculty of Arts for a new institute for Language Sciences. The Committee's review of the proposal has focused on the academic subject matter, the financial viability and sustainability of the proposed institute, and the proposed governance structure. The proposal has also been reviewed by the Research and Innovation Council.

Separate to this recommendation, a recommendation will be coming forward from the administration to designate the new institute, if approved, as a Global Research Excellence Institute.

The Committee is pleased to recommend:

That Senate approve and recommend to the Board of Governors the establishment of the Language Sciences Institute within the Faculty of Arts.

Respectfully submitted,

Dr. Guy Faulkner, Chair
Senate Research and Scholarship Committee

Language Sciences Institute

Proposal for the Establishment of a Global Research Excellence Institute

March 2021



THE UNIVERSITY OF BRITISH COLUMBIA

Language Sciences
Research Excellence Cluster

UBC Language Sciences

Deans' Message

Language is a vital system at every level of human experience – it is ingrained in the architecture of our brains and bodies; it forms the fabric of our connections to our families, our communities and our technologies; and it defines and transcends our societal boundaries and national borders. Since 2015, Language Sciences (LangSci) has leveraged the University of British Columbia's position as a locus of ground-breaking research and education in the science of language to initiate and advance interdisciplinary collaborations between researchers, communities, and industry, most notably, through the successful Social Sciences and Humanities Research Council (SSHRC) Partnership Grant 'Ensuring Full Literacy in a Multicultural and Digital World'. With the success of this grant (the largest collaborative grant available in Canada specifically for the humanities and social sciences), UBC has emerged as a global leader in language research. Formal recognition and sustained funding as a Global Research Excellence Institute at UBC is now needed to enable LangSci to cement and magnify our global status and to address vital emerging and longer-term challenges.

Who?

LangSci members include 224 faculty, graduate students, and postdoctoral fellows from 47 departments across 11 faculties and schools on both the UBC Vancouver and Okanagan campuses, as well as 93 affiliate members from more than 40 other academic institutions, NGOs, and private companies across Canada and internationally. LangSci also engages with undergraduates through its first university-wide undergraduate course, 'Living Language: Science and Society' and its affiliation with the student-founded and -run Language Sciences Undergraduate Research Conference. Since LangSci's inception five years ago, UBC has shown targeted growth in faculty positions and programs across the university, including two positions in Psychology – an assistant professor position with a focus on language (filled for July 1, 2021) and a Tier 1 Canada Research Chair (recently offered to an internationally recognized senior researcher) – as well as the establishment and growth of the Master of Data Science in Computational Linguistics, with two associated hires to date.

What?

LangSci members' work addresses a broad range of research questions, from those that specifically address aspects of language diversity, language acquisition, and language technology, to those that examine how language influences industry, society, and individual and public health. LangSci research falls into three major (and overlapping) research theme areas that focus respectively on 'The Communicating Mind and Body' (CoMBo), 'Emerging Language in an Information Economy' (ELIE), and 'Language, Sustainability and Transnationalism' (LSTn). Members collaborate widely with other researchers within and across these groups and with partners in communities and industry to address issues that overlap these multiple areas, such as, for example, the challenge of computing in languages with few written resources, or of using neuro-computational approaches to examine and address the challenges that children face when learning to read, even where the medium of instruction in their school may not match the language or cultural context in their home.

Why, and why Language Sciences?

Recent events, amplified and accelerated by the global COVID-19 pandemic and community responses to police brutality and racial injustice, have spotlighted the immediate need for a unified, collaborative approach to language science research. Misinformation in social media on the virulence and contagiousness of COVID-19 continues to threaten global democracies and public health. Our spoken and written communications are increasingly directed through – and at – new technologies with capabilities that we barely understand. In our current state of global pandemic, children's education is taking place on screens outside of classrooms without clear knowledge of the consequences, the act of conversing in public poses public

health risks, and the terms that officials use to describe COVID-19 have a profound impact on everything from adherence to public health measures to treatment of our neighbors within our multicultural communities. LangSci is positioned to mobilize researchers across disciplines address large-scale, emerging challenges.

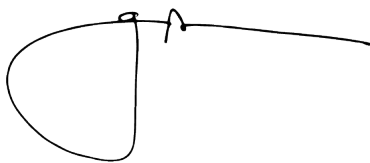
Why now?

Language research has never been more urgent and relevant than it is today. Linguistic discrimination is deeply enmeshed with racial discrimination and injustice, and equitable access to education, health, and social services hinges on the literacy of every individual and community through both traditional and new media.

Harnessing the power of research on spoken and written language to address pressing individual and societal needs is especially urgent at this moment of unparalleled societal transformation. With the network we have established, and the growing amount of funding we have obtained and are pursuing (three consecutive Grants for Catalyzing Research Clusters (GCRC), \$3m of guaranteed external funding – \$8.3m including matching and in-kind contributions – and \$16.4m of in progress and planned grant applications), we are perfectly poised to move quickly to address these needs.

As a research cluster, LangSci has established a growing network of faculty, students, and non-UBC affiliate members, each of whom hold different pieces of the puzzles we must solve to achieve a more just, equitable society for all individuals in a rapidly changing world. As a GREx Institute, Language Sciences will be positioned to pursue grand challenges that require multi-year coordinated approaches.

With continued funding and the significant involvement of each of the undersigned faculties, LangSci will initiate new collaborations and see them through, support upcoming generations of trainees as they enter an increasingly interdisciplinary and collaborative academic, industrial, and community workforce, and cement UBC's global leadership in the emerging international language sciences research network.



Gage Averill, Dean of Arts



Blye Frank, Dean of Education



Dermot Kelleher, Dean of Medicine



Meigan Aronson, Dean of Science

October 2020

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Introduction

Language is a vital system – it is vital to individual well-being, vital to the expression of thought and recording of our past, vital to the connections that link us with other people and devices, and vital to the functioning of our societies and economies. Language is so inextricably linked to our other human capacities that disruptions to the language system can serve as indicators of problems elsewhere, such as the well-being and health of the individual, the interconnectedness and resilience of the community, and the robustness of public discourse and state of society. In the midst of the current global health crisis and uprisings in the face of racial injustice and systemic prejudice, this is increasingly apparent, as we rely on language – spoken, written, and signed – to surmount isolation, to sustain mutual aid, and to share knowledge to address international challenges.

Language is a physical activity

Language engages almost every system in the human body, whether in an everyday spoken or signed conversation or in an opera or stage production. Its proper function and development impacts social, emotional, mental and physical health and well-being across each individual's lifespan. Language acquisition is a key determining factor in one's developmental trajectory. It relies first and foremost on social interaction, abetted by perception, motor control, and higher cognition, all tightly organized by the developing brain. It is essential for success in school, participation in society, and physical health.



In both children and adults, delays, abnormalities, and changes in language capacity and use severely impact well-being and health, and can serve as indicators or diagnostic tools for other health concerns, such as strokes, intoxication, and risk of suicide. By combining theoretical and clinical approaches to language with the dramatic advances in our computational capacity and data science methods, we are now able to simulate complex interactions among the social, physical, and neural systems involved in language and realize their applications in multiple domains.

Language links us to others

Language (spoken or signed) connects us to knowledge and community. For marginalized communities, language also serves as a vital repository of cultural history and knowledge, and can foster social connections that enhance individual well-being and civic engagement. In Canada and globally, healthy intergenerational transmission of Indigenous languages was disrupted by processes of colonization, separating peoples from their societal, ecological and cultural memories. Vital links between linguistic continuity and community vibrancy are well-documented. For these reasons, language reclamation efforts are an essential component of reconciliation.



Community-based research on language documentation and pedagogy builds research and teaching capacity within and beyond communities, repairs broken lines of community knowledge transmission, restores stewardship of community knowledge to communities themselves, and revitalizes global language diversity. Because language provides a vital link to our communities and ways of being, language also intersects with racialized and marginalized identities in Canada and globally. Research into the ways language interacts with discrimination can inform public discourse, policy, and practice on racial and social justice in fields such as education, journalism, public and workplace safety, and social work.

UBC Language Sciences

Language links us with technology

Language forms the basis for much of the technology we use today – the internet is largely composed of and accessed through language – and digital technology provides one of our key means of communicating with one another through language. We are increasingly immersed in and reliant on technology, with minimal understanding of the implications for our children’s development, adults’ mental health, and the robustness of public discourse. The COVID-19 pandemic has accelerated our immersion, making research in these areas more urgent than ever. From an individual level (as in using communication augmentation technology and brain-speech interfaces to improve the lives of people with speech and hearing disorders) to a community and global level (as in collective organization of social movements), today’s technologies give us an unprecedented capacity to improve access to knowledge and means of expression for the world’s most vulnerable populations.



Yet in many ways, communication technology has amplified rather than reduced global inequities. Ninety percent of websites on the internet are in just ten languages, while the vast majority of the world’s 7,000-plus human languages are spoken by isolated populations of under 10,000 speakers. Most of these ‘low-resource’ languages have essentially no internet content, no search capabilities, no machine translation, no outside news sources, no Google or Amazon. Providing the world’s most vulnerable populations with vital access to education, resources and medical care depends on developing these tools and technologies. Computational research on languages with fewer speakers can bolster data sets in low-resource languages, improve automatic translation technology and preserve the privacy of the limited number of native speakers remaining. These are essential steps for fostering the preservation and growth of these languages and the inclusion, safety, health and well-being of their speakers.

Why Language Sciences?

To address these emerging intersectional problems, it is imperative that we build the means to engage in wider, sustained collaboration. The unprecedented challenges before us require an immediate, interdisciplinary response. A Language Sciences Institute is that response.

Since its founding in 2015, LangSci has created a space at UBC for language researchers to come together to answer exactly these questions, using all the tools and knowledge at our disposal across all disciplines, departments, and faculties, and partnering with industry and community to address pressing challenges and translate findings into solutions. The breadth of LangSci’s impact is exemplified by the following collaborative grants (successful, submitted, and unsuccessful) spanning a range of UBC faculties:

- **SSHRC Partnership Grant** ‘Ensuring Full Literacy in a Multicultural and Digital World’ (\$2.5m, plus \$4.9m in cash and in-kind matching contributions, PI Janet Werker & Co-Investigators, including Carla Hudson Kam, Bryan Gick, Anthony Herdman, Guofang Li, and others); and associated **Canada Foundation for Innovation (CFI) grant** of the same title, for joint equipment, including both portable equipment for data collection and high-powered computing (\$569,000 total, PIs Janet Werker & Muhammad Abdul-Mageed)
- **Natural Sciences and Engineering Research Council (NSERC) Strategic Grant** ‘Control Strategies for Articulatory Speech Synthesis for Natural User Interfaces’ (\$590,900, PI Sidney Fels & Co-Investigators Bryan Gick and Anthony Herdman)

- **CFI John R. Evans Leaders Fund (JELF) Grant** 'A Centre for Community Engaged Documentation and Research' (\$672,086 including matching funds, PIs Daisy Rosenblum and David Gaertner)
- **New Frontiers in Research Fund (NFRF) Transformation Grant Letter of Intent** 'A Data-science Driven Framework for Facilitating Language Acquisition and Monitoring Language Degeneration' (unsuccessful, \$10m; PI Raymond Ng; plans to redevelop into multiple collaborative grants for SSHRC, NSERC, and CIHR)
- **CFI Grant** 'Infant-Adult Magnetoencephalography (MEG) Unit at UBC' (unsuccessful, \$6.4m; PIs Anthony Herdman and Martin McKeown; plans to resubmit next cycle)

In addition to the above grants, LangSci has helped support a number of other smaller grants through grant facilitation funding or other in-kind contributions. LangSci has also created a climate that encourages other collaborative grants, with a number of members identifying LangSci as a catalyzing factor in new collaborations between LangSci members.

LangSci has also worked to encourage structural growth in programs and faculty at UBC in the following areas:

- The establishment of a professional Master of Data Science in Computational Linguistics
- A Tier 1 Canada Research Chair (CRC) in Psychology in Language Sciences (\$1.4m, offer made)
- Two tenure track positions in computational linguistics
- An assistant professor position in psychology in language, and
- An assistant professor position to be advertised in early childhood education in language

LangSci has a record of engaging its membership and the public through interdisciplinary public and scholarly events, and events and opportunities for trainees, including:

- Public Language Sciences film screenings
- The Language Science Talks series, hosting prominent speakers to spark new research or celebrate existing collaborations
- The Graduate Student and Postdoctoral Fellow Research Conference
- The undergraduate student-initiated and -led Language Sciences Undergraduate Research Conference
- A university-wide, interdisciplinary undergraduate course 'Living Language: Science and Society' (\$150,000 support from Office of the Provost and Vice-President Academic, 2016-2022, and support from Founding Donor Marietta Hurst), and
- Student and faculty exchanges, to support the learning of new skills, and new collaborations

As a Global Research Excellence Institute, LangSci will reach new heights in catalyzing interdisciplinary research programs; engaging with community and industry partners; enriching public knowledge and discourse; promoting equity, diversity, and inclusion at and beyond UBC; and fully realizing our global leadership in the emerging international language sciences research network.

UBC Language Sciences

Research Excellence in Language at UBC

UBC boasts some of the most prominent language researchers in the world. LangSci members include five Fellows of the Royal Society of Canada (RSC), two members of the College of New Scholars, Artists and Scientists (RSC), seven Canada Research Chairs (Tier 1 and 2), three Officers of the Order of Canada, five Distinguished University Scholars, and two University Killam Professors. UBC has rapidly established itself on the world stage through the quality and quantity of individual LangSci members' publications, the visibility and impact of our outreach, and the importance and relevance of the issues we are investigating. As a Research Excellence Cluster (2016 – 2021), LangSci has birthed many new collaborations among our 159 faculty members, plus graduate students and postdoctoral fellows across 11 of UBC's faculties and 47 of its departments, schools, colleges, and institutes, and has energized the many individual researchers who now find a broader community with whom to share their ideas. Since its inception, LangSci has brought in more than \$5.5 million in collaborative funding, and our team leaders are also leading additional grants that, if successful, will bring in another \$20 million.

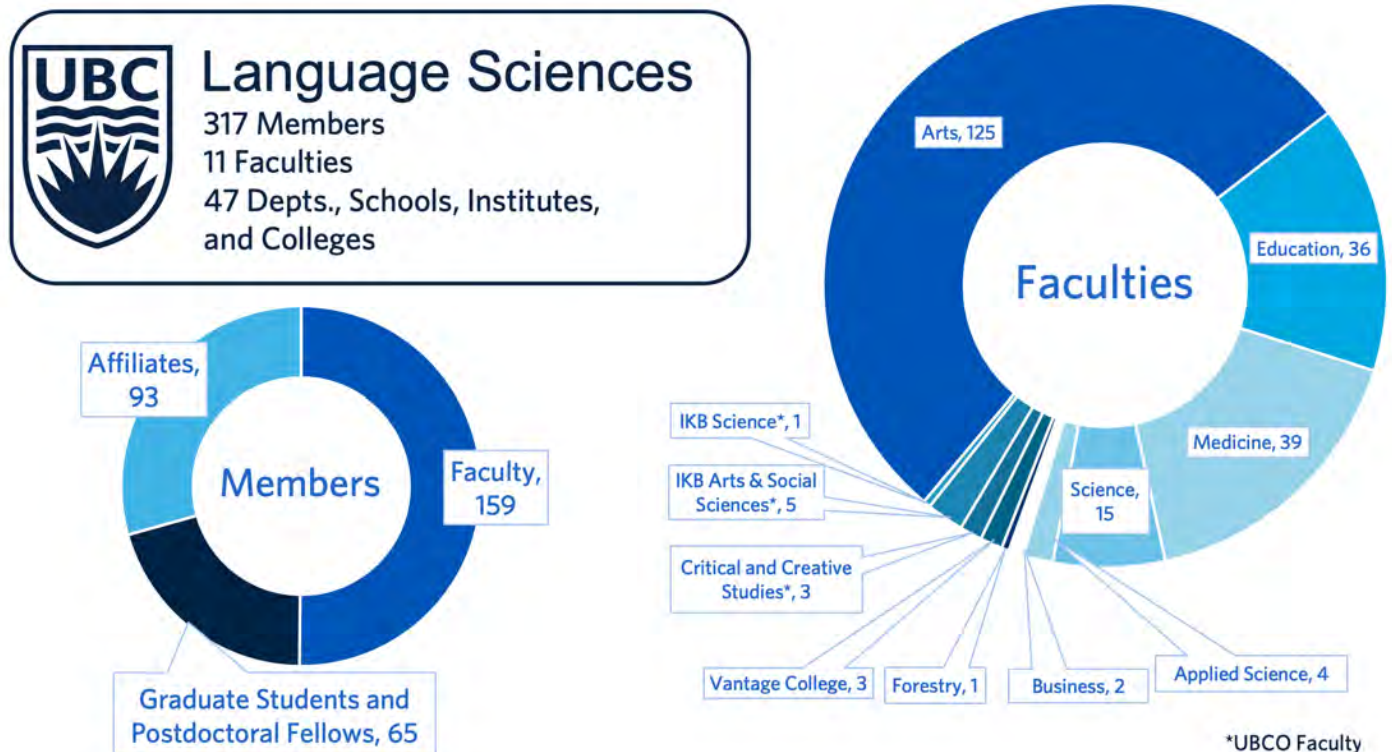


Figure 1: LangSci Members include 159 faculty, 54 graduate students, and 11 postdoctoral fellows from 47 departments, schools, institutes, and colleges across 11 faculties, as well as non-UBC Affiliate members from institutions across Canada and the globe. The above graphs include all members as of March 28, 2021.

Research Strategy

LangSci research aligns with one or more identified thematic areas, and typically integrates multiple themes. The expertise and methodological approaches of each theme are essential to addressing the challenges before us. Becoming a GREx Institute positions LangSci to welcome new members and promote collaboration among the many voices relevant to fully understanding language and its power.

The Communicating Mind and Body (CoMBo)

The Communicating Mind and Body theme explores the physical, neural, cognitive foundations of language, centered mainly in domains such as psychology, linguistics, philosophy, neuroscience, biomechanics, audiology, and speech sciences.

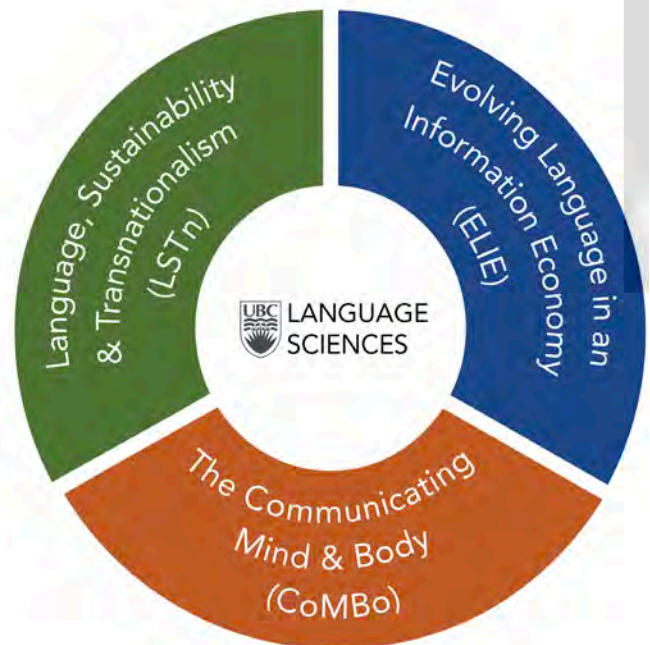
As lead of the CoMBo theme, **Janet Werker** (University Killam Professor and CRC, Psychology and co-director of LangSci) studies the earliest foundations of language development in monolingual and bilingual children. Theme co-lead **Anthony Herdman** (Associate Professor, School of Audiology & Speech Sciences) uses eye-tracking and electrophysiology methods such as electroencephalography (EEG) and magnetoencephalography (MEG) to understand brain function, including brain dynamics underlying reading skills. He also advances neuroimaging methods for EEG and MEG.

Representative example members in this theme area include **Lara Boyd** (Professor and CRC in Neurobiology of Motor Learning and Michael Smith Foundation for Health Research Career Investigator), who examines neuroplasticity following stroke recovery and following interventions and enrichment with school age children and university students; **Darko Odic** (Associate Professor, Psychology), who studies the role of language in mathematical cognition, and is currently one of the instructors of the Living Language course; and **Carla Hudson Kam** (Associate Professor and former CRC, Linguistics), who studies the acquisition of both spoken and signed languages, the content of children's books, and is heavily involved in LangSci knowledge mobilization.

Evolving Language in an Information Economy (ELIE)

The Evolving Language in an Information Economy theme explores language's role in information and technology, based in domains such as computer science, engineering, and human-computer interaction.

As lead of the ELIE theme, **Bryan Gick** (Professor and Head, Linguistics; director, Master of Data Science in Computational Linguistics; and co-director of LangSci) studies speech production, perception, and biomechanics. Theme co-lead **Sidney Fels** (Distinguished University Scholar, Electrical and Computer Engineering) focuses on human computer interaction, speech synthesis, biomechanical modeling, and the interaction of language with arts and music. **Muhammad Abdul-Mageed** (Assistant Professor, Linguistics and School of Information; ELIE co-lead) focuses on deep representation learning and natural language socio-pragmatics, with a goal of building 'social' machines for improved human health, safer social networking, and reduced information overload.



UBC Language Sciences

A representative faculty member in this theme area is **Raymond Ng** (Professor, Computer Science; scientific director, Data Science Institute; LangSci Scientific Steering Committee member and Challenge Lead) whose research focuses in part on natural language processing, specifically on discourse parsing; mining and summarizing conversation; understanding, generating, and summarizing evaluative text; and visual text analytics for conversations.

Language, Sustainability, and Transnationalism (LSTn)

The theme Language, Sustainability, and Transnationalism explores the way language impacts and is impacted by interpersonal, inter-community, and international relationships, focused primarily in domains such as education, anthropology, sociology, language studies, and the arts.

As lead of the LSTn theme, **Daisy Rosenblum** (Assistant Professor, Institute for Critical Indigenous Studies, Anthropology) focuses on multi-modal documentation and description of North American Indigenous languages in long-term partnerships with Indigenous communities, emphasizing methods, partnerships, and products that contribute to community-based language reclamation. Theme co-lead **Guofang Li** (Professor and CRC Tier 1, Language and Literacy Education) focuses on the cultural, linguistic, instructional, and structural barriers to literacy learning and achievement for immigrant and minority students. Li is UBC's CRC in Transnational/Global Perspectives of Language and Literacy Education of Children and Youth.

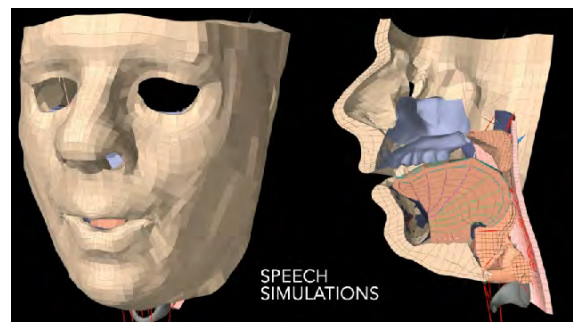
Representative LSTn members include **Christine Schreyer** (Associate Professor, Anthropology, UBCO), who examines the role that language ideologies have in the language planning of Indigenous and minority speech communities, **Heidi Tworek** (Associate Professor, History and School of Public Policy and Global Affairs), who studies the role of media and public discourse, most recently on hate speech and discourse around both COVID-19 and racialized minorities, and **Mark Turin** (Associate Professor, Anthropology, Institute for Critical Indigenous Studies), whose research focuses on endangered languages in Nepal and British Columbia.

Research Grand Challenges

In the next five years, LangSci will draw on expertise from each of our three core research areas to address five research challenges identified in consultation with members. The lists of researchers below are meant to be examples, and additional members are invited to join in these challenges or bring new ones to the fore.

Simulating Language Bodies (SLaB): Co-leads Sid Fels & Bryan Gick

Language is a fundamentally physical capacity, engaging nearly every human body system for its proper development and function. Over the past 20 years, UBC researchers have built the world's first state-of-the-art computational platform for simulation of the face, head and neck, with a focus on the biomechanics of speech and related oral functions. The Simulating Language Bodies challenge will build on this core to create more interactive exploratory user interfaces and develop novel applications. The resulting models will not only deepen our basic understanding of the biological systems that drive human language, but will also provide a framework for our challenges and sub-challenges, including modeling neural control of language, language development and breakdown across the lifespan, and the role of spoken and sung language in COVID-19 and other pathogen transmission.



Sub-challenges/projects	Example faculty involved
Build research exploration space with more user-friendly interfaces, including virtual reality interfaces	Sid Fels (Electrical & Computer Engineering, ELIE)
Simulate and validate neural control/ neurocomputation	Tony Herdman (School of Audiology & Speech Sciences, CoMBo)
Model pathogen transmission through speech and singing	Nancy Hermiston (Music, LSTn)
Develop interactive environments for speech-language pathology and swallowing disorders	Stacey Skoretz (School of Audiology & Speech Sciences, CoMBo)
Establish simulation as a tool for research on pronunciation teaching and learning (eNunciate)	Strang Burton (Linguistics, LSTn)

Mapping Language Acquisition & Decline (MaLAD): Lead Raymond Ng



Not only do disturbances in normal child development and adult aging impact language capacity, but language capacity and use can be powerful tools for identifying the user's cognitive and affective states. Speech degeneration can be tracked in conditions like Alzheimer's disease and stroke, correlating to changes in patients' cognitive and physical states. In small linguistic communities such as Indigenous communities in BC, speech and language data is often sparse, and speakers are readily identifiable, raising concerns about the robustness of data sets and the privacy of the data contained.

Key components under this challenge include affective state detection in clinical chart data, automated study of speech degeneration and development of evidence-based interventions, the creation of synthetic data for privacy protection and generalizing from small populations, intelligent tutoring for language acquisition, and transfer learning. We will use novel data sources, including unstructured eye-tracking data and clinical records, as well as utilize more standard sources in new ways, including spoken language and text, to create a unified language technology platform to address a number of key issues in language.

Sub-challenges/projects	Example faculty involved
Using clinical chart data to predict psychiatric conditions such as self-harm and develop intelligent tutoring for real time feedback to counsellors	Elodie Portales-Casamar (Pediatrics and BC Children's Hospital) Ali Eslami (Psychiatry and BC Children's Hospital)
Using automated speech analysis to predict cognitive decline (e.g. Alzheimer's disease) and augment personalized speech rehabilitation strategies after stroke	Giuseppe Carenini (Computer Science, ELIE) Thalia Field (Neurology, CoMBo)
Machine learning-assisted automatic speech recognition of low resource Indigenous language audio and text corpora	Daisy Rosenblum (Critical Indigenous Studies and Anthropology, LSTn)
Prediction & intelligent tutoring for language acquisition	Janet Werker (Psychology, CoMBo)

Enhancing Literacy and Language Education (ELLE): Co-leads Janet Werker & Guofang Li



Successful literacy is essential to self-concept and human security, but many Canadians lack the necessary skills to succeed, costing our country over \$54 billion annually. This is in part because the world of literacy has changed dramatically, with print increasingly replaced by digital and online materials, hyperlinks to additional text or video, and even emojis. This transformation has been magnified through online learning in the time of COVID-19. At the same time, our aspiring literacy learners come from increasingly diverse linguistic, socioeconomic, cultural, and racial backgrounds. In this challenge, we will identify and address the obstacles new literacy learners from different backgrounds

face and the types of new media that help or stymie them at the various stages in ‘learning to read’ and ‘reading to learn’.

Sub-challenges/projects	Example faculty involved
Literacy, culture, and indigeneity	Mark Turin (Anthropology and Critical Indigenous Studies, LSTn)
Literacy, diversity, and access	Bonny Norton (Language & Literacy Education, LSTn)
Literacy, early learning, and neurodevelopment	Lara Boyd (Physiotherapy, CoMBo) Alexis Black (School of Audiology & Speech Sciences, CoMBo)
Literacy and artificial intelligence	Muhammad Abdul-Mageed (Linguistics & School of Information, ELIE)
Spoken language as a foundation for literacy	Carla Hudson Kam (Linguistics, CoMBo)

Supporting Community-Engaged Language Survivance (SCELS): Co-Leads Daisy Rosenblum and Christine Schreyer



British Columbia is home to 34 of the 70 distinct Indigenous languages in Canada, all of which are at risk of being lost within one generation, with the majority of fluent speakers 70 years of age or older. Bill C-91, the Indigenous Languages Act, recognizes the “urgent need to support the efforts of Indigenous peoples to reclaim, revitalize, maintain and strengthen” these languages and calls for “research or studies ... for the purposes of supporting Indigenous languages.” However, despite growing numbers of motivated adult learners and language activists, Indigenous and other communities worldwide lack suitable technological tools designed for intergenerational transmission of language and culture, as well as accessible documentation, analysis and narrative tools. This challenge addresses the need for effective tools to support the community-led maintenance, revitalization and reclamation of language and culture as a human right. Research and knowledge mobilization

UBC Language Sciences

strategies include the development and advancement of multimodal documentation of community-held knowledge, effective mobilization of this documentation using narrative new media, user-centered stewardship of digitized and born-digital language data, investigation of natural language processing of low-resource languages with typologically unusual grammars, management and stewardship of sensitive language data, and the development and evaluation of extended reality tools for teaching and learning language.

Sub-challenges/projects	Example faculty involved
Natural language processing (NLP) for low resource languages: developing machine learning models for automatic speech recognition and optical character recognition speech-to-text transcription	Daisy Rosenblum (Critical Indigenous Studies and Anthropology, LSTn) David Gaertner (Critical Indigenous Studies)
Extended reality (xR, VR, augmented reality) for language teaching and learning	Christine Schreyer (Community, Culture, and Global Studies, LSTn) Jason Lieblang (Central, Eastern, & Northern European Studies, ELIE)
Language, land and Indigenous realities: Northern Na-Dene, a partnership of peoples	Patrick Moore (Anthropology, LSTn)
Language resources for Salish and Tsimshianic-speaking communities: accessible grammars, dictionaries, texts, curriculum and automatic learning algorithms for St'át'imcets, Secwepemctsín, Nl̓he7kpmxcín, 7ay7ajuthem, Gitksan and Sm'algayax	Henry Davis (Linguistics, LSTn) Lisa Matthewson (Linguistics, LSTn) Miikka Silfverberg (Linguistics, ELIE)
Community-led materials development for Indigenous language learning and teaching: documentation, revitalization, pedagogy and stewardship	Candace Galla (Language and Literacy Education and Institute for Critical Indigenous Studies)
New frameworks for community-informed dictionary work	Mark Turin (Institute for Critical Indigenous Studies and Anthropology, LSTn)

Reimagining Public Discourse (RePD): Lead Heidi Tworek

Online platforms and social media have dramatically changed how we communicate with each other. They have enabled billions of people to express their views online, build coalitions for social justice, and discuss their views. At the same time, the small number of dominant platforms also constrains how people can communicate and platforms' algorithms incentivize the production of ever more extreme content. Platforms like Facebook or Twitter also generally ground their ideas around content moderation on US English and US values of free speech rather than considering other languages and linguistic contexts.



This challenge will bring together big data analysis, business, journalism, social justice, sociology, and policy to focus on how the online environment has changed language, how it has affected public discourse, and how online expression interacts with offline language, as well as (more broadly) on rethinking what we mean by public discourse, whose voices are amplified, how regulation of online platforms affects language, and whether online public discourse is undermining democracy.

Sub-challenges/projects	Example faculty involved
Public health, online discourse, and the history and policy of health communications	Heidi Tworek (School of Public Policy and Global Affairs and History, LSTn)
Journalistic innovation in 21st century Canada	Mary Lynn Young (School of Journalism, Writing, and Media) Alfred Hermida (School of Journalism, Writing, and Media)
Language and social justice	Molly Babel (Linguistics, CoMBo) Hotze Rullmann (Linguistics, CoMBo)

This challenge represents a growth area for LangSci in response to the current large-scale social upheaval, with many projects at emergent stages. Challenge Lead Heidi Tworek aims for a SSHRC Partnership Development Grant on the topic of history and policy of health communications in the next three years.

UBC Language Sciences

A Network of Networks

The LangSci members engaged in the work of these challenges and sub-challenges form a network of networks. The figure demonstrates the collaborative connections within the LangSci network by modeling a subset of the LangSci members mentioned in the proposal, referred to as Leads. The figure illustrates how LangSci works: we are not a research group; rather, we are a cluster of interconnecting clusters across faculties each with our own unique collaborations in addition to our rich collaborations with one another. It is this network structure that positions us to nimbly pursue the diverse challenges outlined in the GREX proposal, as well as new challenges that emerge.

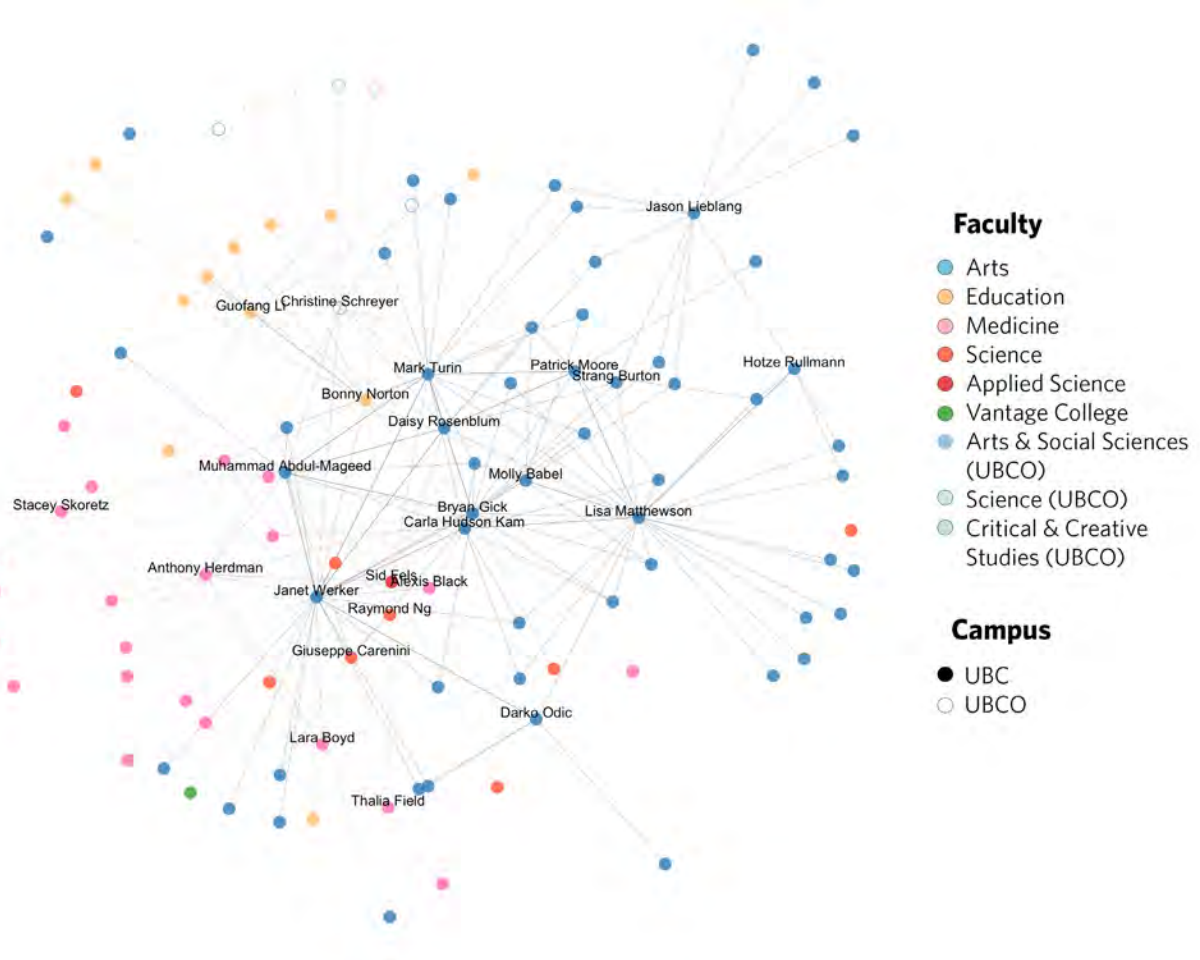


Figure 2: Network diagram showing Research Theme and Challenge Leads and key example members' collaborations with other LangSci members at UBC. Each dot represents a LangSci faculty member at UBC/UBCO. Not all LangSci members are included in this diagram.

Institutional Goals

LangSci commits to the following goals. We will prioritize projects related to the research challenges identified above, but also make explicit room for emerging projects that arise from the size, diversity, and commitment of the wider LangSci membership and form new connections with all disciplines with an interest in language.

Over the next five years, LangSci will establish greater visibility, both on UBC campuses and in the community beyond. Early signs of this growing visibility include the new trend of new faculty candidates in language-related fields reaching out to learn more about LangSci during their campus visits. Language would be recognized as a core area of research excellence by university leadership, and more candidates interviewing at UBC would have some research connection to language. Other units at UBC, including departments, centres and institutes, and public-facing units such as the Chan Centre and the Museum of Anthropology would approach LangSci to collaborate on public talks, events, performances, and exhibitions. Moreover, the presence of a LangSci institute on campus will provide an enhanced space for creative, innovative research connections across departments, schools, and faculties, and a niche for those connections to grow into grant applications, co-supervision opportunities, policy briefs, and creative works.

Goal	Actions	Metrics
Catalyze new interdisciplinary research programs	Provide seed funds for emerging research collaborations Host collaborative, interdisciplinary workshops Host colloquia and symposia across departments and with other UBC entities (e.g., Centre for Brain Health)	Submission of at least three large and ten small and interdisciplinary grant applications New lines of collaborative research
Engage community and industry partners	Provide members with funding and in-kind support for meetings and small roundtables with community and industry partners Support member partnerships with Indigenous communities and Indigenous-led organizations Connect members with community organizations and companies interested in their expertise, including in collaboration with the Master of Data Science in Computational Linguistics program	MITACS fellowships and industry internships Co-produced materials and innovations Contacts initiated by community organizations and industry Publication of white papers, policy briefs, and reports by members in collaboration with community organizations Presentations by members for community organizations and industry partners

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Goal	Actions	Metrics
Share our findings to enrich public knowledge	<p>Host public events such as film screenings and lectures</p> <p>Expand LangSci talks series as public lectures</p> <p>Promote stories on LangSci research on LangSci website, through media releases, and social media</p> <p>Publish research in national print and digital media</p> <p>Develop community and/or audience-specific versions of the course 'Living Language: Science and Society'</p>	<p>A community-based version of the 'Living Language' course</p> <p>One major public lecture/year</p> <p>Two to three Conversation Canada pieces published/year</p>
Promote equity, diversity, and inclusion within and beyond UBC	<p>Prioritize the hiring of IBPOC scholars in joint faculty appointments</p> <p>Prioritize leadership by Indigenous scholars in all areas of research, including/especially in Indigenous language survivance</p> <p>Prioritize community and industry engagement in areas related to language and social justice</p> <p>Facilitate ongoing EDI training and conversations for LangSci Leadership</p> <p>Continue consultations with the Equity and Inclusion office on measures to improve EDI in LangSci and support IBPOC LangSci members (both faculty and trainees) on campus</p> <p>Hold LangSci publicly accountable to these goals</p>	<p>New hires in areas related to language equity and diversity, language and justice</p> <p>New and deepening community partnerships regarding language and social justice issues</p> <p>Bi-annual EDI trainings for LangSci Leadership, especially when onboarding new committee members</p> <p>A publicly available set of EDI measures and outcomes, established in consultation with the Equity and Inclusion office and LangSci members;</p> <p>Annual reporting on EDI goal progress, with reports available to members and the public on the LangSci website</p>

Goal	Actions	Metrics
Cement global leadership in emerging international LangSci research network	<p>Co-design and execute research projects; participate in student, staff, and faculty exchanges</p> <p>Engage in joint knowledge translation and mobilization activities with partner institutions</p> <p>Host American Association for the Advancement of Science (AAAS) symposium (short-term) and expand into an ongoing satellite meeting (long-term)</p>	<p>One new major collaborative, multi-institutional grant</p> <p>Joint materials and resources developed in partnership with the Global Literacy Hub (for example)</p> <p>Special issues of journals on language sciences topics</p>
Cultivate the next generation of LangSci researchers	<p>Determine most effective route to ensure interdisciplinary graduate training, such as exploring and facilitating language sciences-related graduate programs and language sciences graduate streams across UBC</p> <p>Build on Living Language: Science and Society course and expand interdisciplinary language sciences undergraduate curriculum</p> <p>Continue to host the LangSci Graduate Student and Postdoctoral Fellow Research Day, and co-sponsor the student-founded and -run Language Sciences Undergraduate Research Conference</p> <p>Include graduate student, postdoctoral fellow, and undergraduate student representation on our Scientific Steering Committee</p>	<p>Graduation of co-supervised masters and doctoral students</p> <p>Mitacs student and postdoctoral fellows funded</p> <p>Graduate seminars to attract language science students from multiple disciplines (possibly in collaboration with multiple units)</p> <p>A second-term extension of the undergraduate Living Language course</p>

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Catalyze new interdisciplinary research programs

In the past three years, LangSci has helped to catalyze a number of new research collaboration, most prominently the team formed for the SSHRC Partnership Grant 'Ensuring Full Literacy in a Multicultural and Digital World', arising out of a three-day workshop, 'Envisioning a Language Science of Literacy', held in 2018. Following this model, LangSci will continue to leverage funding to form teams around complex, emerging research questions, prioritized around the five research challenges.

LangSci will also continue to provide small seed funds for LangSci members exploring new projects with new teams and provide a platform for members to share their findings with one another through events such as the LangSci Flash Talks, which provide an informal environment for LangSci members to discuss their research and network with one another.

Targeted Funding – Enabled by GREx Funding, 2021-2025	
Targeted Funding Sources	Amount
Combination of CIHR, NSERC, and SSHRC grants (arising from NFRF Transformation Grant LOI, Raymond Ng and collaborators as PIs)	\$2m
CFI Grant (for Space for the Language Sciences) (PI Gick)	\$4m
SSHRC Partnership Development Grant centered on health communications (PI Tworek)	\$150,000
Charitable donations – for space, faculty positions, and graduate fellowships	\$8.5m
Total Funding Target	\$14.65m
Return on Investment (\$/\$ GREx invested)	\$36.63

Stretch Goals	Amount
NSERC CREATE grant in natural language processing	\$1.65m
CIHR/NSERC Collaborative Health Research Project Grant	\$1m
Industry Funds	\$8m
Total Stretch Funding	\$10.65m
Total Funding Opportunity	\$25.3 mil

Engage community and industry partners

LangSci will continue to build on the connections grown through the SSHRC Partnership Grant, the Master of Data Science in Computational Linguistics, and those fostered by our many members, with both community and industry partners, as well as provide resources to members to foster new connections between LangSci teams, community organizations, and industry partners. Examples of these activities include:

- Provide members with funding and in-kind support for meetings and small roundtables with community and industry partners, such as the ones hosted between UBC language instructors and Altissia Canada in 2019
- Provide a community-based version (or audience-specific versions) of the Living Language course, and
- Connect members with community organizations interested in their expertise

Language stakeholders outside the university include:

- Settlement agencies/immigrant welcoming groups (such as H.appi and DIVERSEcity Community Resources Society)
- Communities who are revitalizing endangered languages (e.g. Stó:lō Nation), through documentation efforts and language classes
- Teachers (ex. through professional development courses)
- Parents
- Media (such as The Conversation Canada, *The Globe and Mail*)
- Technology providers (such as Altissia Canada and Virtro Entertainment Inc.)
- Spoken language and literacy teaching companies (such as Squiggle Park and Scholastic Inc.)
- Municipal, provincial, and federal government, and
- Provincial health authorities

Community outreach and knowledge sharing are core components of LangSci, from outreach workshops, Conversation Canada pieces (such as Bonny Norton's article on Storybooks Canada), materials for parents (e.g. *The ABCs of Language Development* by LangSci member Dr. Carla Hudson Kam, Caitlin Bittman, Estelle Paget, and Elizabeth Wellburn, in partnership with KidCareCanada), policy briefs (with, for example, The Canadian Literacy Network), and other materials prepared by our members. Existing and potential new focus areas for community outreach activities include:

- Continued work on Indigenous language documentation and pedagogy
- Language diversity - potential activities include creating materials for general audiences for raising awareness of language and dialect discrimination
- The neuroscience of learning a second (or third) language, and
- "Raising a Bilingual Child", provided in accessible languages (i.e. Mandarin, Cantonese, other commonly spoken languages in BC)

Many of our faculty and student members have developed, or are developing, partnerships with Indigenous communities and Indigenous-led organizations. LangSci will provide various supports to members who are engaged in knowledge exchange activities with Indigenous partners. We see our role as encouraging grass-roots, organic development of research partnerships, rather than engaging in top-down partnerships with individual Indigenous communities. Examples of this may be found in Appendix B: Indigenous Partnerships. Furthermore, LangSci's 'Network of Networks' approach to its membership creates opportunities for peer mentorship for those interested in exploring collaborative partnerships with First Nations communities.

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Share our findings to enrich public knowledge

LangSci will continue and expand its established public Language Science Talks series and public film screening, as well as promote stories on LangSci research on the LangSci website, through media releases, in national print and digital media, and on social media. Additionally, LangSci plans to develop community and/or audience-specific versions of the course 'Living Language: Science and Society' to position others to acquire and utilize knowledge of language in their professional, civic, and personal lives.

Promote equity, diversity, and inclusion within and beyond UBC

Valuing diversity is fundamental to LangSci, as the core of our research examines how language intersects with the full range of human experience, be it physical, cultural, or societal. LangSci acknowledges that holding these values and expertise does not eliminate implicit biases held by its staff, leadership, and members, and if anything, it creates a responsibility to the University and the community beyond to lead anti-racism and anti-discrimination efforts on campus, and inform them through research undertaken under our five research challenges. In the next five years, we will:

- Include one to two talks and public events in our annual event calendar that focus on topics related to language and social justice, in collaboration with campus and community stakeholders
- Support the establishment of a graduate seminar in language and social justice, potentially via the Killam Connection program
- Commit a subset of graduate fellowship funds to students from the four federally identified employment equity groups
- Provide course buyouts (one buyout per three-year service term) to Scientific Steering Committee members from the four federally-identified employment equity groups, in acknowledgment of their increased service burden at the university
- Encourage a diverse pool of candidates for positions on leadership committees by holding open calls for positions, implementing thoughtful recruitment strategies, and stating the Institute's commitment to equity, diversity and inclusion
- Identify and implement measures to adequately support leadership (and LangSci general members) from the four federally designated employment equity groups, as well as junior faculty and trainees), in consultation with the Equity and Inclusion Office
- Provide training for selection committees for leadership roles and internal funding competitions in order to mitigate implicit bias and review selection criteria in consultation with the Equity & Inclusion office, &
- Assess our internal funding competitions and remove barriers to entry for IBPOC scholars (as well as those from the four federally designated employment equity groups) that we discover

Cement global leadership in emerging international language sciences network

LangSci at UBC is in a unique position to play a leadership role in advancing the growth and establishment of interdisciplinary language sciences as a field. In the next five years, LangSci will co-design and execute competitive funded external research grant projects and participate in student, staff, and faculty exchanges and joint knowledge translation and mobilization activities with other institutions in the growing language science network. The following constitute a handful of examples:

- The **Haskins Global Literacy Hub** (HGLH, Yale University) brings together numerous researchers, practitioners, educators, and specialists in literacy technology with the goal of improving language and literacy outcomes for at-risk children from all backgrounds. LangSci and the HGLH are now working toward a number of initiatives together.
- The **Maryland Language Science Centre** (University of Maryland) is an interdisciplinary research

centre whose activities range from fundamental science to community and policy outreach. Director Colin Phillips and Associate Director Jan Edwards attended LangSci's workshop Envisioning a Language Science of Literacy in 2018, and Maryland Language Science Centre has continued to collaborate on the SSHRC PG Ensuring Full Literacy in a Multicultural and Digital World. They plan to host the first in person Trainee Workshop for the SSHRC Partnership Grant, now rescheduled for 2021.

- The **MARCS Institute for Brain, Behaviour, and Development** (Western Sydney University), though wider ranging in scope, includes a sizeable contingent of language science researchers contributing to research on sense and perception, human interaction, and technology. LangSci and MARCs initiated discussions regarding an MOU in late 2019.

Additionally, early in the next five years LangSci plans to host an American Association for the Advancement of Science symposium, to be expanded (with partner organizations) into an ongoing satellite meeting in future years. We will also publish themed issues in both general-interest and specialized journals, beginning with the Science of Reading as an outcome of the SSHRC Partnership Grant.

Cultivate the next generation of LangSci researchers

LangSci believes cutting-edge research is best achieved in partnership with teaching, and with the involvement of learners from different backgrounds and at different levels of expertise. Graduate students and postdoctoral fellows are the next generation of thinkers, who through interdisciplinary training will lead us to the intersections of our fields and push us forward into new knowledge. At this time LangSci does not plan to establish a graduate program in language sciences, but is exploring opportunities to support interdisciplinary curriculum development in partnership with other established and prospective programs, graduate and postdoctoral fellowships and Mitacs funding for LangSci trainees, and co-supervision of students engaged in interdisciplinary language research.

Identifying teaching needs also helps identify key faculty expansion opportunities. LangSci will:

- Continue to work with units across the university to develop models for interdisciplinary graduate training and research in language sciences
- Host the LangSci Graduate Student and Postdoctoral Fellow Research Day, and co-sponsor the student-founded and -run Language Sciences Undergraduate Research Conference
- Continue to partner in helping to build the Master of Data Sciences in Computational Linguistics
- Expand the fourth-year undergraduate course Living Language: Science and Society to include a second-term course, allowing students to follow through on projects proposed during their first term
- Assist with the expansion of interdisciplinary undergraduate language (sciences) curriculum, and
- Include graduate student, postdoctoral fellow, and undergraduate student representation on our Scientific Steering Committee

LangSci will support trainees involved in projects centered on the Research Challenges: Simulating Language Bodies (SLaB), Mapping Language Acquisition and Decline (MaLAD), Enhancing Language and Literacy Education (ELLE), Supporting Community-Engaged Language Survivance (SCELS), and Reimagining Public Discourse (RePD). Trainees will play a central role in establishing new lines of research in these challenge areas. In addition to dedicated mentoring, trainees (along with other trainee members of LangSci) will participate in training workshops on big data analysis, presentation skills, research ethics, knowledge exchange, and equity, diversity, and inclusion in research. They will also present at the annual Graduate Student and Postdoctoral Fellow Research Day. Trainees will meet three times each year to present on, and discuss, their projects, participate in workshops hosted by Challenge Leads, and collaborate with faculty and trainees.

Governance and Operational Structure

Academic Co-directors

Since its founding in 2015, LangSci has had two co-directors from different departments, in order to share the administrative burden of the position and foster broader collaboration between units. Dr. Janet Werker is a University Killam Professor in the Department of Psychology, and Dr. Bryan Gick is Professor and Department Head in Linguistics. The co-directors will define and lead LangSci's research program, with support from the LangSci Research Leads. The co-directors will also provide oversight on curriculum-related efforts (expanding interdisciplinary language sciences curriculum at the undergraduate and graduate level, and exploring and facilitating language sciences-related graduate programs and language sciences graduate streams) and lead efforts in cultivating an international language sciences network. The new CRC in Language Sciences (Department of Psychology) will serve as one of the two Academic Co-directors in the future.

Deans' Council

The Deans' Council (DC) is chaired by the Dean of Arts (currently Dr. Gage Averill) and includes as well the deans of the faculties of education, medicine, and science. The Academic Co-directors will report to the Chair of the DC regarding academic issues, including institute management, direction, and fiscal accountability. The committee will meet once yearly.

V-P, Research and Innovation and the Research and Innovation Council

The Academic Co-directors will also report to the Vice-President, Research and Innovation (currently Dr. Gail Murphy) in her role as VPRI and Chair of the UBC Research and Innovation Council (RIC), which is responsible for overseeing GREx institutes. The RIC includes the Provost and Vice-President, Academic (Vancouver), the Associate VP Research and Innovation (Vancouver), the Associate VP Research and UBC-Okanagan Vice Principal Research, three Deans, and three external members. The VPRI will oversee matters related to the GREx Institute and share oversight with the Chair of the Deans' Council on matters such as fiscal accountability and alignment of the institute strategic plan with external funding opportunities.

International Academic Advisory Board

The Language Sciences Institute will create an Academic Advisory Board (AAB), comprising language researchers in academia, government, and industry. The AAB will provide leadership, guidance, and oversight for the proposed LangSci GREx's research. In addition to a term-based roster of advisory board members, the AAB, in collaboration with the Co-directors and Steering Committee, will identify ad hoc members to advise on specific priority or emerging areas of need.

Steering Committee

The Steering Committee (SC) will comprise the Academic Co-directors (Chairs), the Research Theme and Challenge Leads; the coordinator; at least one graduate student or postdoctoral fellow; the current chairs of the Language Sciences Undergraduate Research Conference (ex officio) and up to three faculty members who will provide high-level expertise in areas such as Indigenous community engagement, knowledge translation and mobilization, and industry partnerships. The SC will ensure that planned research activities within the established research challenges progress and reach key deliverable milestones, and contribute to long-term planning for graduate and undergraduate training, equity, diversity, and inclusion, industry partnerships, and community engagement and knowledge mobilization. The SC will meet every two months, or more frequently as needed.

Operational Oversight

The LangSci coordinator will serve as the central point of contact for the Language Sciences Institute and develop member programming such as general member events, workshops, and roundtables that facilitate conversations and lead to new interdisciplinary collaborations in research, teaching, and community partnerships in Language Sciences. The coordinator will also provide budget planning and oversight support to the LangSci Co-directors, and provide grant facilitation support for large-scale, institute-level grants when needed. In collaboration with the VPRI, the LangSci coordinator will support the development of new industry, community, and institutional partnerships.

LangSci will also employ a communications specialist (80% FTE) to oversee day-to-day communications of the Institute, including publishing regular stories about LangSci research, teaching, and community outreach activities and where appropriate pitching stories to UBC Media Relations for wider dissemination; maintaining LangSci's social media presence; publishing a monthly newsletter; organizing and advertising events such as the LangSci Talks series, public film screenings, and general member events; and supporting the development of annual reports to the Deans' Committee, Academic Advisory Board, Research and Innovation Council, LangSci members, and donors.

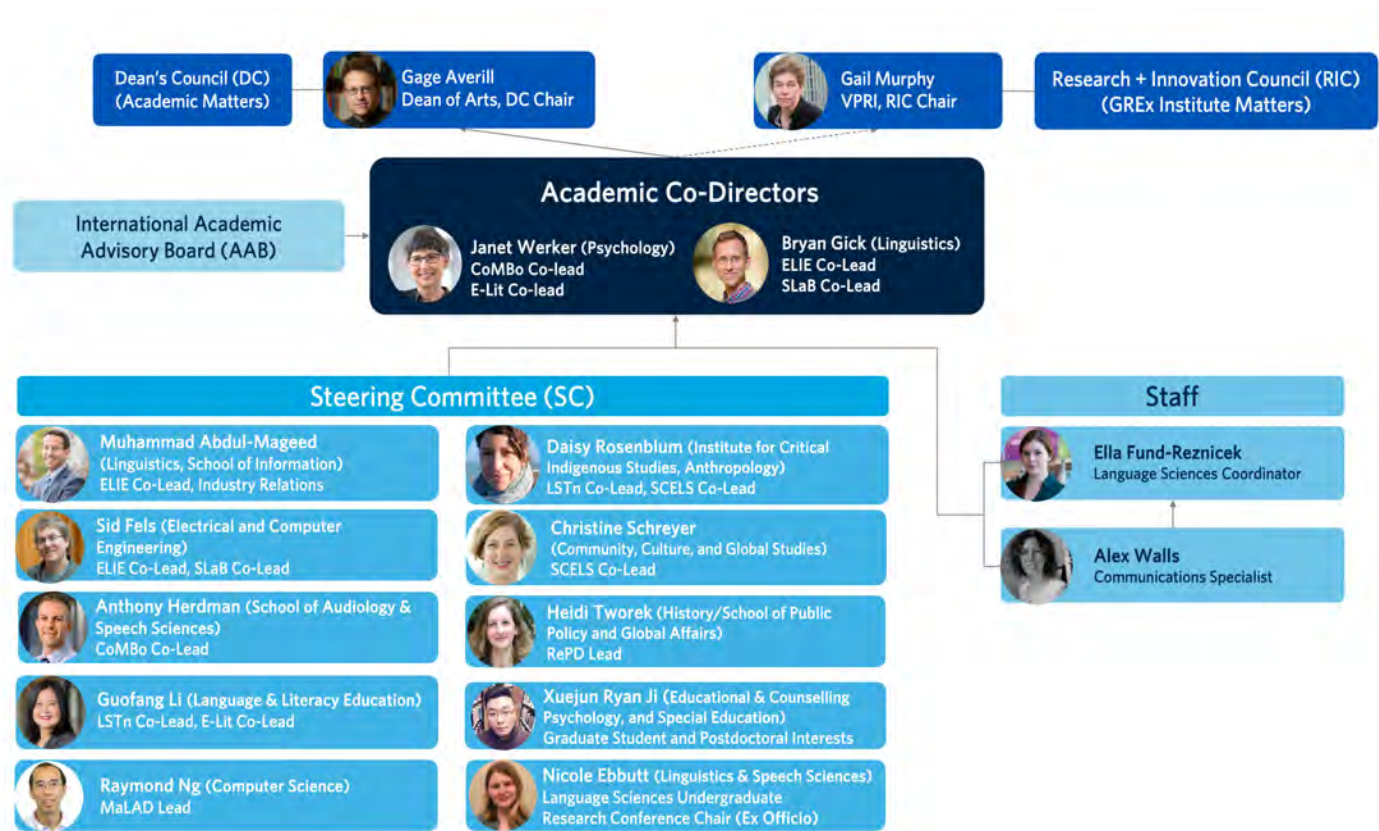


Figure 3: Language Sciences governance and organizational structure.

UBC Language Sciences

Budget

GREx funding will cover a number of operational costs, as well as supporting activities intended to catalyze new research collaborations in line with the five identified research challenges (as well as emerging challenges identified and led by LangSci members); engaging community and industry partners in research; sharing knowledge with the broader public; promoting equity, diversity, and inclusion within and beyond UBC; establishing UBC as a global leader in the emerging international language sciences research network; and cultivating the next generation of LangSci researchers.

Additional funding from our governing faculties will support small, collaborative, member-led research projects, with 15% of funds reserved for projects lead by IBPOC faculty members.

Expense	Annual Amount (Y1 - Y5)
Staff salaries	\$187k
Member project funds	\$90k
Challenge team workshops (5/year)	\$5k
Community/industry roundtables (5/year)	\$5k
General member event funding	\$3k
Course buyouts for challenge leads and/or steering committee members (2/year)	\$20k
Grad/Postdoc SSC stipends (2/year)	\$14k
Trainee stipends (3/year)	\$21k
LangSci Talks (6/year)	\$15k
LangSci film screenings (2/year)	\$10k
Graduate student travel funding	\$10k
Graduate Student and Postdoctoral Fellow Research Day	\$5k
SSHRC PG matching funds	\$10k
General operating costs (office supplies, equipment)	\$5k
Faculty seed-funded member research projects	\$39k
Yearly Total	\$439k

LangSci will continue to retain a full time coordinator (R&F B) and an 80% FTE communications specialist (EPS A). Assuming retention of the current hires with regular pay raises (annual 2% general wage increases and 3% maximum merit increases), the mean annual salary and benefits for both is \$187k/year.

As a UBC Research Excellence Cluster, LangSci set aside a portion of annual funds to support member-led interdisciplinary, collaborative projects, including grant facilitation, community outreach and knowledge mobilization activities, and industry partner outreach. As a GREx institute, LangSci intends to dedicate \$90k/year (nearly 25% of its annual budget) to member-led activities that advance its key goals – particularly projects that leverage these funds to bring in external grant and partnership funding.

LangSci will provide \$13k/year for small group workshops for members, including five challenge-level workshops each year (\$5k/year) to share knowledge and set research direction, community and industry roundtables (\$5k/year) to develop relationships and new lines of inquiry in collaboration with community and industry partners, and general member events (\$3k/year) to bring together the broader LangSci membership to provide updates and consult with members on LangSci Institute progress towards its goals, and to explore and brainstorm new research questions.

One of LangSci's priorities is to ensure equitable and diverse representation at all levels of leadership. To this end, LangSci will provide one course buyout per service term to junior faculty (assistant professors) and members of the four federal employment equity groups. LangSci has set aside \$20k/year for buyouts; service terms are three years, renewable once.

LangSci will also provide \$14k/year in stipends for two graduate student members of the steering committee, calculated to be in line with the hourly wage for CUPE 2293 Senior Teaching Assistants.

LangSci will provide \$21k/year in stipends for a minimum of three graduate students to support projects centered in the five Research Challenges.

In line with our goals to share our findings to enrich public knowledge, LangSci will continue hosting a number of public events each year, including six LangSci Talks (\$15k/year), including both invited external speakers and internal UBC speakers and two to three LangSci film screenings (\$10k). The allocated funds will cover honoraria for external speakers and UBC speakers from the four federal employment equity groups, travel costs for external speakers, webcast costs, catering costs, ASL and other interpretation and translation service fees, closed captioning fees, and venue charges when applicable. In addition, film screening expenses will include film licensing fees.

LangSci will commit \$15k total towards interdisciplinary training and professional opportunities for graduate students and postdoctoral fellows. LangSci will set aside \$10k for travel costs of training opportunities such as lab exchanges and training workshops, which students can request on a rolling basis each year until funds are exhausted. LangSci will also continue hosting the annual Graduate Student and Postdoctoral Fellow Research Day. Funds will cover venue rental and catering costs, honoraria and travel costs for invited keynote speakers, small gifts for volunteers, and a small pool of poster printing stipends.

LangSci will continue to provide \$10k/year in matching funds for the SSHRC Partnership Grant, Ensuring Full Literacy in a Multicultural and Digital World (per UBC's institutional commitment to the grant) which will go towards the annual trainee workshop.

Lastly, LangSci will set aside \$5k/year towards office and operational expenses, such as office supplies and ergonomic office equipment, coffee/tea service for internal meetings, newsletter service subscriptions, and software not provided through UBC IT.

Conclusion

LangSci has grown to be one of the leading research clusters at UBC, mentioned explicitly in the UBC Strategic Plan as an example of interdisciplinary, collaborative research, thanks to support from the Grants for Catalyzing Research Clusters, our original governing faculties, and our founding donor Marietta Hurst. Our diverse, multidisciplinary colleagues are already in place and eager to continue working together - building upon strong and ever-growing links to community and industry, along with several collaborative grants currently underway. These growing synergies within our network and our recent successes will propel us to the next level of impact.

Right now, we are poised and ready to work together to address the emerging and pressing societal challenges in this critical research area. Sustained GREx funding will enable LangSci to achieve this incredible potential.

Appendix A: External Partnerships

Through the SSHRC Partnership Grant and the Master of Data Science in Computational Linguistics program, LangSci has cultivated a number of partnerships with external organizations, including industry, NGOs, other institutions, and the federal government.

SSHRC Partnership Grant, Ensuring Full Literacy in a Multicultural and Digital World	
Partner company/organization name	Type
ABC Life Literacy Canada	Charitable Organization
Access Alliance Multicultural Health and Community Services	Charitable Organization
Canadian Children's Literacy Foundation	Charitable Organization
DIVERSEcity Community Resources Society	Charitable Organization
H.appi	Charitable Organization
KidCareCanada	Charitable Organization
Compute Canada	Federal Government
Delmore "Buddy" Daye Learning Institute	Learning association
Halifax Public Libraries	Library
West Vancouver Memorial Library	Library
Altissia Canada	Private business enterprise
Brain Vision Solutions	Private business enterprise
NIRx Medical Technologies, LLC	Private business enterprise
SMART Technologies	Private business enterprise
Squiggle Park	Private business enterprise
The Conversation Canada	Private business enterprise
Virtro Entertainment Inc. Federal Government	Private business enterprise
West Vancouver Schools	Provincial/Territorial Government
Pearson Clinical Assessment	Publisher
Scholastic Inc.	Publisher
Alberta Machine Intelligence Institute	Research Organization
Mitacs	Research Organization
Storybooks Canada	Research Organization
Toronto District School Board (TDSB) Research and Development	Research Organization
Vancouver School Board #39	Secondary school
Dalhousie University	University

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SSHRC Partnership Grant, Ensuring Full Literacy in a Multicultural and Digital World

Partner company/organization name	Type
McGill University	University
Ontario Institute for Studies in Education	University
SFU Surrey - TD Community Engagement Centre	University
Simon Fraser University	University
The Governors of the University of Alberta	University
The University of Western Ontario	University
University of Calgary	University
University of Maryland, Language Science Centre	University

Master of Data Science in Computational Linguistics

Partner company/organization name	Type
Computational Research Institute of Montreal	Research Organization
Minerva Intelligence	Private business enterprise
Better Dwelling	Private business enterprise
Thomson Reuters	Private business enterprise
Unbounce	Private business enterprise
Informed Opinions	Charitable Organization
Amazon	Private business enterprise
Habanero Consulting Group	Private business enterprise

Appendix B: Indigenous Partnerships

LangSci has provided support for members' emerging and growing partnerships with First Nations communities. The table below outlines projects that LangSci has supported through faculty Research Seed Funding and funds from the Grants for Catalyzing Research Clusters (GCRC). Beyond the examples below, many members have long-standing relationships with First Nations communities, and LangSci plans to continue making funding available for expanding that work.

Examples of Existing Member Partnerships with First Nations Organizations		
Project	Organization(s)	Faculty Members
'Critical Lexicography: Developing New Frameworks for Community-Informed Dictionary Work' (SSHRC Insight Development Grant; LangSci provided GCRC funding to support grant facilitation.)	Heiltsuk First Nation (Bella Bella) Taku River Tlingit First Nation Splatshin First Nation of BC	Mark Turin, Christine Schreyer, Patrick Moore
Cross-border language community in Alaska and British Columbia (LangSci provided research seed funding.)	Teslin Tlingit Council	Rose-Marie Déchaine
Dictionary app development for the Heiltsuk language; Heiltsuk Language & Culture Partnership materials (LangSci provided support for app development and printing costs for partnership materials.)	Heiltsuk Cultural Education Centre	Mark Turin
'Just look it up? Navigating disputed definitions in endangered language dictionaries' (LangSci provided research seed funding for project.)	Liard First Nation	Patrick Moore
eNunciate 2.0 – Five New Languages & Integration with Pronunciation Station LangSci provided GCRC funding to support the update of the UBC Enunciate Ultrasound Overlay site, including materials supporting the Sto:lo Nation community language programs	Stó:lō Nation	Strang Burton

Appendix C: Record of Consultations During Review and Approval Process

In summer 2018, the LangSci Steering Committee engaged in a strategic planning process that established sustainable structural capacity for LangSci within three to five years, to provide for the hiring of a permanent faculty co-director, dedicated space, and staff support for research and grant facilitation, communications, and community outreach. From the summer of 2018 through the winter of 2019 and early 2020, the LangSci co-directors worked with the VPRI and Provost to develop a strategy for addressing this need.

2019 – 2020: Early consultations and proposal development

Throughout the development of the GREx proposal, LangSci leadership consulted broadly both with its own members and with leadership and specific teams in its supporting faculties, as well as the Vice President Research + Innovation (VPRI) and Research + Innovation Council (RIC). In September 2019, LangSci held a general member event focused on generating ideas for the GREx proposal, attended by 50 members, including faculty, postdoctoral fellows, and students from 12 departments and six faculties at UBC and UBCO, as well as visiting faculty and students. The resulting report was published on the LangSci website and shared broadly with LangSci members.

Starting in February 2020, LangSci began developing the feedback from LangSci members, the research leads, and steering committee into a draft GREx proposal. While the bulk of the proposal itself was written by a small committee, it was created with contributions from and iterative interaction with the research leads, challenge leads, and full steering committee, including members from six faculties and 12 departments, each tasked with representing their respective communities. LangSci also began preliminary consultations with its four supporting deans, as well as potential partners such as the Djavad Mowafaghian Centre for Brain Health, the BC Children's Hospital Research Foundation, and the Women and Children's Health working group (based in Pediatrics). LangSci submitted a full proposal to the VPRI in September 2020, and presented this proposal to the RIC in October 2020. With the support of the RIC, LangSci then engaged in a number of consultations with its four supporting faculties, as well as the Graduate Student Society. In March 2021, LangSci also distributed a three-page brief on the proposal to its UBC-based members and made the full proposal available to any who were interested in reading it and providing feedback. Several members requested the full proposal for comment.

Fall 2020 – Spring 2021: Faculty presentations and approvals; GSS consultation

Faculty of Arts

The LangSci co-directors (Janet Werker, Psychology, and Bryan Gick, Linguistics), engaged in a number of conversations with Dean Gage Averill and Associate Dean, Research Brett Eaton between March 2020 and March 2021 regarding the direction and progress of the GREx proposal. LangSci provided Dean Averill and Associate Dean Eaton with the full proposal submitted to the RIC in October 2020.

Associate Dean Eaton brought the proposal to the Arts Deans' Table in March 2021. The Dean's Table recommended the proposal be revised to emphasize the role of LangSci as a 'big tent' and the role of the humanities. LangSci revised the proposal accordingly and submitted it to be reviewed by the Arts Policy and Governance Committee.

Associate Dean Eaton presented the proposal to the Arts Policy and Governance Committee on March 17th, 2021. The committee was very impressed and supportive, and expressed great interest in the vision of an institute focused on language, identifying many potential avenues for additional collaboration and cooperation as the institute grows. The committee affirmed their support for the proposal moving forward.

Dr. Werker then presented the proposal at the Arts Faculty meeting on March 18th, 2021. Dean Averill and Associate Dean Eaton expressed enthusiastic support for the proposal. One department head asked how LangSci will ensure course buyouts do not over-burden smaller departments. Dr. Werker stressed that LangSci sees course buyouts as an equity issue, as they are restricted to junior faculty and IBPOC scholars. They occur infrequently, and LangSci is committed to working with departments on mutually-acceptable arrangements. The motion for the proposal to advance to the Senate Research Committee carried.

Faculty of Education

On December 15th, 2020, Drs. Werker, Gick, and Guofang Li presented the GREx proposal to the Heads and Directors committee in the Faculty of Education. The committee endorsed the proposal and recommended a presentation to the full Faculty.

On March 9th, 2021, Drs. Werker and Gick presented the proposal to the full Faculty council in Education. The faculty voted in support of approving the Language Sciences Global Research Excellence Institute proposal to advance to Senate. One faculty member asked if new members can join the Research Challenges. Dr. Werker clarified that new membership and participation in research in the challenge areas (as well as new challenges) is absolutely welcome. LangSci subsequently revised the full proposal to make this more explicit.

Faculty of Medicine

On December 7th, 2020, Drs. Werker, Gick, and Anthony Herdman presented the GREx proposal to the Centre and Institute Directors committee and Assistant and Associate Deans Research in the Faculty of Medicine. Points of discussion and feedback included:

- Medicine's potential contributions to a LangSci Institute; examples include linkages with the School of Population and Public Health, the Health Outcomes and Language project based in SASS, and current collaborations involving predicting suicidality using social media, language decline in dementia patients, and language acquisition in young learners
- The potential for research challenges point to population-level interventions; Dr. Herdman indicated that LangSci is interested in growing those linkages, and Dr. Werker suggested that one current example is Muhammad Abdul-Mageed's work on social media posts and health conditions
- What resources might be available for investigating language in concussive and traumatic brain injury; Dr. Werker indicated that LangSci is absolutely interested in collaborations on these topics, including potential joint appointments on topics such as stroke and stroke recovery, for instance

The committee voted to endorse the proposal advancing Language Sciences to GREx status.

On January 13th, 2021, Drs. Gick, Werker, and Herdman presented the GREx proposal to the Department and Schools Heads and Directors (DSHD) committee in the Faculty of Medicine. Several members of the committee expressed enthusiastic support for the proposal, with faculty indicating interest in discussing the potential launch of educational activities to mirror LangSci research activities with the LangSci leadership team, and in the development of a graduate course in special topics that might engage students across the graduate landscape at UBC. The committee voted to endorse the advancement of the Language Sciences Initiative to GREx status.

After receiving the support of these two committees, the VPRI and LangSci determined that LangSci did not need to present to the Faculty of Medicine Executive Committee at this time.

UBC Language Sciences

Faculty of Science

On January 20th, 2021, Drs. Gick, Werker, and Raymond Ng presented the GREx proposal to the Heads & Directors Committee in the Faculty of Science. There was enthusiastic and broad interest in the proposal. During the question-and-answer period, Science faculty inquired after LangSci's interest in the evolutionary foundations of language, as well as interest in potential collaboration with regards to plant and animal taxonomy. Drs. Werker and Gick indicated that LangSci is very interested in potential collaborations in those areas, and expressed interest in further discussion after the meeting. The committee voted in support of the Language Sciences Initiative advancing to Global Research Excellence Institute status.

Graduate Student Society

In February 2021, Language Sciences sent the Graduate Student Society (GSS) Executive a three-page brief on the GREx proposal focusing on the role of trainees. The GSS Executive found the proposal to be interesting and responded with two questions for clarification:

- The GSS Executive noted that the brief did not contain a budget justification, and requested clarification on areas such as the film screenings, travel fund, course buyouts, and graduate stipends, particularly on their distribution
- The GSS Executive noted that the brief specified how it broadly envisions graduate students working within the institute, but did not describe the roles available to the students, how many students would be taken on, what funding would be available and to how many students, and what their research will contribute to

Much of the information outlined in the points for clarification was present in the proposal but removed from the brief. In mid-March, LangSci sent the GSS Executive a copy of the revised full proposal, pointing to the sections that addressed the questions outlined in their feedback, and inviting feedback on the proposal. In this revised proposal, LangSci added a budget line for trainee funding for at least three graduate students working on projects relating to the five Research Challenges, and outlined a plan for providing professional development opportunities and training workshops open to all trainee members of LangSci, forming an informal 'cohort' of funded trainees.



August 12, 2020

Dr. Gail Murphy
Office of the Vice President Research + Innovation
The University of British Columbia
Walter C. Koerner Library
Suite 580, 1958 Main Mall
Vancouver, BC V6T 1Z2

Dear Vice President Murphy and Colleagues on the Research and Innovation Council,
This letter is to enthusiastically recommend that the Research and Innovation Council support the establishment of the Language Sciences Initiative as a Global Research Excellence Institute.

The Faculty of Arts is home to the majority of Language Sciences' faculty members, hailing from fifteen departments. To support ongoing and future interdisciplinary research collaborations in Language Sciences, the Faculty of Arts has committed to:

- Fund a CRC Tier 1 in Language Sciences (Department of Psychology) (\$1.4mil);
- \$5,000/year in research seed funds (2019 – 2021);
- Provide cash support for SSHRC PG *Ensuring Full Literacy in a Multicultural and Digital World* (Werker et al.) and associated CFI grant, totalling \$199,991;
- Provide in-kind support for SSHRC PG *Ensuring Full Literacy in a Multicultural and Digital World* (Werker et al) (\$70k);
- Provide cash support for the CFI JELF grant *Centre for Community Engaged Documentation and Research* (Rosenblum & Gaertner) (\$286,000 total from arts and from the Institute for Critical Indigenous Studies); and
- Provide \$2.2mil for dedicated LangSci office, lab, and gathering space in the new Gateway Building (expected completion in 2024), with the expectation that Language Sciences will raise money to recoup those costs and develop the space through a grant from the CFI Innovation Fund and private donations.

In addition, the Faculty of Arts will provide \$5,000 per year for three years (2019 – 2021) for research seed funds, with consideration for a renewed commitment in 2022.

The Faculty of Arts heartily supports the establishment of Language Sciences as a GREx Institute. Continuity of funding will accelerate LangSci's ability to initiate new interdisciplinary programs of research and develop them into successful grants, community and industry partnerships, and training opportunities.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gage Averill', with a large loop at the end.

Dr. Gage Averill
Dean, Faculty of Arts



Office of the Dean

July 28, 2020

Dr. Gail Murphy
Office of the Vice President Research + Innovation
The University of British Columbia
Walter C. Koerner Library
Suite 580, 1958 Main Mall
Vancouver, BC V6T 1Z2

Dear Vice President Murphy and Colleagues on the Research and Innovation Council,

This letter expresses the Faculty of Education's enthusiastic support for Language Sciences' proposal to become a Global Research Excellence Institute at UBC. Faculty and graduate students in Education have been involved in Language Sciences (LangSci), including as members of its leadership team, since 2016. Its flagship project, the SSHRC Partnership Grant *Ensuring Full Literacy in a Multicultural and Digital World*, dovetails neatly with the goals of the Faculty of Education (especially within departments such as Language and Literacy Education (LLED), and Educational and Counselling Psychology and Special Education (ECPS). There are also potential synergies with our cross-Faculty centres, such as the Centre for Interdisciplinary Research and Collaboration in Autism and the Centre for Early Childhood Education and Research.

In support of existing and future collaborations with LangSci, Education commits to:

- The designation of an upcoming position in Early Childhood Education to be focused on language/literacy;
- Facilitating priority access to meeting rooms, including large meeting rooms;
- Committing \$10,000/year for the next three years (FY 2019-2021), in support of research seed funds and other related projects.

Education is excited to support this proposal, and looks forward to the new, ground-breaking language-related research that will be undertaken by our faculty and students in collaboration with their colleagues in Language Sciences.

Sincerely,

Dr. Blye Frank
Dean, Faculty of Education

Dr. Patricia Duff
Associate Dean of Research, Faculty of Education



August 10, 2020

Dr. Gail Murphy
Office of the Vice President Research + Innovation
The University of British Columbia
Walter C. Koerner Library
Suite 580, 1958 Main Mall
Vancouver, BC V6T 1Z2

Dear Vice President Murphy and Colleagues on the Research and Innovation Council,

This letter is to recommend that the Research and Innovation Council support the establishment of the Language Sciences Initiative as a Global Research Excellence Institute.

Much of LangSci's members' work intersects with research interests in the Faculty of Medicine, especially in the areas of speech language pathology, audiology, neurodevelopment, and neurodegeneration. Language Sciences has engaged a number of units in consultation, including the Djavad Mowafaghian Centre for Brain Health, the BC Children's Hospital Research Institute, and the School of Audiology and Speech Science, and agreed that the establishment of LangSci as a GREx would provide great mutual benefit to researchers in our units.

BC Children's Hospital Research Institute

The BC Children's Hospital Research Institute (BCCHRI) strongly supports the establishment of Language Sciences as a Global Research Excellence Cluster. Language development is an important part of children's health, and BCCHRI is pleased to be home to multiple members of the LangSci scholarly community (both investigators and affiliates), and welcomes new members of Language Sciences to explore membership at BCCHRI as well. LangSci members who are also members of the BCCHRI can draw on a number of BCCHRI resources. BCCHRI looks forward to working with LangSci to develop more collaborations as LangSci establishes itself as a GREx Institute, especially in areas related to the science of reading, autism, genetic disorders (especially those effecting facial morphology), and data science.

Djavad Mowafaghian Centre for Brain Health (DMCBH)

DMCBH recognizes a number of research alignments with LangSci in areas such as neurodevelopment and neurodegeneration, especially with regards to autism, Alzheimer's disease, and stroke, as well as animal modelling, and a general shared interest in

Language Sciences Institute GREx Proposal
Letter of Support, Faculty of Medicine

neuroinformatics. In order to support further collaborations in these areas, DMCBH commits to:

- Supporting joint and/or coordinated fundraising efforts in these research areas;
- Encouraging current and future LangSci members to also become members of CBH, with potential for emphasizing language as an area of priority at CBH in the future (as CBH members, LangSci members would also have access to CBH funding such as trainee funding and research Kickstart Grants, and non-cash resources such as privileged access to the Fipke Integrated Neuroimaging Suite);
- Co-hosting colloquia and symposia, such as the planned talk in April 2021 by Dr. Edward Chang (Professor of Neurological Surgery at the University of California, San Francisco, co-hosted by DMCBH and Language Sciences); and
- Potentially collaborating on graduate curriculum and training in the future.

Faculty of Medicine Support for Language Sciences

The Faculty of Medicine has also committed to providing \$8,000/year in research seed funds for three years (from 2019 – 2022), to support interdisciplinary pilot projects lead by Language Sciences members, with consideration for a renewed three-year commitment in 2022.

Language is a vital aspect of human health and well-being, from infancy through our twilight years. The Faculty of Medicine enthusiastically supports this proposal, and looks forward to the fruition of existing and growing collaborations and the flowering of new ones between Medicine and LangSci in the coming five years.

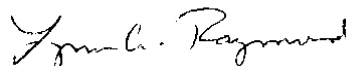
Sincerely,



Dr. Dermot Kelleher
Dean, Faculty of Medicine



Dr. Wyeth Wasserman
Vice-President Research,
BC Children's Hospital, PHSA



Dr. Lynn Raymond
Director, Djavad Mowafaghian Centre for
Brain Health



THE UNIVERSITY OF BRITISH COLUMBIA

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July 27, 2020

Dr. Gail Murphy
Office of the Vice President Research + Innovation
The University of British Columbia
Walter C. Koerner Library
Suite 580, 1958 Main Mall
Vancouver, BC V6T 1Z2

Dear Vice President Murphy and Colleagues on the Research and Innovation Council,

This letter is to enthusiastically recommend that the Research and Innovation Council support the establishment of the Language Sciences Initiative as a Global Research Excellence Institute.

Collaborations between Language Sciences and the Faculty of Science have grown dramatically in the past year. Several Science members are now involved in leadership positions in LangSci. Raymond Ng (Professor in Computer Science and Scientific Director of the Data Science Institute), in collaboration with other LangSci members, including several from Computer Sciences, has submitted a Letter of Intent for the New Frontiers in Research Fund's Transformation Grant competition, focused on a data science approach to the acquisition and breakdown of language. The Master of Data Science in Computational Linguistics is entering its second year. Discussions regarding further coordinated hires between Computer Science and Linguistics in Machine Learning and Natural Language Processing are ongoing, and we encourage LangSci to bring language-related candidates, when appropriate, to our existing and future open searches.

In support of existing and future collaborations between LangSci, the Faculty of Science has committed to \$8,000 per year for three years (2019 – 2022) in research seed funds to support emerging interdisciplinary research, with consideration for subsequent renewed funding.

The Faculty of Science heartily supports the establishment of Language Sciences as a Global Research Excellence Institute, and looks forward to further collaborations.

Sincerely,

A handwritten signature in cursive script that reads 'Meigan Aronson'.

Dr. Meigan Aronson
Dean, Faculty of Science



19 May 2021

To: Vancouver Senate

From: Vancouver Senate Teaching and Learning Committee

Re: *Report to UBC Senates: Progress on Student Experience of Instruction Recommendations*

Following the May 2020 Senate endorsement of the recommendations of the Student Evaluations of Teaching Working Group, a Steering Committee and an Implementation Committee were struck to work towards operationalizing the recommendations. This above-named report provides an update on progress made with respect to the May 2020 recommendations.

The Teaching and Learning Committee is pleased to present, for information and discussion, the *Report to UBC Senates: Progress on Student Experience of Instruction Recommendations*, as attached.

Respectfully submitted,

Joanne Fox, Chair
Senate Teaching and Learning Committee

Report to UBC Senates: Progress on Student Experience of Instruction Recommendations

Report to Okanagan Senate Learning and Research Committee – April 9, 2021
Report to Vancouver Senate Teaching and Learning Committee – April 14, 2021

Student Evaluation of Instruction Senate Report April 2021

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Student Evaluation of Instruction Senate Report April 2021

Introduction and background

In February 2019, a Student Evaluation of Teaching (SEoT) working group formed with membership across both UBC Okanagan and UBC Vancouver campuses. Working under the auspices of the UBCO Senate Learning and Research and the UBCV Senate Teaching and Learning committees, the group had the following remit:

1. Interrogate anonymized UBC data, to determine if there is evidence of potential biases.
2. Review and assess the recent literature on the effectiveness of SEoT, with particular reference to potential sources of bias in evaluations.
3. Review the University questions (UMI) used in SEoT in light of the data and available literature, recommending changes where appropriate.
4. Propose recommendations for appropriate metrics, effective analysis and presentation of data to support SEoT as a component of teaching evaluation.
5. Consider the implications any proposed changes may have on other components of teaching evaluation.

Through work and consultations done over an extended period, the SEoT working group presented a [report to both the Okanagan and Vancouver Senates](#) in May 2020. Included in the report was information about the working group's membership and consultation process, an annotated bibliography of research on bias in student evaluations of teaching, studies done at UBC on bias based on binary sex data, and information about a new set of metrics used in reporting SEoT results.

In addition, and most pertinent to the present purpose, the report included sixteen recommendations about student evaluations of teaching, which were endorsed by both Senates, see [Appendix 1](#). In the Fall of 2020, two new committees were formed to oversee the process of implementing these recommendations, a Steering Committee and an Implementation Committee. Since one of the recommendations in the original working group's report was to change the name of the process from "student evaluations of teaching" to "Student Experience of Instruction" (SEI), these new committees are called the SEI Steering and SEI Implementation committees.

The SEI Steering Committee is made up of senior leaders, faculty and students on both campuses, and provides strategic guidance and oversight for the Implementation Committee, which is tasked with operationalizing the implementation of the recommendations. Please see [Appendix 2](#) for membership of these groups.

Summary of implementation work

Since early Fall 2020 the Implementation Committee has worked collaboratively with the Planning and Institutional Research Office (PAIR), the Equity and Inclusion office (EIO), the Centre for Teaching, Learning & Technology (CTLT) and others on the recommendations put forth from the SEoT working group. In addition, the Implementation Committee has worked on creating a number of resources and events to communicate changes and work to date across both campuses, including a SEI website and a cross-campus open forum that was held on March 10th, 2021.

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The main focus of work to date has been on the changes to the questions. This committee has also begun work on recommendations related to the need for additional data and analyses to better answer questions related to bias in SEI, as well as exploring how UBC could adopt a more integrative approach in the evaluation of teaching. Further details of work on each of the recommendations are presented throughout this report.

Engagement and pilot process for revised University Module Items

The Student Evaluations of Teaching (SEoT) working group recommended that the questions on end-of-course student surveys be focused on the student experience rather than the evaluation of teaching. Six core university questions were drafted, based on the six questions used in the Vancouver survey, to solicit feedback from students on their experiences in courses. In addition, the working group recommended that further data collection and analysis be undertaken, particularly for a proposed new question on feedback that would replace a previous question from the Vancouver survey on the fairness of assessment of student learning (see details on the proposed questions below, under Updates on Recommendations).

In taking this work forward, the SEI Implementation Committee developed an 8-step plan to evaluate and test the proposed core university questions within our community. In January 2021 we recruited student and faculty participants through email invitations. To ensure a diverse group of participants, we collected information about students' program of study, undergraduate/graduate program, year level, and international/domestic status during the recruitment phase. We asked faculty participants to provide us with information about their rank and their Faculty. Student participants received a \$20 electronic gift card to thank them for their time. Faculty members did not receive any monetary incentive for their participation.

During the month of February, we held 16 one-hour focus groups with 116 students across both campuses, all year levels, undergraduate and graduate, and across a diversity of programs. The goal of the focus group discussions was to introduce the six proposed questions and to gain an understanding of how students interpreted and would respond to these survey questions. Further, we asked them to identify any possible confusion that might occur in terms of different interpretations or understanding of the questions. In addition, we asked for suggestions on how to improve the questions that might be interpreted differently across students or in different environments, such as in a large compared with a small class setting.

In late February/ early March we also held eight one-hour focus group sessions with faculty members, of which four involved Okanagan faculty and four involved Vancouver faculty. In total, 40 faculty members participated in the sessions, from a range of programs as well as from tenure-track and non-tenure track positions. Again, we asked them to provide insight on how they interpreted the proposed questions and their thoughts on how students would possibly understand and respond to the questions. We also collected suggestions from participants on possible ways to reword the questions.

Our next step was to conduct one-on-one interviews with students who had not participated in the previous focus group sessions, which also took place in March. These interviews are called think-aloud sessions or cognitive interviews. In these interviews, we asked students to speak aloud to verbalize their thoughts on how they interpret each of the six questions, what types of examples about the course they recall when responding to the question, and what information

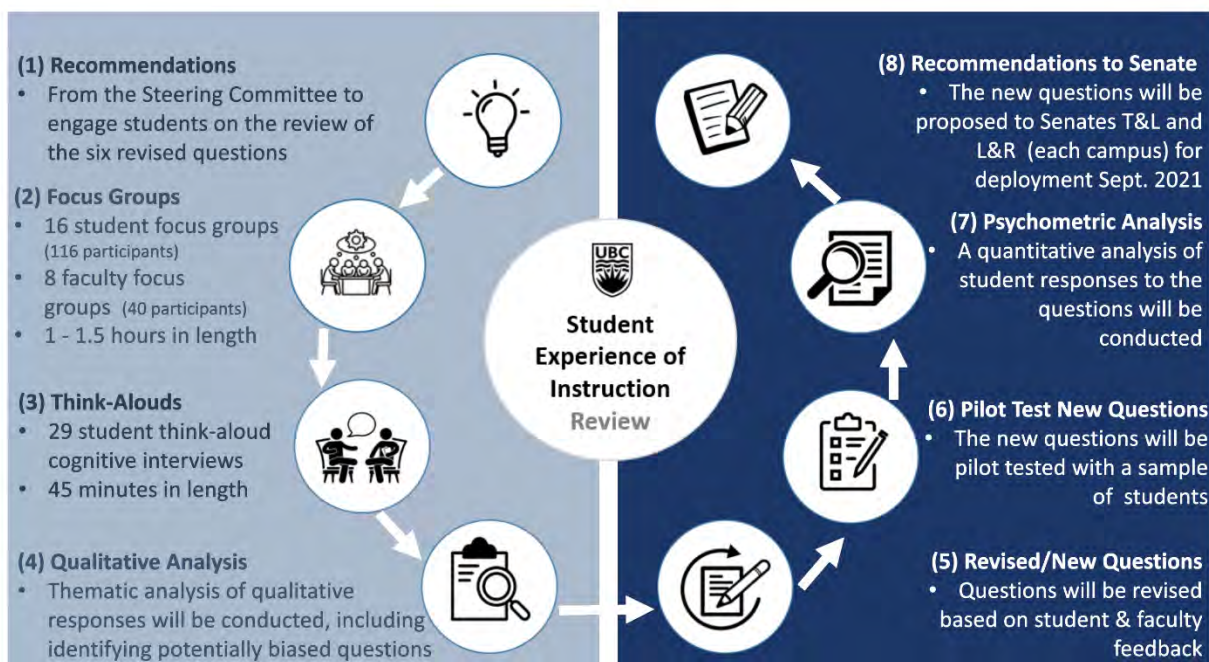
Student Evaluation of Instruction Senate Report April 2021

they recall and consider when responding to each question. We conducted 29 interviews that each took between 45 minutes and one hour.

We have completed all of the focus group sessions and student interviews, and have transcribed all of the recordings. We are currently working on coding these transcriptions and conducting a thematic analysis of the qualitative results collected from students and faculty, including any concerns regarding possible biases in the questions. Through to the end of April we will be developing revised questions based on this feedback and then we will pilot test the new questions with a sample of students across UBC in May to early June. Once we have collected the responses to the questions, we will conduct a quantitative analysis of the student responses with the new questions, reviewing the results and following up with students on items needing further clarification.

Finally, we will make recommendations to the Senate Teaching and Learning Committee in Vancouver and the Senate Learning and Research Committee in the Okanagan for adoption of the new questions to be deployed starting September 2021.

Visual representation of the process and timeline provided below.



Timeline for process	Jan	Feb	March	April	May	June	July	Aug	Sep
Focus groups students & faculty									
Conduct Think aloud Sessions									
Qualitative Thematic analysis									
Revised/New Questions									
Pilot new questions									
Psychometric Analysis									
Senate committees for review									
Deploy the final questions									

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Progress with recommendations

As noted above, in May 2020 sixteen recommendations about Student Evaluations of Teaching were endorsed by both the UBCO and UBCV Senates. Most of the work to implement these recommendations is still in progress; some of it will be completed by the beginning of September 2021, while other work will continue further into the next academic year and possibly beyond.

Student Involvement – Recommendations 1 – 4

The first set of recommendations focused on the role and contributions of students to the process of the evaluation of teaching. Under each of the recommendations below is an update on work to date.

1. Evaluation of teaching should include student feedback.

Complete

This recommendation reaffirmed the important role that student feedback plays in the evaluation of teaching; thus, end of course student surveys will continue as one aspect in that process.

2. The name of the process by which student feedback is gathered should be changed from 'Student Evaluation of Teaching' to 'Student Experience of Instruction'.

In progress

This recommendation has already been rolled out in a number of communications, including the SEI website and the open forum held in March 2021. A full switch to the new name will begin in all communications starting in September 2021.

3. Questions asked of students should focus on elements of instruction based on their experience with instructor(s) in specific contexts and relationships.

In progress (see UMI questions, below)

The wording changes to questions to be included in new student experience of instruction surveys are a result of this recommendation. Throughout the process of piloting and reframing the questions, students reflected on their perceptions of what the questions were asking and how they might be interpreted in different course contexts. They also made suggestions for improving the questions to ensure they capture various student experiences in courses.

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4. **Student leadership on both campuses should be actively engaged in raising the profile of student feedback on instruction.**

In progress

Students have an important voice and perspective in work to improve the process of gathering student feedback and how it is used to evaluate and improve teaching at the university. Students have been invited and have participated in this initiative, including participation as members of the Steering and Senate committees, as well as in the work to refine the questions, as outlined above. Over the next few months, the Implementation Committee will be developing information for students about how results from the surveys are used at the university and advice for providing effective, constructive feedback. Partnering with students on this work will be very helpful, to ensure the information is useful to students.

Discussions to further engage student leadership across both campuses will be undertaken by the Implementation Committee to ensure a dialogue and feedback on communication and implementation plans for the changes coming in September 2021.

University Module Items – Recommendations 5-9

5. **UMI-6 (*Overall the instructor was an effective teacher*) should be retained in the core question set, but modified.**
6. **Minor changes in wording of other UMI questions are suggested to better reflect the focus on each student's experience of instruction.**
7. **UMI-4 (*Overall, evaluation of student learning was fair*) should be removed from the common set**
8. **A new UMI item, pertaining to the usefulness of feedback, should be trialed.**
9. **There should be a common set of UMI questions asked across both campuses**

In progress

The current UMI 4 from the Vancouver student surveys (as noted in recommendation 7) will be removed as of September 2021, and both UBCO and UBCV will use the same set of University Module Items starting with Winter Term 1, Fall 2021 surveys (recommendation 9).

Regarding recommendations 5, 6, and 8: The May 2020 SEoT Working Group report to Senates suggested the following wording for University Module Items 1-6:

1. *The instructor made it clear what I was expected to learn*
2. *I think that the instructor communicated the subject matter effectively.*
3. *The instructor engaged me in the subject matter*
4. *I have received feedback that supported my learning*
5. *I think that the instructor showed concern for student learning*
6. *Overall, this instructor was effective in helping me learn*

As discussed above, this wording has been tested through student and faculty focus groups, and student interviews, yielding rich qualitative data that is being used to refine

Student Evaluation of Instruction Senate Report April 2021

the questions for pilot testing in a survey of students in early summer 2021. Further revision to the questions will be undertaken as needed before presenting to the Senate committees on both campuses for endorsement ahead of implementation in September 2021.

Data and Reporting – Recommendations 10-12

10. Units should be supported to adopt a scholarly and integrative approach to evaluation of teaching.

In progress

The Implementation Committee has drafted an outline for a discussion paper on integrative approaches to the evaluation of teaching (see Appendix 3). This paper will be completed by early Fall of 2021 and will present the current ways teaching is evaluated at UBC, rationale for moving to a more integrative approach, best practices from institutions who have adopted such an approach, and recommendations of how UBC should move forward in the development and implementation of an integrative approach to the evaluation of teaching.

This discussion paper will contribute to the process of developing broader evaluation of teaching policies through the UBCV and UBCO Senate processes (see recommendations 15 and 16, below).

11. Reporting of quantitative data should include an appropriate measure of centrality, distributions, response rates and sample sizes, explained in a way that is accessible to all stakeholders, regardless of quantitative expertise.

Complete

Individual instructor reports of results have included the interpolated median (instead of the mean), the dispersion index (instead of the standard deviation), and the percent favorable (percentage of respondents who chose Agree or Strongly Agree on each question) since 2018 Winter Term 1.¹ These reports also include the response rate as well as a table with the recommended response rates according to the number of students in the course, based on research by Zumrawi, Bates, and Schroeder (2014).²

The interpolated median, dispersion index, and percent favorable are explained on the new [Student Experience of Instruction website, under “Metrics.”](#)

Faculty preparing dossiers for tenure and promotion, as well as heads or directors, can request conversion of past results using previous metrics into the new metrics. In

¹ Individual reports included both the previous and new metrics beginning in 2018 Winter Term 1, and only the new metrics beginning in 2020 Winter Term 1.

² Zumrawi, A.A., Bates, S.P. & Schroeder, M. (2014). What response rates are needed to make reliable inferences from student evaluations of teaching? *Educational Research and Evaluation*, 20(7-8), 557-563. DOI: [10.1080/13803611.2014.997915](https://doi.org/10.1080/13803611.2014.997915)

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addition, unit heads, program directors, and dean's offices can request aggregate reports. Please see information about [how to request aggregate data reports](#) on the new Student Experience of Instruction website.

12. UBC should prioritize work to extract information from text/open comments submitted as part of the feedback process.

In progress

In addition to the quantitative information from the Likert-style questions on student surveys (interpolated median, dispersion index, and percent favorable), there are frequently text comments from students as well that may provide more in-depth information about students' experiences in courses. It is important to recognize that the comments sometimes include harmful and abusive language, including racist, sexist, ableist and other discriminatory statements and questions. The Implementation Committee has begun investigating a possible automated process for analyzing text comments to help with extracting meaning from them for formative purposes, for instructors to be able to more easily understand patterns in the comments. In time, this may also contribute to ways to address harmful comments on the surveys.

Qualitative data analysis to extract meaning from text is often done through one or more people reviewing the text, picking out themes and categories that either emerge from the data or are determined in advance, and assigning codes to particular pieces of text accordingly. It is possible to partly automate this process through natural language processing systems that can generate a set of themes or codes from a list of text comments, when can then be refined and categorized by human reviewers. Such systems can also tie these themes to sentiments expressed in the comments.

For example, a comment on a student survey could be:

- "We didn't get our graded essays back in time to use the feedback on the next one. Which is too bad because the feedback was clear and helpful and could have been used to improve on the next paper."

An automated system might then yield the following themes and sentiments:³

- "We didn't get our graded essays back in time..."
 - Theme: grading
 - Sentiment: negative
- "the feedback was clear and helpful ..."
 - Theme: feedback
 - Sentiment: positive

After reviewing and refining the automated generation of themes and re-running the data through the system, it is then possible to build filters and visualizations that can help with extracting meaning from long lists of comments. Themes generated can then be linked back to lists of individual comments. Such a system could be used for individual instructors for formative purposes, to help them better understand students' experiences

³ It may also be possible, depending on the system, to expand the sentiments from a simple binary (positive or negative) to a range, such as a 5-point scale.

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in their courses, and possibly consider changes to their approach to teaching (if needed). It may also be possible to use this kind of system to pre-emptively remove harmful comments from individual reports of survey results (though this possibility needs to be further investigated).

The Implementation Committee has begun investigating such systems, and they will oversee a pilot test of one or more of these systems using SEI comments from faculty who volunteer to share their data for this purpose. A report on progress, and recommendations for moving forward, will be presented to UBCV and UBCO Senate committees and Senates during the 2021-2022 academic year.

Dealing with Bias – Recommendations 13-14

13. UBC needs additional and regularized analysis of our own data to answer questions related to potential bias, starting with instructor ethnicity, as it is frequently highlighted as a potential source of bias in the literature on student evaluation of teaching.

In progress

The Implementation Committee has been working with the EIO, PAIR, and the CTLT (who supports and operates the software used for SEI surveys and reports) on plans for regular analyses of SEI data for bias. So far, only analyses on binary sex data for faculty and students have been done using administrative data (see Appendix 3 of the [May 2020 SEoT Working Group report to Senates](#)); this is because there has not been enough other demographic data available to yield valid results if analyzed for bias. The current employment equity survey has a response rate of 66% and there is evidence that some non-response is not random, making the data insufficient for bias testing at this time. That is changing, however.

A new employment equity survey has been rolled out for newly-hired UBC employees, and will be available for existing employees starting in September. The questions better address the range of how members of the UBC community self-identify, and may then lead to more people answering all the questions on the survey. There is also a plan for publicizing the new survey for existing employees to encourage all to fill it out even if they have already filled out the old one. The Implementation Committee is working with the EIO, PAIR, and the CTLT on processes and workflow for accessing and analyzing combined EE and SEI data in an anonymized way to analyze for bias, once there is further data from the new EE survey.

In addition, there is work underway through a collaboration between the EIO, PAIR, Enrolment Services, and Enterprise Data Governance to collect further demographic data from students. As of March 2021, the project is in planning stages, with the aim to develop a survey to collect student demographic data, as well as governance processes for collection, storage, access, and approved uses of the data by early 2022.

The Steering and Implementation Committees will work with the above groups to undertake analyses of SEI data for biases when governance processes are established and there is enough faculty and student demographic data available to yield valid

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results. They will also establish a process for continuing those analyses on a regular basis and reporting to both Senates.

- 14. The work of collecting, integrating, interpreting and using feedback on teaching should mitigate against bias, but should not presume the complete removal of bias.**

In progress

As noted in response to the previous recommendation, regular analyses of SEI data for bias will continue to be conducted. It will then be possible to recommend actions to be taken to mitigate bias, if found, even if complete elimination is not possible.

Broader Issues – Recommendation 15 – 16

- 15. The Vancouver Senate should review the policy on Student Evaluations of Teaching and consider a broader policy on the evaluation of teaching writ large. The Okanagan Senate should develop a similar policy for the Okanagan campus.**

In progress

Initial discussions about this recommendation have been held with the Chairs of the Okanagan Learning and Research Committee and the Vancouver Teaching and Learning Committee, with the aim to start formal work in the Fall of 2021. Consultations held so far have reinforced the importance of this work moving forward. In addition, noted above, the Implementation Committee is writing a discussion paper over the summer of 2021 with recommendations for a broader, integrative approach to evaluation of teaching that can feed into this policy work.

- 16. Senate should commit to support the ongoing work of implementing policies related to the evaluation of teaching.**

In progress

This recommendation is focused on the need to ensure there is support for broad implementation of policies developed through the above recommendation, and thus, much of this work will need to happen alongside the development of the policies.

However, the Implementation Committee will also be creating resources for the SEI website to support the current transition to new SEI questions:

- Advice for faculty on how to include reports of results from previous and new SEI questions in their dossiers for review, tenure, promotion, or merit.
- Advice for academic leaders and reviewers on how to interpret the new metrics, particularly in dossiers that include both old and new questions, and possibly old and new metrics as well.

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Summary of Upcoming Activities

The following list of upcoming activities is partly summarized from information above, and also contains some new items not yet discussed above.

Changes to University Module Items

Once the qualitative data have been analysed, the results will be used to inform further changes to the six core university questions. These revised questions will be pilot tested on a sample of students in May 2021. Then in June, a quantitative analysis will be conducted to see how well the questions performed. Further refinement of the survey questions may be made based on the results of the quantitative analysis.

A report on the results of testing the new questions, along with recommended wording, will be brought to the UBCO Senate Learning and Research and UBCV Senate Teaching and Learning Committees for endorsement before implementing these questions in student surveys beginning in Winter Term 1, Fall 2021.

Communications

- Emails about the upcoming UMI changes: to Associate Deans, Heads & Directors, all faculty and others teaching courses where the UMI are used in SEI surveys (note: surveys about TAs vary across the institution and do not all include the UMI).
- Information about upcoming changes in various newsletters on both campuses.
- Meetings with student leaders on both campuses, also VP Student communications, to discuss getting the word out about the changes to University Module Items.
- Presentations:
 - Session on new metrics at CTLT Spring Institute in June 2021 (possibly repeated in August & December 2021)
 - Another open forum, late summer or early fall 2021
- Information to be added to seoi.ubc.ca website
 - Advice for faculty on how to include reports of results from previous and new SEI questions in their dossiers for review, tenure, promotion, or merit.
 - Advice for academic leaders and reviewers on how to interpret the new metrics, particularly in dossiers that include both old and new questions, and possibly old and new metrics as well.
 - Information for students on how SEI are used at the institution, and advice on providing effective and constructive feedback (developed in partnership with students).

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Further data collection and analyses

Work with EIO and others to access new faculty and student demographic data when available, and conduct analyses for bias in SEI results. Recommend process for regular, periodic analyses for bias and steps to mitigate if found.

Test one or more systems that can partially automate extraction of meaning from text comments, and determine feasibility and desirability of implementation at the institution. Recommend governance for access and use of the data, privacy and security requirements, and resources required.

Integrative approach to evaluation of teaching, and Senate policy work

Discussion paper with recommendations on an integrative approach to evaluating teaching will be completed by the end of Summer 2021 (see Appendix 3 for a draft table of contents). This paper will feed into work on both campuses, starting in Fall 2021, to develop Senate policies on broader approaches to evaluating teaching (currently Senate policies on teaching evaluation only focus on SEI).

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Appendices

Appendix 1 – Recommendations from May 2020 Senate report

Appendix 2 – Steering & Implementation Committees Membership and Consultations

Appendix 3 – Draft Table of Contents for a discussion paper on an integrative approach to evaluation of teaching

Student Evaluation of Instruction Senate Report April 2021

Appendix 1 – Recommendations from May 2020 Senate report

Student Involvement

1. Evaluation of teaching should include student feedback.

Students have a unique and valuable perspective from which to provide feedback on teaching at UBC. Student feedback on teaching is one of several sources of data that should be used for making personnel decisions and for the improvement of teaching.

2. The name of the process by which student feedback is gathered should be changed from ‘Student Evaluation of Teaching’ to ‘Student Experience of Instruction’.

Evaluation of teaching is a complex process, whether for formative or summative purposes. To do it effectively requires input from multiple perspectives and sources (students, peers, self) integrated across time. As noted in (1) above, students have an important perspective that should be part of that. However, students should be asked to focus on their experience, rather than to ‘evaluate’ teaching writ large.

3. Questions asked of students should focus on elements of instruction based on their experience with instructor(s) in specific contexts and relationships.

In line with a recent statement from the American Sociological Association ([Article](#), Sept 2019) questions for students should focus on their experiences and be framed as an opportunity for students to provide feedback, rather than positioning the request as a formal and global evaluation of the teacher.

4. Student leadership on both campuses should be actively engaged in raising the profile of student feedback on instruction.

Gathering and considering feedback on teaching and learning from students is a responsibility shared between faculty and students. Student leadership should play an active and visible role in raising awareness of the purposes for, and ways in which, this feedback can improve instruction. Student leadership should also be part of efforts to raise awareness of comments that are not appropriate and/or counter-productive in the context of an anonymous survey.

UMI Questions

5. UMI-6 (*Overall the instructor was an effective teacher*) should be retained in the core question set, but modified.

The Working Group had extensive discussions about the inclusion or deletion of this item. Analysis of UBC data indicates that UMI-6 scores are able to be predicted to a high degree of confidence based on a weighted linear combination of other UMI questions (except UMI-4). However, in its current form, UMI-6 asks students to directly evaluate the ‘overall effectiveness of the teacher’. As we have argued above, students are not in a position to be able to make sweeping, all-inclusive judgments about the effectiveness of instruction. On balance, the Working Group recommends retaining UMI-6, but rewording it as ‘*Overall, this instructor was*

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effective in helping me learn'. This centres the question on the individual experience of the student.

6. Minor changes in wording of other UMI questions are suggested to better reflect the focus on each student's experience of instruction.

The instructor made it clear what students were expected to learn, to be changed to

The instructor made it clear what I was expected to learn

The instructor helped inspire interest in learning the subject matter, to be changed to

The instructor engaged me in the subject matter

The instructor communicated the subject matter effectively to be changed to

I think that the instructor communicated the subject matter effectively.

The instructor showed concern for student learning to be changed to

I think that the instructor showed concern for student learning

The latter two questions are phrased so as to balance first person perceptions with overall cohort experience and classroom climate.

7. UMI-4 (Overall, evaluation of student learning was fair) should be removed from the common set

UMI-4 is something of an outlier in the current UMI set used in Vancouver campus surveys. It is consistently answered by fewer students. It is also problematic because the concept of 'fairness' is highly ambiguous. Student consultations have indicated they are often unsure how to interpret what 'fairness' means.

8. A new UMI item, pertaining to the usefulness of feedback, should be trialled.

Whilst the working group recommends removal of the previous UMI-4 item, on fairness of assessment (see recommendation 4), there was a strong sense that, given the importance of timely and effective feedback in the learning process, this should be reflected in the core UMI questions.

We recommend a question worded as follows: *"I have received feedback that supported my learning"*. However, this question should be piloted in a limited set of courses in 2020/21 to ensure that we understand how responses might be influenced by variables such as class size, etc. It is certainly the case that the opportunity to provide feedback, and indeed the nature of that feedback (e.g., written and / or numerical), will look very different in a seminar class of 20 compared to a large introductory lecture of 200. We should collect data from a pilot to better set. The results of the pilot could be included in the 2020/21 Report to Senates and a decision taken on how to proceed.

9. There should be a common set of UMI questions asked across both campuses

There should be a commonly-used core set of five or six questions across both campuses. Modular approaches to constructing feedback surveys may be appropriate (university-wide items plus Faculty, Department and course-specific items). However, units should be mindful that most students complete several surveys per semester, potentially causing 'feedback fatigue' and reducing rates of participation. Therefore, units should be mindful of the overall length of feedback surveys students are being asked to complete. Units should also explore other ways to gather specific feedback as the course progresses.

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Data and Reporting

10. Units should be supported to adopt a scholarly and integrative approach to evaluation of teaching.

Because teaching is complex and contextually dependent, departments and units should be supported to adopt an integrative and scholarly approach to evaluation that synthesizes multiple data sources (e.g., students, peers, historical patterns, and self-reflection documentation) for a holistic picture, without over-reliance on any single data source. This approach will necessarily look different in different units but should include both in-kind support from units such as CTLT/CTL and funding for department leaders to accomplish the work proposed. When used for personnel decisions, the unit's approach, strategy, and norms can then be communicated to all levels of review, along with the file. The VPAs on both campuses should work with the Senior Appointments Committee (SAC) to identify and disseminate anonymous examples of effective ways to integrate, synthesize and reconcile multiple perspectives on teaching effectiveness.

11. Reporting of quantitative data should include an appropriate measure of centrality, distributions, response rates and sample sizes, explained in a way that is accessible to all stakeholders, regardless of quantitative expertise.

The interpolated median should be used as the measure of centrality, with the dispersion index as a measure of spread. Reports should include distributions of responses, response rates and sample sizes, clearly flagging where response rates do not meet minimum requirements for validity and accuracy. Visualizations of comparative (anonymous) data should be developed, along with an on-going program of consultation and dissemination to different groups (faculty, staff and administrators).

12. UBC should prioritize work to extract information from text/open comments submitted as part of the feedback process.

Many faculty members report the free-text student comments as sources of rich data to support reflection and enhancement of their course and teaching. It is recommended that a pilot investigation be undertaken, with one or more Faculties, to investigate the potential of automated approaches to extract useful information from large volumes of text submissions. The pilot should engage with appropriate research expertise in Faculties in these areas, and aim initially for formative purposes. There is an opportunity for UBC to take a lead among institutions in providing balance and insight when combining quantitative and qualitative data. Failing to do this continues to privilege quantitative over qualitative data about teaching.

Dealing with Bias

13. UBC needs additional and regularized analysis of our own data to answer questions related to potential bias, starting with instructor ethnicity, as it is frequently highlighted as a potential source of bias in the literature on student evaluation of teaching.

An analysis of UBC-V data with respect to instructor and student gender over the last decade reveals no systematic differences in aggregate data of ratings received by female vs. male instructors. Variables tested for (including instructor and student gender) indicate aggregate differences at the level of approximately +/- 0.1 on a 5-point scale, in other words, very small

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effects. Course-specific effects (e.g., subject discipline, course level) demonstrate larger effects (typically +/- 0.3 on the same scale). An analysis of UBC-O data across 2015-16 and 2018 academic year revealed mixed results, as are detailed in Appendix 3.

For both campuses, it is important to note that this is an analysis of aggregate data and, as such, will mask variation on an individual level. The lived experience of individual instructors may be quite different from this aggregate view. However, holistic evaluations of a person's teaching (see: Recommendation 15) can be used to contextualize individual instructors' experience. We cannot stress enough the importance of a holistic evaluation that allows individual lived experiences to be heard, particularly if their lived experience runs counter to the aggregate data.

Given that studies have presented evidence of bias on the basis of instructor ethnicity, it would seem both appropriate and timely that the same analysis be brought to bear in checking the UBC data for bias. This work comes with privacy and ethical implications. We recommend developing a process that would allow instructor ethnicity data to be accessed confidentially for regular investigation of bias. We have not been able to address this analysis during the timescale of this working group and thus recommend a follow-on activity to investigate this, reporting back to Senates during the 2020-2021 academic year. The follow-on report would also be in a position to recommend regularized analysis and mitigation strategies to address any systematic biases found, particularly related to gender and/or ethnicity.

14. The work of collecting, integrating, interpreting and using feedback on teaching should mitigate against bias, but should not presume the complete removal of bias.

As with most other forms of surveys, student feedback on instruction cannot be completely free from bias. Bias can be explicitly discriminatory and perpetuating of stereotypes. But bias can also be implicit, where respondents are not consciously aware of how their attitudes influence their responses. Implicit biases have been shown to occur in many domains and the general approach at UBC (e.g., on hiring committees) has been one of mitigation through education and awareness raising.

This recommendation is supported by an analysis of the voluminous literature on the topic of student evaluations of teaching, and interrogation of the UBC dataset at multiple points in the last 10 years. The research literature reports studies on a wide variety of instruments and processes, with considerable variation in the scope of data collected. Individual studies are often reported in the mainstream academic press, sometimes with extrapolation beyond the context and the effects found in the initial study. Studies investigating a variety of instructor effects (e.g. age, gender, ethnicity) vary in whether they show bias, no bias or bias toward (rather than against) female instructors. In the subset of published studies where biases are found, and enough detail is provided to be able to discern the effect size, those effect sizes on aggregate are small.

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Broader Issues

15. The Vancouver Senate should review the policy on Student Evaluations of Teaching and consider a broader policy on the evaluation of teaching writ large. The Okanagan Senate should develop a similar policy for the Okanagan campus.

Student feedback, both quantitative and qualitative, should be integrated with other forms of data to estimate the effectiveness of a faculty member's teaching. The current policy (2007) says little about how student feedback should be integrated with other forms of data before making judgments about the effectiveness of teaching. Therefore, it is appropriate to revisit the UBC-V Senate Policy on Student Evaluation of Teaching and consider adding or replacing it with a policy that sets forth a broader and teaching. Similar processes should be applied and governed by either a joint Senate policy, or aligned policies for each campus.

16. Senate should commit to support the ongoing work of implementing policies related to the evaluation of teaching.

Career advancement decisions are made on the recommendation of Departmental, Faculty and a system-wide Senior Appointments Committee, each of whom is tasked to evaluate teaching effectiveness as a component of every case. It is imperative that UBC commit to providing the necessary resources and training, including administrative and technological support, to implement Senate policies on evaluating teaching (see Recommendation 15). Faculty members must be given the tools, resources, and support to effectively present a scholarly case for their teaching effectiveness. Likewise, evaluators at all levels must be adept at appropriately interpreting and contextualizing the kinds of data offered across diverse disciplinary and teaching contexts, with due consideration to multiple sources of data and the limitations of each.

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Appendix 2 – Steering & Implementation Committees Membership and Consultations

The Steering committee and Implementation Group began work in the Fall 2020, and smaller groups also worked on specific items.

Steering Committee, 2020-2021

Support: Debbie Hart, Senior Manager, Strategic Projects

Simon Bates	Associate Provost, Teaching and Learning, UBCV (Co-chair)
Moura Quayle	Vice Provost, Associate Vice-President Academic Affairs, UBCV, (Co-chair)
Stefania Burk	Associate Dean Academic, Faculty of Arts, UBCV
Sage Cannon	Students Union Okanagan - Faculty of Creative & Critical Studies Representative
Julia Mitchell	Director, Communications & Marketing, Office of the Provost & Vice-President Academic, UBCV
Karen Rangoonaden	Chair, Senate Learning and Research Committee, UBCO
Rehan Sadiq	Professor and Executive Associate Dean, School of Engineering, UBCO
Naznin Virji-Babul	Assistant Professor, Physical Therapy Senior Advisor to the Provost on Women and Gender-Diverse Faculty, UBCV
Georgia Yee	Vice-President Academic and University Affairs, UBCV

Implementation Committee, 2020-2021

Support: Debbie Hart, Senior Manager, Strategic Projects

Christina Hendricks	Academic Director, CTLT, Professor of Teaching, Philosophy, UBCV (Chair)
Vanessa Auld	Professor / Head, Research Group Co-leader - Cellular Mechanisms of Development and Disease, UBCV
Breeonne Baxter	Communications Manager, VPA Communications, UBCV
Brendan D'Souza	Lecturer, Department of Biology, UBCO
Tanya Forneris	Interim Academic Lead, CTL, Associate Professor of Teaching, School of Health & Exercise Sciences, UBCO
Mark Lam	Lecturer, Department of Psychology, UBCV
Stephanie McKeown	Chief Institutional Research Officer (PAIR)
Marianne Schroeder	Sr. Associate Director, Teaching and Learning Technologies, CTLT, UBCV (Sept. 2020-Feb. 2021)
Abdel-Azim Zumrawi	Statistician, CTLT, UBCV (Feb. 2021 onwards)

Student Evaluation of Instruction Senate Report April 2021

Advisory group on changes to UMI

Christina Hendricks	Academic Director, CTLT, Professor of Teaching, Philosophy, UBCV
Stephanie McKeown	Chief Institutional Research Officer (PAIR)
Catherine Rawn	Professor of Teaching, Psychology, UBCV
Bruno Zumbo	Professor, Canada Research Chair in Psychometrics and Measurement, Tier 1; & Paragon UBC Professor of Psychometrics and Measurement Educational and Counselling Psychology, and Special Education, UBCV
Abdel-Azim Zumrawi	Statistician, CTLT, UBCV

Group working on discussion paper on integrative approach to evaluating teaching

Tanya Forneris	Interim Academic Lead, CTL, Associate Professor of Teaching, School of Health & Exercise Sciences, UBCO (Chair)
Brendan D'Souza	Lecturer, Department of Biology, UBCO
Christina Hendricks	Academic Director, CTLT, Professor of Teaching, Philosophy, UBCV
Jaclyn Stewart	Deputy Academic Director, CTLT, Associate Professor of Teaching, Chemistry, UBCV

Starting in the Fall of 2020 the Implementation Committee has been consulting with several different groups, which have informed and provided feedback on the work of implementing the recommendations.

In addition to the work detailed above to test the new UMI, discussions have been held with and feedback collected from:

- UBC Vancouver:
 - Senate Teaching & Learning Committee
 - Associate Deans Academic, Students, and Faculty
 - Heads & Directors (at a Provost's Heads & Directors meeting)
- UBC Okanagan:
 - Senate Learning & Research Committee
 - Deans Council
 - Student Academic Success Committee
- Across both campuses:
 - Senior Appointments Committee
 - Open forum March 10, 2021 (over 100 faculty, staff and students joined)

We will continue with our communications and building out of information available for access via the website seoi.ubc.ca. Please see the section on upcoming activities in the main report, above.

Student Evaluation of Instruction Senate Report April 2021

Appendix 3 – Table of Contents for a Discussion Paper on Integrative Evaluation of Teaching

Outline for Discussion Paper on an Integrative Approach to the Evaluation of Teaching

Background/Context

- Why we evaluate teaching at UBC / the purposes of evaluating teaching
- Background and current context at UBC in terms of the evaluation of teaching (summary, with more detail below)
- Types of Evaluation (e.g., formative and summative) and the role of each in the evaluation process
- Identification of gaps/concerns
- Explain why a more integrative approach is needed

Summary of Practices at UBC (examples from both campuses):

- How is teaching being evaluated here and how does this vary across the institution
- Examples of good practices already in place
- Identify issues and/or areas for improvement

What is an Integrative Approach to the Evaluation of Teaching?

- Define what is meant by an integrative approach to the evaluation of teaching
- A brief summary of relevant research literature on equitable evaluation practices that are likely to promote improvements in teaching
- A summary and examples of work being done at other institutions who have adopted a scholarly and integrative approach to evaluation of teaching

Best Practices for Implementing an Integrative Approach to the Evaluation of Teaching

- Describe the process of how these institutions implemented these changes
 - Approaches other institutions have used to have academic units across the institution adopt the change
 - Processes other institutions have used to integrate this work into policies related to tenure and promotion as well as merit processes
- Challenges in developing and implementing an integrative approach
 - Lessons learned in the implementation process and what institutions would now change/adapt
 - Possible solutions to the identified challenges and barriers
- Identify best practices for implementation, based on published resources as well as interviews with key institutions who have gone through the process

Student Evaluation of Instruction Senate Report April 2021

Recommendations for Establishing an Integrative Approach at UBC

- A set of guiding principles for how an integrative approach to evaluating teaching should take place at UBC. Guiding principles initially discussed include but are not limited to processes that are streamlined, useful, and forward looking towards improving teaching.
- Considerations for how to address the different requirements for summative evaluation of teaching for faculty in different roles.
- Discussion within the implementation committee has noted that the development and implementation of an integrative approach at UBC should include input from all parts of the UBC community, including faculty, students, and staff.

19 May 2021



Vancouver Senate
THE UNIVERSITY OF BRITISH COLUMBIA

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19 May 2021

To: Vancouver Senate

From: Senate Tributes Committee

Re: Candidates for Emeritus Status (approval)

The Tributes Committee recommends approval of the following motion:

Motion: *"That the attached list of individuals for emeritus status be approved and that, pursuant to section 9(2) of the University Act, all persons with the ranks of, Professor, Associate Professor, Assistant Professor, Professor of Teaching, Associate Professor of Teaching, or Administrative Librarian be added to the Roll of Convocation."*

Respectfully submitted,

Dr. John H.V. Gilbert, Chair
Senate Tributes Committee

Name	Rank	Faulty	Emeritus Title
Lim, Choon Jim	Professor	Faculty of Applied Science	Professor Emeritus of Chemical & Biological Engineering
Kannangara, Dhanesh	Associate Professor of Teaching	Faculty of Applied Science	Associate Professor of Teaching Emeritus of Chemical & Biological Engineering
Schoen, Michael	Associate Professor of Teaching	Faculty of Applied Science	Associate Professor of Teaching Emeritus of Chemical & Biological Engineering
Posarac, Dusko	Associate Professor of Teaching	Faculty of Applied Science	Associate Professor of Teaching Emeritus of Chemical & Biological Engineering
Soussloff, Catherine	Professor	Faculty of Arts	Professor Emeritus of Art History, Visual Art and Theory
Braund, Susanna	Professor	Faculty of Arts	Professor Emeritus of Classical, Near Eastern, and Religious Studies
Arnovick, Leslie	Professor	Faculty of Arts	Professor Emeritus of English Language and Literatures
Job, Brian	Professor	Faculty of Arts	Professor Emeritus of Political Science
Paulhus, Delroy Lorenzo	Professor	Faculty of Arts	Professor Emeritus of Psychology
Cullis, Pieter	Professor	Faculty of Medicine	Professor Emeritus of Biochemistry and Molecular Biology
Lawrence, McIntosh	Professor	Faculty of Medicine	Professor Emeritus of Biochemistry and Molecular Biology
Hymel, Shelley	Professor	Faculty of Education	Professor Emeritus of Education
Young, Richard	Professor	Faculty of Education	Professor Emeritus of Education
Crocker, Peter	Professor	Faculty of Education	Professor Emeritus of Kinesiology
Sheppard, Stephen	Professor	Faculty of Forestry	Professor Emeritus of Forest Resource Management
Edinger, Elizabeth	Associate Professor	Faculty of Law	Associate Professor Emeritus of Law
Johnston, Darlene	Associate Professor	Faculty of Law	Associate Professor Emeritus of Law
Herbert, Carol	Professor	Faculty of Medicine	Professor Emeritus of Family Practice
Wong, Peter	Professor	Faculty of Medicine	Professor Emeritus of Pediatrics
Langton, Nancy	Associate Professor	Sauder	Associate Professor Emeritus of Commerce and Business Administration

Winter, Ralph	Professor	Sauder	Professor Emeritus of Commerce and Business Administration
Tiedje, Thomas	Professor	Faculty of Science	Professor Emeritus of Physics & Astronomy and Electrical & Computer Engineering
Roskams, Jane	Professor	Faculty of Science	Professor Emeritus of Zoology
Pitcher, Tony	Professor	Faculty of Science	Professor Emeritus of Zoology
Ciufolini, Marco	Professor	Faculty of Science	Professor Emeritus of Chemistry
Rensink, Ronald	Associate Professor	Faculty of Science	Associate Professor Emeritus of Computer Science
Thompson, Charles	Professor	Faculty of Science	Professor Emeritus of Microbiology
Affleck, Ian	Professor	Faculty of Science	Professor Emeritus of Physics & Astronomy
Rihela, Jillian	Clinical Associate Professor	Faculty of Medicine	Clinical Associate Professor Emeritus of Occupational Therapy and Occupational Science
Ansley, David	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Anesthesiology, Pharmacology & Therapeutics
Enright, Angela	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Anesthesiology, Pharmacology & Therapeutics
Grant, Raymer	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Anesthesiology, Pharmacology & Therapeutics
Harper, Jon	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Anesthesiology, Pharmacology & Therapeutics
Montgomery, Carolyne	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Anesthesiology, Pharmacology & Therapeutics
Colbourne, Margaret	Clinical Associate Professor	Faculty of Medicine	Clinical Associate Professor Emeritus of Pediatrics
Thomson, Sydney	Clinical Associate Professor	Faculty of Medicine	Clinical Associate Professor Emeritus of Obstetrics & Gynaecology
Woo, Henry	Clinical Associate Professor	Faculty of Medicine	Clinical Associate Professor Emeritus of Obstetrics & Gynaecology
Bugeaud, Danielle	Administrative Librarian	VP Academic & Provost	Administrative Librarian Emeritus
Beauchamp, Richard*	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Orthopedics

Schubert, Harold*	Clinical Associate Professor	Faculty of Medicine	Clinical Associate Professor Emeritus of Emergency Medicine
Scoble, Malcolm*	Professor	Faculty of Applied Science	Professor Emeritus of Mining Engineering
Van Zyl, Dirk Jacobus A*	Professor	Faculty of Applied Science	Professor Emeritus of Mining Engineering
Veiga, Marcello*	Professor	Faculty of Applied Science	Professor Emeritus of Mining Engineering
Jetha, Nasir*	Clinical Professor	Faculty of Medicine	Clinical Professor Emeritus of Pediatrics
Miller, Dianne*	Associate Professor	Faculty of Medicine	Associate Professor Emeritus of Obstetrics & Gynaecology

*Previously approved December 2020. Included here for the purposes of editorial corrections.



Date: April 20, 2021

To: UBC Vancouver Senate

From: Andrew Szeri, Provost and Vice-President Academic

Re: **Establishment of Language Sciences Institute GREX Designation**

Recommendation:

I recommend that Senate designate the Language Sciences Institute as a Global Research Excellence Institute, effective May 19, 2021.

About UBC Language Sciences

Since 2015, Language Sciences (LangSci) has leveraged the University of British Columbia's position as a locus of ground-breaking research and education in the science of language to initiate and advance interdisciplinary collaborations between researchers, communities, and industry, most notably, through the successful Social Sciences and Humanities Research Council (SSHRC) Partnership Grant 'Ensuring Full Literacy in a Multicultural and Digital World'. With the success of this grant (the largest collaborative grant available in Canada specifically for the humanities and social sciences), UBC has emerged as a global leader in language research. Formal recognition and sustained funding as a Global Research Excellence Institute at UBC is now needed to enable LangSci to cement and magnify its global status and to address vital emerging and longer-term challenges.

As a Global Research Excellence Institute, LangSci will reach new heights in catalyzing interdisciplinary research programs; engaging with community and industry partners; enriching public knowledge and discourse; promoting equity, diversity, and inclusion at and beyond UBC; and fully realizing our global leadership in the emerging international language sciences research network.

Institutional Goals

Over the next five years, LangSci will establish greater visibility, both on UBC campuses and in the community beyond. Early signs of this growing visibility include the new trend of new faculty candidates in language-related fields reaching out to learn more about LangSci during their campus visits. Language would be recognized as a core area of research excellence by university leadership, and more candidates interviewing at UBC would have some research connection to



language. Other units at UBC, including departments, centres and institutes, and public-facing units such as the Chan Centre and the Museum of Anthropology would approach LangSci to collaborate on public talks, events, performances, and exhibitions. Moreover, the presence of a LangSci institute on campus will provide an enhanced space for creative, innovative research connections across departments, schools, and faculties, and a niche for those connections to grow into grant applications, co-supervision opportunities, policy briefs, and creative works.

Governance and Operational Structure

Academic Co-directors

Since its founding in 2015, LangSci has had two co-directors from different departments, in order to share the administrative burden of the position and foster broader collaboration between units. Dr. Janet Werker is a University Killam Professor in the Department of Psychology, and Dr. Bryan Gick is Professor and Department Head in Linguistics. The co-directors will define and lead LangSci's research program, with support from the LangSci Research Leads. The co-directors will also provide oversight on curriculum-related efforts (expanding interdisciplinary language sciences curriculum at the undergraduate and graduate level, and exploring and facilitating language sciences-related graduate programs and language sciences graduate streams) and lead efforts in cultivating an international language sciences network. The new CRC in Language Sciences (Department of Psychology) will serve as one of the two Academic Co-directors in the future.

Deans' Council

The Deans' Council (DC) is chaired by the Dean of Arts (Dr. Gage Averill) and includes as well the deans of the faculties of education, medicine, and science. The Academic Co-directors will report to the Chair of the DC regarding academic issues, including institute management, direction, and fiscal accountability. The committee will meet once yearly.

V-P, Research and Innovation and the Research and Innovation Council

The Academic Co-directors will also report to the Vice-President, Research and Innovation (Dr. Gail Murphy) in her role as VPRI and Chair of the UBC Research and Innovation Council (RIC), which is responsible for overseeing GREx institutes. The RIC includes the Provost and Vice-President, Academic (Vancouver), the Associate VP Research and Innovation (Vancouver), the Associate VP Research and UBC Okanagan Vice Principal Research, three Deans, and three external members. The VPRI will oversee matters related to the GREx Institute and share oversight with the Chair of the Deans' Council on matters such as fiscal accountability and alignment of the institute strategic plan with external funding opportunities.

International Academic Advisory Board

The Language Sciences Institute will create an Academic Advisory Board (AAB), comprising language researchers in academia, government, and industry. The AAB will provide leadership, guidance, and oversight for the proposed LangSci GREx's research. In addition to a term-based



roster of advisory board members, the AAB, in collaboration with the Co-directors and Steering Committee, will identify ad hoc members to advise on specific priority or emerging areas of need.

Steering Committee

The Steering Committee (SC) will be comprised of the Academic Co-directors (Chairs), the Research Theme and Challenge Leads; the coordinator; at least one graduate student or postdoctoral fellow; the current chairs of the Language Sciences Undergraduate Research Conference (ex officio) and up to three faculty members who will provide high-level expertise in areas such as Indigenous community engagement, knowledge translation and mobilization, and industry partnerships. The SC will ensure that planned research activities within the established research challenges progress and reach key deliverable milestones, and contribute to long-term planning for graduate and undergraduate training, equity, diversity, and inclusion, industry partnerships, and community engagement and knowledge mobilization. The SC will meet every two months, or more frequently as needed.

Operational Oversight

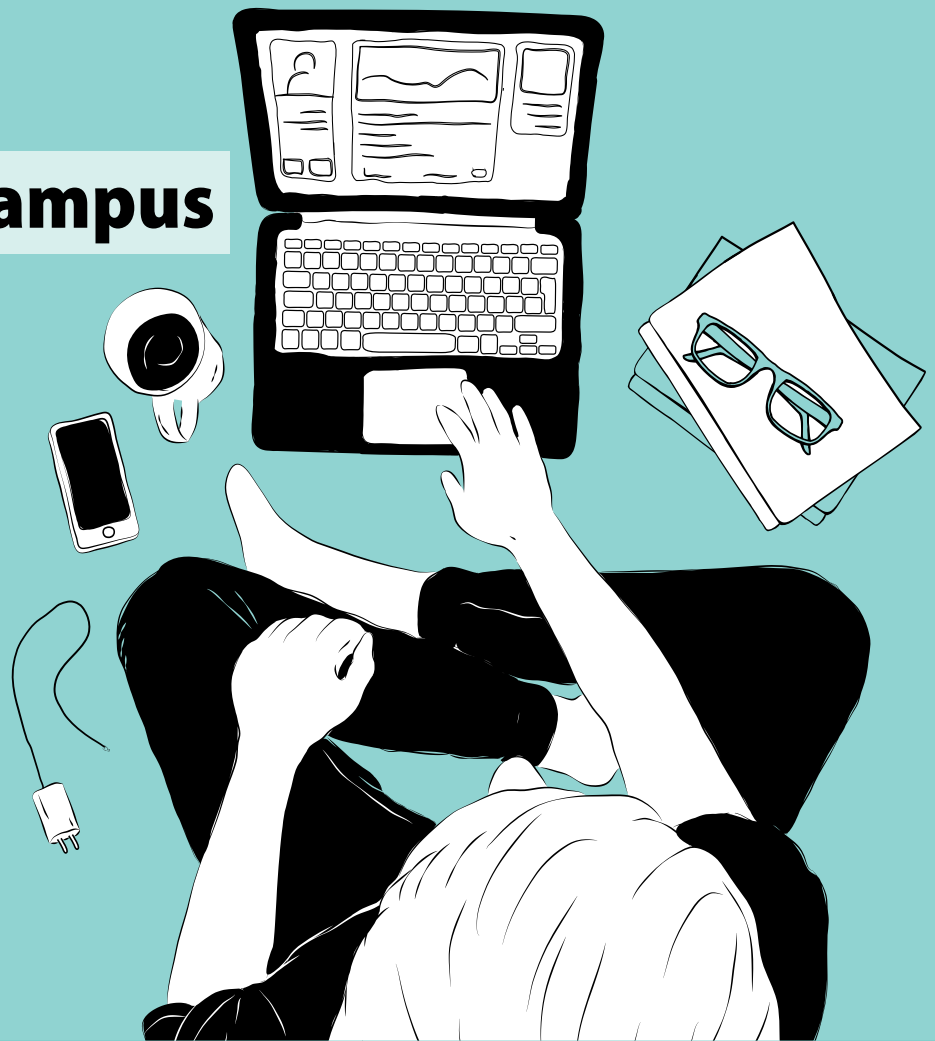
The LangSci coordinator will serve as the central point of contact for the Language Sciences Institute and develop member programming such as general member events, workshops, and roundtables that facilitate conversations and lead to new interdisciplinary collaborations in research, teaching, and community partnerships in Language Sciences. The coordinator will also provide budget planning and oversight support to the LangSci Co-directors, and provide grant facilitation support for large-scale, institute-level grants when needed. In collaboration with the VPRI, the LangSci coordinator will support the development of new industry, community, and institutional partnerships. LangSci will also employ a communications specialist (80% FTE) to oversee day-to-day communications of the Institute, including publishing regular stories about LangSci research, teaching, and community outreach activities and where appropriate pitching stories to UBC Media Relations for wider dissemination; maintaining LangSci's social media presence; publishing a monthly newsletter; organizing and advertising events such as the LangSci Talks series, public film screenings, and general member events; and supporting the development of annual reports to the Deans' Committee, Academic Advisory Board, Research and Innovation Council, LangSci members, and donors.



COVID-19

Return-to-Campus

Primer



April 30, 2021

Primer produced by
B.C. Post-Secondary Institutions
with the support of the Ministry of
Advanced Education and Skills Training

COVID-19 Return-to-Campus Primer

The *COVID-19 Go-Forward Guidelines for B.C.'s Post-Secondary Sector (Guidelines)* are being updated by a team of experts from the public post-secondary sector, and representatives from the Office of the Provincial Health Officer, Regional Health Authorities and the BC Centre for Disease Control. Updated guidelines will reflect predicted COVID-19 conditions for the fall along with updated infection prevention and control measures appropriate for those conditions. Flexibility and adaptability based on scientific evidence and epidemiology to manage the COVID-19 virus will continue to be important as the post-secondary system returns to on-campus activities.

The *Guidelines* are expected to be released in the coming weeks with implementation planned for August 1st. In the interim, the *COVID-19 Return-to-Campus Primer* is a planning tool intended to provide high-level guidance to support planning for the safe return of students, faculty and staff throughout the summer, and the updating of campus safety plans in anticipation of a full return to face-to-face instruction. Until the revised *Guidelines* are implemented on August 1st, the current *Guidelines* remain in effect.

Planning Context

On March 8, 2021, B.C.'s Provincial Health Officer, Dr. Bonnie Henry, advised public post-secondary institutions to begin planning for a full return to on-campus teaching, learning and research in September 2021 (see Attachment 1). It is very important for everyone's health and well-being to get back on campus. Dr. Henry expressed deep confidence that the combination of mass immunization contributing to community immunity, the application of revised health and safety protocols in the *COVID-19 Go-Forward Guidelines for B.C.'s Post-Secondary Sector*, and the regular review and updating of multi-layered institutional safety plans will support the safe resumption of on-campus activities.

Planning for a full return to campus at a time when COVID-19 infections are high requires institutions to look with extra care at what campus conditions are likely to be in September 2021. Planning assumptions and guidance for returning to campus will be informed by a continued commitment to protecting the health, safety and well-being of the campus community, while remaining mindful of the importance of adaptability as conditions change.

Fall Planning Assumptions

By September 2021, it is anticipated that:

- COVID-19 transmission will be low, and more importantly serious infections will be uncommon. COVID-19 is a virus that is unlikely to be eliminated from the population. However, COVID-19 can be managed in the same manner as other common respiratory infections.
- All adults in B.C. will have had an opportunity to receive at least one dose of the COVID-19 vaccine before July 1, 2021, while many will have received two doses by the end of August.

Infection Prevention and Control Measures

Based on guidance from the Provincial Health Officer and experience to date within B.C. and other jurisdictions, controlled environments such as post-secondary educational settings are lower-risk sites for COVID-19 transmission. The multiple layers of infection prevention measures in place have helped post-secondary campuses remain open and available for learners with remote adaptive learning while successfully minimizing the spread of COVID-19.

While elimination of the COVID-19 virus is not feasible in the near future, we can certainly adapt to living with COVID-19 as we do with other manageable seasonal ailments such as influenza. Immunization and prevention and exposure control measures are the tools we have to make everyone less vulnerable to getting COVID-19 or experiencing serious outcomes.

Preventing the spread of COVID-19 relies on everyone doing their part, including immunization, self-administered health checks, staying home when sick, wearing masks when appropriate, practicing hand hygiene, and maintaining strong public health measures such as monitoring, testing and contact tracing protocols.

Authorized vaccines have proven to be highly effective at reducing serious outcomes from the COVID-19 virus. B.C. is expecting all adults in the province to have the option of receiving their first dose of a COVID-19 vaccine

before July 1, 2021. As immunization programs roll out, their positive effects will build at the population level, reducing transmission in communities, decreasing serious outcomes of COVID-19, and thereby even protecting unvaccinated individuals.

As conditions improve through the summer, it is reasonable to expect that some of the more restrictive public health measures affecting our personal and professional lives will be relaxed and replaced with other proven infection prevention and control measures. While no single layer of protection against COVID-19 is perfect, when multiple layers of protection are combined, the risk of transmission is significantly reduced. Due to the anticipated effect of the immunization program, the layering of core public health measures, and the tailoring of prevention and control measures, physical distancing will not be required in controlled post-secondary classrooms and instructional settings.

Core measures that are expected to remain in place for September, until otherwise determined by the Provincial Health Officer, include:

- Completing a daily COVID-19 self-assessment and not attending campus when ill;
- Following handwashing and hygiene protocols;
- Maintaining up-to-date campus COVID-19 Safety Plans;
- Continuing daily cleaning protocols in all indoor settings and on high touch surfaces; and
- Requiring non-medical masks in indoor common areas depending on the rate of COVID-19 transmission.

Some federal travel restrictions may remain in place in the fall. It is anticipated that students entering Canada to study will continue to be permitted entry if they are attending a designated learning institution with a COVID-19 readiness plan approved by the province. These students will be required to continue following federal testing and quarantine requirements in place at the time of entry into Canada.

Safety is Everyone's Responsibility

We can all contribute personally and professionally by getting vaccinated (as we are able), following campus safety plans, performing our daily health check, staying home when sick, wearing masks as required, following handwashing and hygiene etiquette, and following public health orders and guidelines both on and off campus.

It is up to each one of us to do our part, but it is our collective efforts that will make the difference.

General Campus Planning

In addition to a comprehensive immunization program, a number of core public health measures and tailored infection prevention and control measures are expected to continue to support the safe resumption of on-campus activities. These anticipated measures are outlined below.

Campus Logistics

- Daily self-assessment for COVID-19 symptoms will continue. Individuals experiencing symptoms should stay home, consult the BC COVID-19 self-assessment tool to determine if COVID-19 testing is needed, and contact 811 or their healthcare provider for medical advice as necessary.
- Where possible and practical, managing the safe flow of pedestrian traffic within buildings and confined areas will be recommended, at least in the short term. Directional arrows in hallways for traffic flow and denoting building entrances and exits are recommended. Furniture for informal or non-educational/non-study use should be organized to discourage crowding. Directions should be posted to minimize time spent in confined spaces (e.g. elevators, washrooms).

- Anticipate a role for non-medical masks. Institutions should anticipate that masks may be required in indoor common areas including lobbies, hallways, washrooms, elevators, kitchens, break rooms, and other high-traffic common areas where individuals circulate freely. Any requirements for masks in more structured indoor settings like classrooms, libraries, and work spaces will be informed by the Provincial Health Officer and the *COVID-19 Go-Forward Guidelines for B.C.'s Post-Secondary Sector*.
- WorkSafeBC continues to advise that building ventilation systems, in good operating condition, do not contribute to the spread of COVID-19. Institutions should ensure that building ventilation (HVAC) systems are operating and maintained in accordance with WorkSafeBC requirements and relevant ASHRAE¹ Standards for indoor air quality.
- Barriers or partitions may continue to be used in busy client-facing settings including retail checkouts, kiosks, and food service counters. They may also be considered in smaller, open office spaces where multiple workstations are in close proximity.

1 ASHRAE – the American Society of Heating, Refrigerating and Air-Conditioning Engineers

Student Housing and Dining Facilities

- On-campus student housing providers can plan for full or close-to-full occupancy for the fall. Institutions may wish to hold back 1-2% of total student housing beds for the isolation or quarantine of students in the event of infection.
- It is anticipated that dining facilities for student housing and cafeterias serving students, faculty and staff at educational institutions will continue to be exempt from any provincial closure orders for restaurants and bars. On-campus restaurants and pubs should follow the provincial requirements for food and liquor serving premises including closures and restrictions when applicable.

Cleaning and Hygiene

- Hand hygiene should be actively promoted. Hand sanitization stations are recommended for placement outside classrooms, at regular intervals throughout common spaces and at the entrances/exits to all public spaces.
- Educational spaces, public spaces and high touch areas should be cleaned daily and routinely. Cleaning between classes is not required.

COVID-19 Safety Plans

- Before resuming activities on-campus, WorkSafeBC requires each post-secondary institution to have a COVID-19 Safety Plan in place. The Safety Plan outlines the policies, guidelines, and procedures in place to reduce the risk of COVID-19 transmission. These plans should be aligned with the safety guidance and layers of protection outlined in the current version of the *COVID-19 Go-Forward Guidelines for B.C.'s Post-Secondary Sector*, and follow any additional health and safety protocols prescribed by WorkSafeBC.

Faculty and Staff Considerations

- We acknowledge that some faculty and staff may feel anxious or hesitant about a return to campus. Employees should be clearly informed of new or updated workplace safety procedures, and how they are designed to protect faculty and staff from COVID-19 before returning to the workplace.
- Formal requests for a medical accommodation should be considered based on the individual circumstances and in accordance with collective agreements, legal obligations and established accommodation review timelines.
- Faculty and staff are eligible to take up to three (3) hours of paid leave to be vaccinated against COVID-19. Amendments to the Employment Standards Act provide this support for both doses of the vaccine.
- Faculty and staff absences may be higher than during pre-pandemic periods due to ongoing self-assessment and self-isolation requirements. While community transmission is expected to be very low, employees may need to take time off or work from home if diagnosed with COVID-19, or advised to self-isolate or quarantine as part of the contact tracing process.

Related Public Health Guidelines

- For guidelines that relate to other aspects of campus operations beyond the delivery of post-secondary education and training, the post-secondary sector will continue to rely on Provincial Health Officer orders and guidelines developed and updated for other sectors (e.g., size of outdoor gatherings, use of athletic and recreational facilities, travel, retail services, etc.).
- Institutions should continue to work with their local medical health officers for campus-specific questions, local / regional public health guidance, and COVID-19 case and contact management.

- COVID-19 vaccines are available to all adults living, working or studying in BC during the pandemic. You do not need a Personal Health Number, BC Services Card or to be enrolled in B.C.'s Medical Services Plan to get the vaccine. All adult students will be eligible to receive the vaccine, including International students. The COVID-19 vaccine will not be mandatory. There are no vaccines in Canada that are mandatory. However, [*ImmunizeBC*](#) highly recommends getting the vaccine.
- Rapid point-of-care screening for COVID-19 is being used by BC Health Authorities for COVID-19 testing in settings with increased risk of transmission and/or outbreaks. Point-of-care testing for COVID-19 is available to post-secondary institutions that meet the indications outlined in B.C.'s [*Rapid Point of Care Testing Strategy*](#). Institutions interested in rapid COVID-19 point-of-care tests can email RapidPOCTeam@phsa.ca for an intake assessment.

Educational Activities:

- Educational activities are defined as those activities offered with the intention of delivering and/or supporting student learning and development. Educational activities include both structured activities scheduled in classrooms, lecture theatres, libraries, studios, workshops, labs, field schools, practicum, performance, or research settings as well as informal activities engaged in by faculty, staff and students that support teaching, learning, research, and student development.
- Institutions have the discretion to identify which activities are considered educational activities based on the above definition.
- Educational activities associated with orientation events are encouraged. Non-educational or social activities throughout the year should be planned according to the prevailing Provincial Health Officer orders in effect at that time.

Classroom Logistics

The Provincial Health Officer has indicated that there are no limits on the number of participants for in-class educational activities. Fall classes can be scheduled without physical distancing requirements (e.g. a classroom with 30 seats can be scheduled with 30 students; a lecture theatre with 150 seats can be scheduled with 150 students).

It is recommended that students select a specific seat / space within a class or lab at the start of term, and endeavour to use that same seat or sit in the same immediate area until the end of term. There will be no requirement for institutions to cohort students, specifically assign seats, or take attendance for educational activities.

Student Supports / Accommodation

- Indigenous learners and First Nations communities might continue to take increased safety measures during the pandemic, which may mean that some students will not be able to attend in-person classes. Some First Nations may still be under states of emergency. Institutions should work with First Nations communities and Indigenous learners to develop plans to support continued access to some academic programming and services for these students.
- Institutions are strongly encouraged to develop and/or follow established accommodation mechanisms to ensure that students who cannot physically be on campus (e.g., they are ill, adhering to quarantine rules, self-isolating, attending a vaccine appointment, etc.) are not significantly disadvantaged in their educational pursuits. Institutions are also strongly encouraged to waive any requirements for medical documentation from students for absences given the strain this will cause on the medical community.
- Institutions are encouraged to work collaboratively with student societies, clubs and governments to assist in the development and implementation of COVID-19 safety plans, and positively reinforce COVID-safe behaviours both on and off campus.

Mental Health Supports

- Mental health supports will be critical to support a full return to in-person activities on-campus. Communication plans should be in place to raise awareness of these supports.

Program-Specific Considerations

- Students and instructors will be expected to follow guidelines for specific settings where work integrated learning placements occur, including clinical, teaching, internships, co-op placements, and other community engaged work placements. Institutions should be knowledgeable of program-specific COVID-19 safety protocols and ensure that student and instructor risk is minimized in these placements.
- Institutions, students, faculty and staff should adhere to travel advisories when considering studying or working abroad.

Student Health Services

- Student health services can play a key role by liaising with local public health officials to ensure students, including out-of-province and international students, have the most current information about the availability of vaccines. Institutions should continue to work with their local Medical Health Officer within their Regional Health Authority.
- Institutional student health services should identify and communicate steps that students should take if they develop symptoms, including where to access testing.
- Public health authorities are responsible for determining notification processes and requirements for confirmed cases of COVID-19.
- Institutions may be asked to assist public health authorities in notifying close contacts, assisting in the identification of people who may have been exposed, distribution of materials prepared by the public health authorities, or supporting public notification efforts.
- For more information, please refer to the [COVID-19 Contact Tracing and Notification Protocols](#) on page 7 in the current *Guidelines*.

Attachment 1



1190387

March 8, 2021

Dear Post-Secondary Institution Presidents:

I am writing to you to acknowledge the important leadership the post-secondary sector has shown in BC's response to the COVID-19 pandemic over the past 12 months, and to support you with the critical goal of resuming safe on-campus teaching, learning and research in September 2021.

Your institutions worked in partnership with the BC Centre for Disease Control, WorkSafeBC, the Ministry of Advanced Education and Skills Training, and staff in my office to produce and update the "COVID-19 Go-Forward Guidelines for B.C.'s Post-Secondary Sector." Those Guidelines and your institutional health and safety plans helped the sector to be very successful in mitigating the spread of COVID-19. The quick adaptation to remote learning, while staying open and available for learners, played a major role in the success of B.C.'s pandemic response.

My office and our medical health officers share your concerns about the wellbeing of young adults who are disproportionately affected by the pandemic, including worsening mental health, increased financial instability and diminished future prospects. We also acknowledge this has been a difficult and stressful time for faculty and staff. It is imperative to get back on campus for everyone's health and well-being.

There are very good reasons to be confident that a return to on-campus instruction in the fall can be undertaken safely and successfully. Current projections of the COVID-19 vaccine supply in BC suggest that all vulnerable and high-risk groups should be immunized this spring, and the majority of the adult population by the summer. Young adults aged 18-24 should receive the vaccine no later than the end of July, but more likely sooner. The timing of immunization should not be a determinant of planning for a return to on-campus activities.

Given the expected timelines for immunization it is essential that we plan for a full return to in-person activities on campus in September 2021, including in-person instruction, with faculty and staff returning to campus sooner. Immunization will support what seems likely to become stable coexistence with COVID-19 as another manageable, seasonal ailment.

.../2

New variants of the SARS CoV-2 virus will likely continue to emerge. We will respond to them through monitoring, re-formulation of tests and vaccines, and through other measures as needed depending on the characteristics of the variants. Targeted testing and contact tracing by health authorities will remain key supplements to immunization in rapidly controlling transmission. These activities will be part of normal, ongoing life with COVID-19.

We have also learned over the past year that when we implement effective safety plans, large sectors can operate safely. Reducing the opportunity for infectious contacts will continue to be an important strategy. As such, safety plans will remain important, with updates as required. My team looks forward to working with you to fine-tune plans for the prevention activities we have all become so familiar with: self-administered health checks; facilitating hand cleaning through access to soap and water or encouraging people to use hand sanitizers; use of masks; early detection and rapid testing of potential cases; isolation; and case and contact management.

The experience of the past year can help with a safe return to post-secondary campuses. Above and beyond immunization, infectious contacts in group settings at post-secondary institutions can be reduced through a variety of prevention and exposure control measures. Two-meter physical distancing has been my guidance for uncontrolled group settings. Such distancing is neither practical, nor necessary, in the controlled context of post-secondary instructional settings. I am very confident that the combination of immunization and continued application of the “COVID-19 Go-Forward Guidelines for B.C.’s Post-Secondary Sector” will support the safe and complete resumption of campus teaching, learning, and research.

We also believe student housing, dining and other on-campus student services will be able to return to normal or close-to-normal capacities by following revised protocols in the “COVID-19 Go-Forward Guidelines for B.C.’s Post-Secondary Sector.”

Based on what we have learned in the past year, and the important protection that immunization will provide, I, as well as the medical health officers in British Columbia, strongly support the resumption of on-campus activities in September 2021. Public health will also continue to work with post-secondary institutions to determine if measures are needed to keep activities inside and outside the classroom safe in the fall, such as public transportation, socializing outside of class, athletics, and arrival and quarantine of international students.

Thank you, again, for the important role you play in supporting the provincial COVID-19 response, and in helping British Columbians to realize the full experience and benefits of post-secondary education. I look forward to working with you to strengthen the collaboration between public health and post-secondary institutions for a full and safe return to on-campus instruction in September 2021. We all look forward to the rich campus interactions that will make learning and personal development so much more effective and supportive for students, faculty, and staff.

Sincerely,

A handwritten signature in black ink, appearing to read "Bonnie Henry". The signature is fluid and cursive, with the first name "Bonnie" and last name "Henry" clearly distinguishable.

Bonnie Henry
MD, MPH, FRCPC
Provincial Health Officer

Cc Honourable Anne Kang, Minister of Advanced Education and Skills Training
 Shannon Baskerville, Deputy Minister of Advanced Education and Skills Training
 Max Blouw, President Research Universities' Council of BC
 Ruth Wittenberg President, BC Association of Institutes and Universities
 Colin Ewart, President BC Colleges
 Honourable Adrian Dix, Minister of Health
 Stephen Brown, Deputy Minister, Ministry of Health
 Chief Medical Health Officers, Regional Health Authorities
 Chief Medical Officer, First Nations Health Authority
 Deputy Provincial Health Officers



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